CITY OF RIPON

100 Jackson Street • Ripon, Wisconsin 54971-1396

October 7, 2013

Mr. Gary Edelstein, P.E.
Wisconsin Department of Natural Resources
Bureau for Remediation and Redevelopment - RR/5
P.O. Box 7921
Madison, WI 53707

Re: Ripon FF/NN Landfill Monitoring Report

Dear. Mr. Edelstein,

Enclosed is the status report for the July 2013 sampling event at the FF/NN Landfill prepared by Tetra Tech, Inc. The report reflects the reduction in quarterly reporting requirements we previously discussed.

If you have any questions or concerns please feel free to contact me.

Sincerely.

Lori Rich

Lori Rich
City of Ripon Administrator

Enclosures

cc: Nelson Olavarria
Mike Noel

STATUS REPORT
JULY 2013 SAMPLING EVENT
FF/NN LANDFILL NPL SITE
Ripon, Wisconsin

Prepared for:

FF/NN Landfill PRP Group
600 Travis, Suite 5600
Houston, Texas 77002

Prepared by:

TETRA TECH

Tetra Tech, Inc.
175 N. Corporate Drive, Suite 100
Brookfield, WI 53045

October 3, 2013

Michael R. Noel, P.G.
Principal Hydrogeologist, Project Manager

Ashley A. Weimer
Project Geologist

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1. SITE INFORMATION AND CONTACTS

CONTRACT SF-92-01

SITE NAME/ACTIVITY:

FF/NN Landfill NPL Site
Ripon, Wisconsin
Groundwater Monitoring and Corrective Action

WDNR File Ref. No.: 02-20-000915

PREPARED BY:

Mr. Michael R. Noel and Miss Ashley A. Weimer
Tetra Tech, Inc.
175 N. Corporate Drive, Suite 100
Brookfield, Wisconsin 53045

Tetra Tech Ref No.:117-2202.040

PREPARED FOR:

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Chairman, FF/NN PRP Group
600 Travis, Suite 5600
Houston, TX 77210

Ms. Lori Rich
City of Ripon Administrator
100 Jackson St.
Ripon, WI 54971

Mr. Gary Edelstein, P.E.
Wisconsin DNR
P.O. Box 7921
Madison, WI 53707

Mr. Kevin McKnight
Wisconsin DNR
625 E County Road Y, Suite 700
Oshkosh WI, 54901

Mr. Bernard Schorle
U S Environmental Protection Agency
SR-6J
77 West Jackson Boulevard
Chicago, IL 60604

DATE:
October 3, 2013

2. FIELD ACTIVITIES THIS REPORTING PERIOD

Monitoring was conducted in accordance with the revised groundwater monitoring program as outlined in the April 18, 2013 conditional approval letter from WDNR.

- Groundwater elevations were measured at 10 monitoring wells by Tetra Tech in July 2013. Water levels in Layer 4 wells were measured consecutively to avoid any effects from municipal pumping.

- A total of 10 monitoring wells were sampled for VOCs by Tetra Tech during the July 2013 event. One duplicate sample was collected for quality control.

- Jack Wendler from the City of Ripon conducted biweekly landfill gas monitoring of the extraction system vents and wells for this quarterly report.

3. RESULTS OF FIELD ACTIVITIES

3.1. Groundwater Monitoring Event - Monitoring Well Sampling

The revised groundwater monitoring program as outlined in the April 18, 2013 conditional approval letter from WDNR was followed for this sampling event. The groundwater samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260B. Analytical results and field forms are provided in Attachments B and C, respectively. The VOC analytical results for the monitoring wells are tabulated in Table 2. The temporal trends of chlorinated compound concentrations in wells sampled during this event are provided in attached Charts.

Natural attenuation parameters were taken on selected wells during the July 2013 sampling event. The DO and ORP along with temperature, pH and conductivity were measured using a QED MP20 MicroPurge Flow Cell Meter. The iron II was measured in the field using CHEMetrics analyte-specific Vacu-vials® for photometric analysis using a CHEMetrics Model V-2000 LED photometer.

The following sections present a summary of the July 2013 VOC analytical results as they relate to groundwater standards for each well that was sampled. To better track impacts at various depths, the results are organized according to the four stratigraphic groupings of wells discussed previously.

3.1.1. Layer 1 Wells

- No Layer 1 wells were sampled during the July 2013 event.

3.1.2. Layer 2 Wells

- No Layer 2 wells were sampled during the July 2013 event.

3.1.3. Layer 3 Wells

- P-103D (Chart 53): No detection of any VOC. VC has not been detected in this well since April 2012.
- P-111D (Chart 54): VC exceeded its ES at 6.8 ug/L. 1,2-DCE (1.9 ug/L) and chloroethane (1.9 ug/L) were detected at concentrations below NR 140 standards. The results are similar to past results since 2007.
- MW-3B (Chart 55): No detection of any VOC. VC has not been detected in this well since May 2008.
- P-113B (Chart 56): No detection of any VOC. TCE, 1,2-DCE and VC have never been detected in this well since it was installed in 2002.
- P-114 (Chart 57): No detection of VC. VC was last detected in this well April 2013. 1,2-DCE (no detection, 1.3 ug/L duplicate) was detected at a concentration below NR 140 standards.
- P-115 (Chart 58): VC exceeded its ES with a concentration of 1.1 ug/L. This result is similar to past results.

- P-116 (Chart 59): No detection of any VOC. TCE, 1,2-DCE and VC have never been detected in this well since it was installed in 2001.

3.1.4. Layer 4 Wells

- MW-3A (Chart 60): No detection of any VOC. TCE, 1,2-DCE and VC have never been detected in this well since it was installed in 2002.
- P-107D (Chart 61): No detection of any VOC. VC was last detected in this well April 2013.
- P-113A (Chart 62): No detection of any VOC. TCE, 1,2-DCE and VC have never been detected in this well since it was installed in 2002.

3.1.5. Natural Attenuation Parameters

Because VC is the sole remaining contaminant of concern exceeding NR 140 standards and because VC reduction is most commonly an aerobic process via direct oxidation, MNA parameters that can demonstrate oxidative conditions were taken. Based on EPA (1998) guidance, iron II was taken as indirect evidence of natural attenuation. The results of the MNA sampling are shown on Table 3 and continue to indicate that the aquifer is marginally aerobic.

3.2. Interim LF Gas Extraction System Performance Monitoring

Results of the gas monitoring are presented in Table 6.

Current extraction is from shallow vent GV-6 and the three deep leachate wells (LC-1, LC-2 and LC-3). The other vents have remained closed to prevent oxygen levels from increasing above 5%. There were a few modifications to the system during this monitoring period based on the oxygen levels observed in the landfill:

- 5/13/2013 – Run time decreased to 16 hours on/8 hours off
- 5/29//2013 – Run time decreased to 12 hours on/12 hours off
- 7/22/2013 – Run time decreased to 10 hours on/14 hours off

There were no gas samples collected during this sampling event per the changes in the monitoring plan dated April 18, 2013.

Monitoring of the gas probes and wells outside the limits of fill indicate that the gas extraction system has controlled gas migration from the fill area since its startup in March 2006. Gas concentrations in all exterior wells and gas probes have been consistently below the methane LEL (5.0%).

4. UPCOMING ACTIVITIES PLANNED

- Quarterly groundwater sampling and water level measurements will be conducted in July 2013 in accordance with the monitoring programed outlined in the April 18, 2013 conditional approval letter from WDNR.

- The gas extraction system will continue to be monitored for effectiveness throughout this quarter.

5. PERSONNEL

Mr. Michael Noel is the Project Manager and Principal Hydrogeologist. Ms. Ashley Weimer is the Project Geologist who oversaw the field activities. The laboratory analyses for July 2013 groundwater samples were completed by Pace Analytical Services, Inc. in Green Bay, Wisconsin. The laboratory analyses for the air samples were completed by Pace Analytical Services, Inc. located in Minneapolis, Minnesota.

TABLES

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Jun-93	Oct-93	Apr-94	Oct-96	May-97	Oct-97	Apr-98	Oct-98	Oct-99	May-00
MW-101	884.80	826.56	824.20	824.04	823.41	824.34			822.08	823.17	
P-101	885.26	826.52	824.24	824.02	823.38	824.33	823.00	820.24	822.04	823.16	822.73
MW-102	843.05	826.83	825.35	824.29	823.57	824.67	823.26			823.52	823.17
P-102	842.99	826.89	824.40	824.35	823.64	824.75	823.38	820.77	822.47	823.63	823.25
MW-103	872.42	823.08	821.77	819.49	820.56			819.22			
P-103	872.92	826.29	826.88	823.88	817.43	824.16	822.89	820.25	821.96	823.11	822.70
P-103D	873.08	(Installed December 2003)									
MW-104	875.15	826.32	824.12	824.02	823.14	824.13		820.13	823.87		
P-104	875.48	826.47	824.25	824.12	823.26	824.24	822.92	820.25	822.06	823.18	822.70
MW-106	878.90	826.67	824.21	824.24	820.96	824.61	823.23		822.42	823.45	823.10
P-106	878.91	826.63	824.09	824.07	823.42	824.51	823.16	820.40	822.33	823.38	823.02
MW-107	871.78	821.02	820.52	818.76	819.17	819.22		817.04	818.70	819.68	
P-107	871.38	820.86	820.37	818.78	819.07	819.24	818.38	817.14	818.72	819.71	818.62
P-107D	871.98			819.13	817.47	819.52	818.29	816.77	817.56	817.78	817.34
MW-108	845.25		819.00	817.85	818.17	818.31				818.48	817.49
P-108	845.61		822.03	821.09	821.29	821.52	820.55	818.77	820.25	821.18	820.25
MW-111	856.46			817.58	817.93	818.10	817.29	816.29	817.33	818.30	817.28
P-111	856.13			817.09	817.43	817.60	816.78	815.75	816.85	817.83	816.79
P-111D	855.79	(Installed April 2002)									
MW-112	874.55				819.46	819.92	819.02		819.15	820.02	819.20
P-113A	833.09	(Installed September 2002)									
P-113B	833.10	(Installed September 2002)									
P-114	839.35	(Private well converted to monitoring well in 2003)									
P-115	842.71	(Private well converted to monitoring well in 2004)									
P-116	845.34	(Private well converted to monitoring well in 2004)									
MW-3A	850.77	(Water levels taken beginning February 2002)									
MW-3B	851.04	(Water levels taken beginning February 2002)									
LC1	876.15				849.02	847.87	846.99	846.82	846.56		846.27
LC2	866.05				847.25	842.91	841.20	840.61	838.31	839.29	839.17
LC3	877.34					845.69					845.82

Notes:
Blank cells indicate that the water level was below top of pump; unable to measure.
Measurements are in Feet Above Mean Sea Level (msl)
">" indicates depth to top of pump (water level was beneath pump)
NT - Not taken, only measured deep wells
NM - Well not measured

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Oct-00	May-01	Oct-01	Feb-02	May-02	Aug-02	Oct-02	Dec-02	Apr-03	Oct-03
MW-101	884.80		823.13	824.17	823.18	DRY	DRY	NT	DRY	DRY	821.24
P-101	885.26	822.66	823.06	824.16	823.19	800.47	814.42	NT	818.91	820.46	821.16
MW-102	843.05	823.19		824.38	823.53	818.93	DRY	NT	DRY	820.95	821.57
P-102	842.99		823.39	824.49	823.69	799.84	814.94	NT	819.47	821.08	821.66
MW-103	872.42			821.63	>51.32	819.28	819.34	NT	DRY	DRY	819.61
P-103	872.92	822.60	823.02	823.87	823.00	801.70	814.74	NT	819.01	820.52	821.12
P-103D	873.08										
MW-104	875.15			823.88	>51.28	DRY	DRY	NT	DRY	820.37	820.85
P-104	875.48	822.64	823.10	824.03	823.12	802.51	814.82	NT	819.05	820.50	821.43
MW-106	878.90	822.96	823.34	Dry	823.50	DRY	DRY	NT	DRY	DRY	821.58
P-106	878.91	822.89	823.26	824.25	823.39	800.31	814.52	NT	819.18	820.80	821.49
MW-107	871.78		819.36	820.12	>52.5	816.72	DRY	DRY	DRY	817.73	818.35
P-107	871.38	818.62	819.35	820.12	818.86	809.86	813.29	NT	816.65	817.74	818.39
P-107D	871.98	818.10	819.04	816.61	817.70	811.80	815.35	816.43	816.68	817.26	816.72
MW-108	845.25		818.32	818.62	>27.7	815.44	815.45	NT	815.79	816.20	816.68
P-108	845.61	820.45	820.97	822.08	820.66	811.84	815.19	NT	817.83	818.57	819.26
MW-111	856.46	817.32	818.15	818.74	817.51	813.43	813.59	NT	815.42	816.14	816.71
P-111	856.13	816.83	817.68	818.26	817.04	812.54	812.90	NT	814.90	815.68	816.27
P-111D	855.79					807.70	815.16	816.73	816.22	818.17	817.95
MW-112	874.55	819.21	819.87	820.52	822.87	814.38	814.47	NT	816.75	817.87	818.54
P-113A	833.09							816.09	816.39	816.93	816.20
P-113B	833.10							816.68	816.93	817.25	816.58
P-114	839.35									817.17	816.93
P-115	842.71										
P-116	845.34										
MW-3A	850.77				817.24	810.74	815.18	816.11	815.99	816.63	815.67
MW-3B	851.04				819.32	807.37	815.34	817.07	817.54	818.31	817.92
LC1	876.15		846.30	Dry	Dry	DRY	DRY	NT	DRY	DRY	NM
LC2	866.05	839.28	839.03	838.92	838.97	838.83	838.98	NT	838.75	839.17	NM
LC3	877.34		845.80	Dry	Dry	DRY	DRY	NT	DRY	DRY	NM

Notes:
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Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Feb-04	Apr-04	Jul-04	Oct-04	Jan-05	Apr-05	Jul-05	Oct-05	Jan-06	Mar-06
MW-101	884.80	NM	822.87	825.76	823.36	822.85	823.27	821.11	DRY	820.81	NM
P-101	885.26	NM	822.86	825.76	823.35	822.84	823.26	821.07	820.23	820.75	NM
MW-102	843.05	NM	823.34	826.08	823.71	823.34	823.66	821.70	820.65	821.33	NM
P-102	842.99	NM	823.42	826.17	823.79	823.38	823.75	821.48	820.72	821.41	NM
MW-103	872.42	NM	821.06	824.54	822.24	820.52	821.60	819.70	819.25	819.24	NM
P-103	872.92	NM	822.77	825.58	823.23	822.78	823.14	821.09	820.26	820.92	NM
P-103D	873.08	820.64	821.89	824.39	822.21	821.89	822.08	820.26	819.23	820.24	NM
MW-104	875.15	NM	822.75	825.49	823.27	822.75	823.16	821.09	820.34	820.65	NM
P-104	875.48	NM	822.82	825.61	823.36	822.82	823.21	821.20	820.40	820.79	NM
MW-106	878.90	NM	823.25	826.07	823.60	823.20	823.61	821.42	DRY	821.24	NM
P-106	878.91	NM	823.17	825.99	823.50	823.10	823.54	821.31	820.50	821.16	NM
MW-107	871.78	NM	819.63	823.41	821.20	819.89	820.18	818.69	817.85	817.81	NM
P-107	871.38	NM	819.71	823.34	821.20	820.91	820.20	818.72	817.84	817.80	NM
P-107D	871.98	NM	818.68	819.78	817.72	817.65	818.77	815.90	814.85	816.33	816.45
MW-108	845.25	NM	817.86	820.27	819.00	818.17	818.41	816.95	816.27	816.31	NM
P-108	845.61	NM	820.52	823.39	821.94	820.84	821.05	819.76	819.13	819.04	NM
MW-111	856.46	NM	818.03	821.40	819.60	817.39	818.69	817.32	816.51	816.31	NM
P-111	856.13	NM	817.59	821.01	819.16	816.92	818.19	816.82	816.03	815.84	NM
P-111D	855.79	NM	819.55	821.82	819.77	819.55	819.55	818.11	817.37	818.40	NM
MW-112	874.55	NM	819.89	823.17	821.14	820.15	820.50	818.82	818.14	818.31	NM
P-113A	833.09	NM	817.91	818.17	817.32	817.28	818.35	815.50	814.36	816.40	816.04
P-113B	833.10	816.61	818.30	820.16	818.25	818.13	818.36	816.74	815.47	816.90	NM
P-114	839.35	NM	818.55	820.44	818.71	818.50	818.76	817.02	816.34	817.28	NM
P-115	842.71	NM	818.61	820.51	818.71	818.55	818.62	817.05	816.05	817.44	NM
P-116	845.34	NM	817.54	819.31	817.80	817.47	817.74	816.45	815.48	816.02	NM
MW-3A	850.77	NM	818.03	819.73	817.00	817.15	816.84	816.05	814.87	817.98	815.81
MW-3B	851.04	NM	819.79	822.01	819.66	819.60	819.45	818.44	817.28	819.15	NM
LC1	876.15	NM	846.45	NM	DRY	DRY	846.39	DRY	NM	NM	NM
LC2	866.05	NM	839.27	NM	838.89	DRY	839.05	838.89	838.91	839.01	NM
LC3	877.34	NM	DRY	NM	DRY	DRY	DRY	DRY	NM	NM	NM

Notes: Blank cells indicate that the water level was below top of pump; unable to measure.
Measurements are in Feet Above Mean Sea Level (msl)
">" indicates depth to top of pump (water level was beneath pump)
NT - Not taken, only measured deep wells
NM - Well not measured

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Apr-06	Jul-06	Oct-06	Jan-07	May-07	Aug-07	Oct-07	Jan-08	May-08
MW-101	884.80	821.41	821.29	820.71	821.43	822.37	822.22	822.74	822.47	824.5
P-101	885.26	821.37	821.22	820.69	821.34	822.32	822.18	822.68	822.43	824.49
MW-102	843.05	821.91	821.75	821.15	821.73	822.85	822.55	822.95	822.95	824.9
P-102	842.99	822.06	821.80	821.25	821.82	822.90	822.63	823.01	823.03	824.95
MW-103	872.42	819.36	819.82	818.82	819.47	820.39	820.45	820.78	820.46	822.13
P-103	872.92	821.42	821.33	820.70	821.39	822.31	822.17	822.63	822.86	824.39
P-103D	873.08	820.54	820.43	819.88	820.52	821.56	821.495	822.015	821.935	823.885
MW-104	875.15	821.35	821.16	820.61	821.11	822.17	822.06	822.56	822.25	824.26
P-104	875.48	821.45	821.33	820.76	821.29	822.29	822.27	822.75	822.44	824.45
MW-106	878.90	821.85	821.77	821.10	821.78	822.78	822.51	822.76	822.84	824.77
P-106	878.91	821.72	821.67	820.99	821.62	822.71	822.44	822.7	822.75	824.7
MW-107	871.78	818.03	DRY	817.90	818.29	818.87	818.97	819.12	818.88	820.34
P-107	871.38	818.19	818.59	817.89	818.23	818.88	819.01	819.08	818.91	820.27
P-107D	871.98	816.89	816.83	816.24	817.05	818.27	818.79	819.93	820.32	822.9
MW-108	845.25	816.70	816.88	816.39	816.64	817.39	817.96	817.99	817.5	819.15
P-108	845.61	819.40	819.65	819.41	819.40	820.14	821.45	821.33	820.44	822.15
MW-111	856.46	816.74	817.14	816.58	816.72	817.40	817.44	817.51	NT	818.85
P-111	856.13	816.24	816.74	816.09	816.23	816.92	816.95	817.01	816.85	818.4
P-111D	855.79	818.62	818.54	818.26	818.48	819.84	819.44	819.92	820.14	822.09
MW-112	874.55	818.66	818.88	818.20	818.52	819.24	819.39	819.73	819.41	820.97
P-113A	833.09	816.39	816.54	815.81	817.29	817.78	818.13	819.42	819.91	822.4
P-113B	833.10	817.01	817.57	816.81	816.70	818.11	818.26	819.09	819.35	821.36
P-114	839.35	817.38	817.36	816.86	817.36	818.48	818.14	818.61	819	820.91
P-115	842.71	817.56	817.50	817.12	817.62	818.72	818.375	818.815	819.185	821.095
P-116	845.34	816.48	816.34	816.00	816.38	817.47	816.905	817.475	817.755	819.425
MW-3A	850.77	816.29	817.51	816.34	817.49	817.68	819.68	820.7	821.15	823.53
MW-3B	851.04	818.86	819.18	818.27	818.88	819.62	820.24	820.88	821.08	823.09
LC1	876.15	843.40	847.60	847.66	NM	846.41	NM	NM	NM	845.89
LC2	866.05	839.47	839.52	838.45	NM	838.63	NM	NM	NM	837.81
LC3	877.34	845.89	845.87	844.68	NM	846.12	NM	NM	NM	845.28

Notes: Blank cells indicate that the water level was below top of pump; unable to measure.
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">" indicates depth to top of pump (water level was beneath pump)
NT - Not taken, only measured deep wells
NM - Well not measured

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Jul-08	Sep-08	Oct-08	Jan-09	Apr-09	Jul-09	Oct-09	Feb-10
MW-101	884.80	825.1	822.61	822.63	822.93	824.08	823.61	822.68	822.2
P-101	885.26	825.07	822.56	822.59	822.91	824.05	823.6	822.63	822.17
MW-102	843.05	825.36	822.77	822.83	823.4	824.49	823.85	822.99	822.65
P-102	842.99	825.34	822.74	822.81	823.5	824.57	824.11	823.05	822.76
MW-103	872.42	823.95	822.05	821.92	821.19	821.99	821.72	820.83	820.27
P-103	872.92	825.02	822.57	822.66	822.97	824.06	823.59	822.62	822.24
P-103D	873.08	824.425	822.145	822.265	822.475	823.545	822.905	822.055	821.705
MW-104	875.15	824.9	822.54	822.55	822.82	823.92	823.47	822.53	822.06
P-104	875.48	825.12	822.78	822.74	822.98	824.06	823.64	822.68	822.22
MW-106	878.90	824.98	822.7	822.75	823.31	824.41	823.94	822.96	822.61
P-106	878.91	825.25	822.63	822.64	823.25	824.37	823.9	822.85	822.54
MW-107	871.78	823.81	821.16	821.04	819.71	820.34	820.25	819.37	818.81
P-107	871.38	823.72	821.1	821.09	819.4	820.34	820.26	819.34	818.48
P-107D	871.98	823.25	820.9	820.87	820.81	822.24	820.61	819.98	819.88
MW-108	845.25	820.42	819.28	819.23	818.16	818.87	818.58	817.93	817.28
P-108	845.61	823.57	822.14	822.05	820.87	821.67	821.73	821.06	820.08
MW-111	856.46	821.08	819.77	819.75	818.21	818.88	818.71	817.87	817.29
P-111	856.13	820.72	819.35	819.23	817.77	818.41	818.3	817.43	816.86
P-111D	855.79	822.61	820.74	820.79	820.65	821.71	820.85	820.15	819.91
MW-112	874.55	822.76	821.08	820.99	820.08	820.83	820.62	819.76	819.24
P-113A	833.09	822.8	820.45	820.53	820.34	821.81	820.1	819.4	819.57
P-113B	833.10	821.79	820.09	820.1	819.84	820.96	819.81	819.24	819.15
P-114	839.35	821.45	819.79	819.83	819.5	820.51	819.6	818.99	818.75
P-115	842.71	821.635	819.965	819.975	819.655	820.725	819.805	819.145	818.935
P-116	845.34	820.385	816.805	818.705	818.375	819.155	818.465	817.755	817.565
MW-3A	850.77	823.87	821.57	821.62	821.62	822.96	821.46	820.87	820.85
MW-3B	851.04	823.53	821.48	821.5	821.51	822.66	821.74	821.06	820.84
LC1	876.15	NM	NM	NM	NM	NM	NM	NM	NM
LC2	866.05	NM	NM	NM	NM	NM	NM	NM	NM
LC3	877.34	NM	NM	NM	NM	NM	NM	NM	NM

Notes:
Blank cells indicate that the water level was below top of pump; unable to measure.
Measurements are in Feet Above Mean Sea Level (msl)
">" indicates depth to top of pump (water level was beneath pump)
NT - Not taken, only measured deep wells
NM - Well not measured

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	May-10	Sep-10	Jan-11	Mar-11	Apr-11	Jul-11	Oct-11	Jan-12
MW-101	884.80	823.43	823.29	822.19	NM	823.66	824.41	822.45	822.93
P-101	885.26	823.37	823.25	822.14	NM	823.6	824.38	822.37	822.87
MW-102	843.05	823.77	823.66	822.66	NM	824.1	824.73	822.67	823.36
P-102	842.99	823.8	823.71	822.74	NM	824.16	824.79	822.67	823.44
MW-103	872.42	821.25	821.32	820.29	NM	821.34	822.45	821.14	820.97
P-103	872.92	823.34	823.19	822.26	NM	823.6	824.28	822.34	822.91
P-103D	873.08	822.575	822.35	821.81	821.96	822.88	823.26	821.64	822.04
MW-104	875.15	823.25	823.12	822.1	NM	823.47	824.19	822.32	822.82
P-104	875.48	823.41	823.3	822.26	NM	823.62	824.37	822.53	822.93
MW-106	878.90	823.72	823.6	822.57	NM	824.02	824.68	822.58	823.33
P-106	878.91	823.64	823.52	822.52	NM	823.94	824.6	822.48	823.24
MW-107	871.78	819.59	819.85	818.83	NM	819.76	821.04	820.04	819.96
P-107	871.38	819.62	819.82	818.98	NM	819.73	821.02	820.02	819.15
P-107D	871.98	819.68	818.85	820.47	819.05	820.29	819.73	818.74	819.38
MW-108	845.25	818.27	818.39	817.44	NM	818.51	819.21	818.48	818.11
P-108	845.61	821.53	821.66	820.25	NM	821.32	822.51	821.45	820.86
MW-111	856.46	818.07	818.3	817.39	NM	818.37	819.45	818.64	818.12
P-111	856.13	817.61	817.88	816.96	NM	817.89	819.01	818.18	817.68
P-111D	855.79	820.41	820.16	817.15	820.05	820.83	820.9	819.92	820.33
MW-112	874.55	820.13	820.24	819.33	NM	820.23	821.36	820.2	819.91
P-113A	833.09	819.09	818.24	820.05	818.53	819.67	818.78	818.34	818.72
P-113B	833.10	819.27	818.88	819.45	818.97	819.64	819.34	819.04	818.87
P-114	839.35	819.12	819	819.09	818.85	819.75	819.67	819	819.16
P-115	842.71	819.205	819.13	819.265	819.005	819.855	819.745	819.145	819.265
P-116	845.34	818.055	817.85	817.895	817.755	818.845	818.605	817.985	818.125
MW-3A	850.77	819.92	818.91	821.26	819	819.85	819.18	819.74	819.6
MW-3B	851.04	821	820.59	821.04	820.35	821.18	821.1	820.65	820.78
LC1	876.15	843.73	NM	NM	NM	843.14	NM	NM	NM
LC2	866.05	838.96	NM	NM	NM	838.4	NM	NM	NM
LC3	877.34	845.67	NM	NM	NM	845.22	NM	NM	NM

Notes:
Blank cells indicate that the water level was below top of pump; unable to measure.
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">" indicates depth to top of pump (water level was beneath pump)
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NM - Well not measured

Table 1 - Groundwater Elevations
FF/NN Landfill
Ripon, WI

Well Name	TOC Elevation	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13
MW-101	884.80	823.33	823.56	821.86	821.99	823.89	NM
P-101	885.26	823.29	823.5	821.82	821.92	823.88	NM
MW-102	843.05	823.8	823.89	822.3	822.43	824.38	NM
P-102	842.99	823.86	823.96	822.41	822.52	824.45	NM
MW-103	872.42	821.24	821.9	820.21	820.09	821.5	NM
P-103	872.92	823.32	823.48	821.9	822.02	823.88	NM
P-103D	873.08	822.47	822.43	821.085	821.275	823.135	823.24
MW-104	875.15	823.22	823.4	821.79	821.87	823.76	NM
P-104	875.48	823.22	823.57	821.96	822.02	823.87	NM
MW-106	878.90	823.73	823.87	822.27	822.43	824.3	NM
P-106	878.91	823.64	825.8	822.18	822.33	824.21	NM
MW-107	871.78	819.77	820.68	818.98	818.73	819.87	NM
P-107	871.38	819.76	820.7	819	818.71	819.88	NM
P-107D	871.98	819.42	818.1	817.78	818.02	820.41	820.56
MW-108	845.25	818.28	818.74	817.63	817.27	818.74	NM
P-108	845.61	821.01	822.09	820.82	820.02	821.52	NM
MW-111	856.46	818.32	819.09	817.61	817.25	818.52	NM
P-111	856.13	817.87	818.67	817.16	816.81	818.07	NM
P-111D	855.79	820.28	820	819.01	819.29	821.07	820.97
MW-112	874.55	820.15	820.8	819.27	819.15	820.39	NM
P-113A	833.09	818.51	817.23	817.23	817.5	819.83	819.92
P-113B	833.10	818.71	818.39	817.96	817.92	820.89	820.02
P-114	839.35	819.06	818.46	818.03	818.27	819.94	820.05
P-115	842.71	819.075	818.805	818.105	818.335	820.025	820.205
P-116	845.34	818.125	817.575	817.115	817.395	818.855	818.825
MW-3A	850.77	818.41	818.23	817.6	817.98	820.07	820.25
MW-3B	851.04	820.27	820.35	819.28	819.48	821.49	821.48
LC1	876.15	843.21	NM	NM	NM	843.36	NM
LC2	866.05	837.87	NM	NM	NM	838.51	NM
LC3	877.34	845.63	NM	NM	NM	845.52	NM

Notes:
Blank cells indicate that the water level was below top of pump; unable to measure.
Measurements are in Feet Above Mean Sea Level (msl)
">" indicates depth to top of pump (water level was beneath pump)
NT - Not taken, only measured deep wells
NM - Well not measured

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-3A	04/04/2002	NR			NA																						
	05/22/2002	NR			NA																						
	08/20/02	NR																									
	12/05/02	NR																									
	04/22/03																										
	10/22/03																										
	05/11/04																										
	10/14/04																										
	01/27/05																										
	04/26/2005																										
	08/02/05																										
	10/26/05																										
	01/31/2006																										
	04/24/06																										
	07/27/06								0.35 J																		
	10/31/06																										
	01/31/07																										
	5/1/2007																										
	8/8/2007																										
	10/19/2007																										
	5/6/2008																										
	10/1/2008																										
	4/7/2009																		0.56J								
	10/28/2009																										
	5/24/2010																										
	10/5/2010																		0.49J								
	1/24/2011																										
	4/13/2011																										
	7/12/2011																		0.63J								
	10/19/2011								0.66J																		
	1/23/2012																										
	4/4/2012																										
	7/25/2012																										
	10/16/2012																										
	1/15/2013																										
	4/26/2013																										
	7/2/2013																										
MW-3B	04/04/2002	NR			NA																		0.38			**0.31**	
	05/22/2002	NR			NA																	NA					
	8/20/2002	NR																				NA					
	12/5/2002	NR																									
	4/22/2003																										
	10/22/2003																										
	5/11/2004																									**0.2 J**	
	07/22/2004																										
	10/14/2004																										
	1/27/2005																										
	4/26/2005																										
	8/2/2005																									**0.30 J**	
	10/26/2005																									**0.39 J**	
	01/31/2006																										
	4/24/2006																										
	7/27/2006								0.45 J																		
	10/31/2006																										
	1/31/2007																										
	5/1/2007																										
	8/8/2007																										
	10/19/2007																										
	5/6/2008														1.3											5.4	
	10/1/2008																										
	4/7/2009																										
	10/28/2009								0.42J																		
	5/24/2010																										
	10/5/2010																										
	1/24/2011																										
	4/13/2011																										
	7/12/2011																		0.81J								
	10/19/2011																										
	1/23/2012																										
	4/4/2012																										
	7/25/2012																										
	10/16/2012																										
	1/15/2013																										
	4/26/2013																										
	7/2/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

Sampling Point	Collection Date	Parameters																								
		Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-101	10/1/1993	NR																			0.7 J						
	04/1/1994	NR																			0.6J						
	05/01/1996	NR																			0.6J						
	10/01/1996	NR							0.89 J												0.72 J						
	05/01/1997	NR																									
	10/01/1997	NR																			0.7						
	04/98*	NR																									
	10/01/1998	NR																									
	04/01/1999	NR																									
	10/01/1999	NR																			0.7						
	05/01/2000	NR																			0.32						
	10/01/2000	NR																			0.38						
	05/01/2002	NR																			0.28						
	10/11/2001	NR																									
	02/05/2002	NR			NA						0.19										0.32	NA		0.16			
	05/21/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/02 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/03 *		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/23/2003																										
	4/28/2004																										
	10/13/2004	11																									
	4/27/2005																										
	4/28/2006	18																									
	11/1/2006*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/1/2007																										
	5/1/2007	2.4																									
	5/6/2008																										
	4/8/2009																										
	10/29/2009																										
	5/25/2010																										
	10/4/2010																		0.44J								
	1/26/2011																										
	4/11/2011																										
	4/3/2012																										
P-101	10/01/1993	NR																									
	04/01/94	NR																					0.5J				
	020/5/02	NR			NA																	NA					
	05/22/2002	NR			NA																	NA					
	10/13/2004																										
	4/27/2005																										
	10/25/2005																										
	4/28/2006																										
	11/1/2006																										
	5/1/2007																										
	5/6/2008																										
	4/8/2009																										
	11/4/2009								0.75J																		
	5/25/2010																										
	10/4/2010																		0.44J								
	1/26/2011																										
	4/11/2011																										
	4/3/2012																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-102	10/26/1993	NR																									
	04/11/1994	NR																					3				
	05/08/1996	NR																					0.4J				
	10/30/1996	NR							0.99 J												0.30 J						
	05/12/1997	NR																									
	10/26/1997	NR																									
	04/13/1998	NR													0.46												
	10/11/2001	NR																									
	05/21/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/23/2004																										
	10/14/2004																										
	4/27/2005																										
	10/25/2005																										
	4/25/2006																										
	11/1/2006																										
	5/2/2007																										
	4/30/2008																										
	10/2/2008																										
	4/8/2009																										
	5/20/2010																										
	4/11/2011																										
	4/3/2012																										
P-102	10/26/1993	NR																									
	04/11/1994	NR																									
	10/11/2001	NR																									
	05/21/2002	NR			NA																	NA				0.33J	
	08/20/2002	NR																				NA				0.62	
	12/04/2002	NR																								0.68	
	04/21/2003																		0.48 J&							0.83	
	10/22/2003																									0.96	
	04/27/2004																									2.1	
	10/14/2004								0.5 J																	0.32	
	1/27/2005																										
	4/27/2005																										
	8/3/2005																										
	8/3/2005 dup																										
	10/25/2005																										
	2/1/2006																										
	4/27/2006																										
	4/27/2006 dup																										
	7/27/2006								0.66 J																		
	11/1/2006																										
	2/15/2007																										
	5/2/2007																										
	8/14/2007																										
	10/16/2007	2.9 J																									
	5/6/2008																										
	10/2/2008																										
	4/8/2009																										
	11/4/2009																										
	11/4/2009 Dup																										
	5/20/2010																										
	4/11/2011																										
	4/3/2012	9.1 J																									

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

Sampling Point	Collection Date	Parameters																									
		Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-103[2]	10/27/1993	NR													**410**											**75**	
	04/11/1994	NR													**1100**											**440**	
	04/01/94 Dup	NR													**970**											**410**	
	05/01/1996	NR				7J									**740**	9J								**10J**		**170**	
	05/01/96 Dup	NR				8J			9 J						**840**	10J								**11J**		**180**	
	10/01/1996	NR	3.3			8.1 J	1.9		1.1	0.76 J		0.99 J		0.30J	**520 E**	5	1.9							4.7		**98 E**	
	05/01/1997	NR	4.3			8.5	2.7			0.98		1.2	0.52	0.75	**790**	4.7	1.6			0.27				**5.6**		**230**	
	10/01/1997	NR	4.2			7.9	2.4			1.4		0.89	0.38		**550J**	5.2	1.5			0.38		3.1		**6.6**		**220J**	
	04/98*	NR																									
	10/01/1998	NR	2			5.7									**260**	3.3								**5.8**		**45**	
	04/01/1999	NR	1.4			4.7									**150**	2.4								3.9		**47**	
	10/01/1999	NR				5.2									**170**	2.6								2.4		**48**	
	05/01/2000	NR	1.8			6.5									**170**	3.4								4.1		**60**	
	10/01/2000	NR	1.6			6.9	3.1			0.84		0.33			**130**	4.5	0.75							**6.6**		**78**	
	05/01/2001	NR	1.2			5.7	1.5			0.92					**94**	3.4	0.54		2.6L			1.1		4.5		**46**	
	10/11/2001	NR	1.1		80	2.6	0.62			0.54					25	2.7			6.4L				0.8			**15**	
	2/4/2002	NR	1.8		NA	6.4	1.1			0.81		0.36			**71**	5.5	0.53		0.28		0.13	NA	0.72	3.1		**40**	
	5/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/21/03 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/21/2003		0.8			1.3									58	1.9								1.7		**21**	
	04/28/2004		0.61 J		26	0.53 J									16									1.9		**6.7**	
	10/13/2004	56	1.4			1.7			0.52						12	2.5							0.89	0.78		**7.9**	
	4/26/2005		1.2			2.8									1.9	3.0							0.71			**1.8**	
	4/25/2006	31			8.0 J	0.62 J									5.2									0.48 J		**1.8**	
	10/31/2006*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/1/2007				6.1J										10									0.82J		**0.34**	
	5/2/2007					1.7									14									1.7		**0.75**	
	10/18/2007														26									2.8		**2.2**	
	5/5/2008					0.63J									15.7									3.4			
	10/2/2008					0.43J									12.3									3.8			
	4/7/2009														7.7									3.1			
	10/28/2009														4.6									2.4			
	2/25/2010														2.9									2.1			
	5/24/2010														4									2.1			
	10/4/2010														3.5				0.73J					2.4			
	1/26/2011														2.9									2.7			
	4/11/2011														2.7									2.1			
	7/11/2011														4.2				0.74J					2.3			
	10/19/2011														4.3									3			
	1/24/2012														3.2									2.6			
	4/3/2012														2.9									2.3			
	4/3/2012 Dup														3.3									2.4			
	7/25/2012														2									2.2			
	10/17/2012														2.1									1.7			
	1/16/2013														1.7									2.3			
	4/24/2013														1.1									1.7			

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																									
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloromethane	1,2-dichloromethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-103	10/27/1993	NR																									
	04/12/1994	NR																									
	05/9/1996	NR													0.1J								0.1J			0.1J	
	10/31/1996	NR							0.84 J																		
	05/13/1997	NR																									
	10/27/1997	NR																									
	04/13/1998	NR																									
	2/4/2002	NR			NA																	NA					
	05/21/2002	NR			NA										[0.54]							NA					
	10/13/2004								0.52 J																	1.7	
	1/26/2005																										
	1/26/2005 dup																										
	4/26/2005																									2.4	
	8/3/2005																									3.2	
	10/26/2005																									3.2	
	02/01/2006																									3.6	
	4/25/2006																									2.9	
	7/28/2006								0.49 J																	1.6	
	11/1/2006																									1.4	
	2/1/2007																									1.5	
	5/2/2007																									1.6	
	8/14/2007																									1.4	
	10/18/2007																									1.2	
	5/5/2008																									0.74	
	5/5/2008 Dup																									0.81	
	10/2/2008																									0.81J	
	10/2/2008 Dup																									0.89J	
	4/7/2009																									0.75J	
	10/28/2009								0.43J																	0.58J	
	2/25/2010								0.52J																	0.49J	
	5/24/2010																										
	10/5/2010																		0.53J							0.41J	
	1/25/2011																									0.34J	
	4/12/2011																									0.39J	
	7/11/2011																										
	10/18/2011																									0.29J	
	1/24/2012																									0.28J	
	4/4/2012																									0.28 J	
	7/25/2012																										
	10/17/2012																										
	1/16/2013																										
	4/26/2013																										
P-103D	02/4/2004				NA														0.55J			NA				1.1	
	05/11/2004																									1.5	
	05/11/04 dup																									1.5	
	07/23/2004																									1.3	
	07/23/04 dup																									1.5	
	10/13/2004								0.43 J						0.86 J												
	04/26/2005														0.84 J											3.0	
	10/26/2005														0.98 J											2.7	
	10/26/2005 dup														0.95 J											2.8	
	4/25/2006																									2.6	
	11/1/2006																									1.9	
	5/2/2007																									1.4	
	10/18/2007																									1.2	
	5/5/2008																									0.69	
	5/5/2008 Dup																									0.66	
	10/2/2008																									1.1	
	10/2/2008 Dup																									1.5	
	4/7/2009																									0.77J	
	4/7/2009 Dup																									0.74J	
	10/28/2009								1.1																	0.75J	
	2/25/2010																									0.64J	
	5/24/2010																										
	10/5/2010																		0.86J							0.71J	
	1/25/2011																										
	4/11/2011																									0.69J	
	7/11/2011																									0.78J	
	10/18/2011																									0.54J	
	1/24/2012																									0.73J	
	4/4/2012	10.7 J																								0.98 J	
	7/25/2012																										
	10/17/2012																										
	1/16/2013																										
	4/26/2013																										
	7/2/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																									
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-104	10/27/1993	NR	2			2				2					1 JB								31				
	4/19/1994	NR	1			1				1					10									0.81		6.0	
	05/9/1996	NR	6			5	1		0.3 J			0.2 J			6	0.3 J		0.1J					0.2 J	0.51		10	
	10/30/1996	NR	0.64 J			1.1	0.34 J		0.46 J						3.6	0.22 J		0.80 J						0.31 J		4.3	0.77 J
	05/12/1997	NR	4.8			4.5	1.5			0.91					1.1					0.32						4.5	
	10/27/1997	NR	0.63			1.3				0.85					7.3											18	
	04/13/1998	NR	1.2												74	0.67							0.46	3.5		17	
	10/13/1998	NR	1.7							0.76					3.3											15	4.1
	04/07/1999	NR	3.2			1.4									6.6									0.71		6.1	
	10/27/1999	NR	3.5			5.4				0.92					4.5											2.8	
	05/2/2000	NR	3			5.7				1.5					0.7								0.13			1.1	
	10/30/2000	NR	2			6.2				1.6					2.6								0.12	0.33		29	
	05/1/2001	NR	2.5			5.6				2	0.47				7				0.51L			0.81	0.13	0.66		8.6	
	10/11/2001	NR	3.1			9.5				2.3				0.85	2				0.39L				0.1			2.2	
	02/5/2002	NR	2.7		NA	8				2	0.19				5.1							NA	0.17	0.73		13	
	05/21/02*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/2003 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/22/2003		1.8		6.9J	3.1									4.6											6.5	
	10/23/2003	3.2	4			7.8				1.8					3.3											8.6	
	04/28/2004		2.4			6				2.2 J					6.4											8.7	
	10/13/2004		2.5			6.5				2.2 J					10											20	
	4/27/2005		1.7			5.4				2.1 J																0.64	
	10/25/2005		1.4			6.9				2.5 J					3.9											13	
	4/25/2006		1.4		4.6J	4.9				2.2 J					1.0J											1.1	
	11/2/2006		1.2 J			4.8				1.7 J																	
	11/2/2006 dup		1.3 J			5																					
	5/2/2007		0.8J			4				2.0J																	
	10/18/2007		0.75 J			6				2.0 J																	
	5/6/2008		0.62J			3.3				1.8																	
	10/1/2008		0.52J			3.7				1.9																	
	4/7/2009		0.68J			3.5				2.3																	
	11/4/2009					3.9				1.9																	
	5/20/2010					3.5				2.4																	
	4/11/2011					3.1				1.9																	
	10/19/2011					3.6				2																	
	4/3/2012		0.41J			3.5				1.9																	
	10/17/2012					2.8				1.8																	
	4/24/2013					3				1.8																	
P-104	10/27/1994	NR																									
	04/19/1994	NR																									
	05/09/1996	NR																									
	10/30/1996	NR							0.20J																		
	05/12/1997	NR																									
	10/27/1997	NR																									
	04/13/1998	NR																									
	10/11/2001	NR																	0.52L								
	02/5/2002	NR	0.18		NA				0.85													NA					
	5/21/2002	NR			NA																	NA					
	08/20/2002	NR																				NA					
	10/13/2004								0.45 J																		
	10/13/04 Dup																										
	8/3/2005																										
	8/3/05 Dup																										
	7/28/2006																										
	8/14/2007																										
	5/5/2008																										
	4/7/2009																										
	5/26/2010																										
	4/12/2011																										
	4/3/2012																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

Sampling Point	Collection Date	Parameters																								
		Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-106	10/1/1993	NR																									
	04/01/1994	NR																					11				
	02/04/02	NR			NA																	NA	0.25				
	05/21/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/19/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	120/5/02 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/21/03 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/23/2004																										
	4/27/2005																										
	4/27/05 Dup																										
	7/28/06*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/31/2006*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/15/2007																										
	8/14/2007																										
	4/30/2008																										
	4/8/2009																										
	5/20/2010																										
	4/11/2011																										
	4/3/2012																										
P-106	10/01/1993	NR																						0.6J			
	04/01/1994	NR																						0.8J			
	05/01/1996	NR													0.2 J									0.8J			
	10/01/1996	NR							0.62J															0.22 J			
	05/01/1997	NR																						0.65			
	10/01/1997	NR																						0.67			
	04/01/1998	NR																						0.61			
	10/01/1998	NR																						0.71			
	04/01/1999	NR																						0.58			
	10/1/1999	NR																						0.61			
	05/01/2000	NR																						0.56			
	10/01/2000	NR																						0.6			
	05/01/2001	NR																						0.56			
	10/11/2001	NR																						0.39			
	2/5/2002	NR			NA																	NA		0.6			
	02/05/02 Dup	NR			NA																	NA		0.6			
	05/22/2002	NR			NA																	NA		0.49			
	05/22/02Dup	NR			NA																	NA		0.47 J			
	08/20/2002	NR																				NA		0.43 J			
	12/4/2002	NR																						0.53			
	04/22/2003																							0.55 J			
	10/21/2003																							0.56			
	10/21/03 Dup																										
	4/27/2004																										
	10/13/2004								0.9															0.84 J			
	4/27/2005																										
	10/25/2005																										
	4/28/2006																										
	11/1/2006																										
	5/1/2007																										
	10/22/2007																										
	4/30/2008																										
	10/1/2008																										
	4/8/2009																										
	4/8/2009 Dup																										
	11/4/2009																										
	5/26/2010																										
	4/12/2011																										
	4/3/2012																										
	4/24/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-107	10/27/1993	NR																						2			
	4/12/1994	NR																						2			
	5/9/1996	NR																						2			
	10/21/1996	NR							0.80 J															2.2			
	5/13/1997	NR									0.9													2.6			
	10/27/1997	NR									0.7													2			
	4/14/1998	NR																						2.1			
	10/13/98*	NR																						NA			
	4/6/1999	NR																						1.8			
	10/27/1999	NR																						1.1			
	5/2/2000	NR																						1.6			
	10/31/2000	NR																						1.2			
	5/31/2001	NR									0.47								0.57L					1.8			
	10/11/2001	NR																						0.87			
	2/4/2002	NR			NA						0.35											NA		1.4			
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/2003																		0.52 J					1.2			
	10/21/2003																							2.2			
	4/27/2004																							1.9			
	10/13/2004								0.63 J															0.65 J			
	4/27/2005																							1.1			
	10/27/2005																							0.79 J			
	4/25/2006																		0.49 J					0.55 J			
	10/31/2006																										
	5/1/2007																							0.86			
	10/17/2007																							0.53 J			
	5/5/2008																										
	10/1/2008																										
	4/7/2009																										
	10/28/2009								1.6															0.51J			
	5/24/2010																										
	10/4/2010																		0.70J								
	1/26/2011																										
	4/11/2011																										
	10/18/2011																										
	4/3/2012																										
	10/17/2012																										
	4/24/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-107	10/27/1993	NR													4											**6**	
	4/12/1994	NR													2								0.7J			**3**	
	4/12/94 Dup	NR													2								0.7J			**3**	
	5/9/1996	NR	0.1 J				0.2 J								2								0.1 J	0.1 J		**2**	
	10/23/1996	NR					0.19		0.79 J						1.9											**2.3**	
	10/23/96 Dup	NR					0.21		0.49 J						2.1											**2.7**	
	5/14/1997	NR													1.3											**2**	
	5/14/97 Dup	NR													1.1											**1.7**	
	10/27/1997	NR													2.2											**2.6**	
	10/27/97 DUP	NR													1.8											**2.3**	
	4/14/1998	NR													2.3											**2.2**	
	4/14/98 Dup	NR													2.3											**2.4**	
	10/14/1998	NR													2.1											**1.5**	
	10/14/98 DUP	NR													2.4											**1.7**	
	4/6/1999	NR													1.5											**0.58**	
	10/27/1999	NR													1.8												
	10/27/99 Dup	NR													1.8												
	5/2/2000	NR													1.5											**1.2**	
	5/02/00 Dup	NR													1.6											**1.2**	
	10/31/2000	NR													1.4												
	10/31/00 Dup	NR													1.4												
	5/9/2001	NR													0.96				0.52L			0.72		1.8		**0.85**	
	5/9/2001 Dup	NR													0.97				0.49L			0.79				**0.86**	
	10/11/2001	NR													1.6											**1.7**	
	10/11/01 Dup	NR													1.5											**1.7**	
	2/4/2002	NR			NA										1.6							NA				**1.2**	
	5/21/2002	NR			NA										1.8							NA				**1.5**	
	5/21/02 Dup	NR			NA										1.7							NA				**1.4**	
	8/20/2002	NR													0.84							NA				**0.54J**	
	12/4/2002	NR													1.3											**1**	
	4/21/2003														1.5 J											**1**	
	04/21/2003 Dup														1.3 J												
	10/21/2003														1.3											**0.93**	
	4/27/2004														0.96 J											**0.61**	
	10/13/2004														0.89 J											**0.64**	
	10/13/04 Dup														1.1 J												
	4/27/2005																										
	10/27/2005																										
	4/25/2006																									**0.79**	
	10/31/2006																									**0.33J**	
	5/1/2007																									**0.76**	
	10/19/2007														0.92 J											**1**	
	5/5/2008																									**0.48J**	
	10/1/2008																										
	4/7/2009								0.24J																	**0.88J**	
	10/28/2009								1.6																	**0.64J**	
	5/24/2010																									**1.1**	
	10/5/2010																									**0.94J**	
	1/24/2011																										
	4/12/2011																									**0.84J**	
	10/18/2011																									**0.54J**	
	4/4/2012	10.7 J																								**1.1**	
	10/17/2012																										
	4/26/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-107D	10/27/1993	NR													2B											6	
	4/13/1994	NR																									
	5/9/1996	NR	0.1J						0.3J						0.2J								0.3J			**0.6J**	
	10/23/1996	NR							0.44 J																	**3.9**	
	5/14/1997	NR													0.49											**2.4**	
	10/27/1997	NR													1.7											**5.1**	
	4/14/1998	NR													1											**4.1**	
	10/14/1998	NR																								**2.2**	
	4/6/1999	NR													0.34											**0.87**	
	10/27/1999	NR																								**1.7**	
	5/2/2000	NR																								**1.3**	
	10/31/2000	NR													0.64												
	01/05/2001	NR		0.33											1.5				0.44L			0.72B				**5.6**	
	10/11/2001	NR													2.2											**10**	
	2/4/2002	NR			NA										1.2							NA		0.17		**3.9**	
	02/04/02 Dup	NR													1.2											**3.9**	
	5/21/2002	NR			NA										1.1							NA				**3.3**	
	8/20/2002	NR													1.1							NA				**3.1**	
	12/4/2002	NR													0.75											**0.81**	
	4/21/2003														1.3 J											**3.3**	
	10/21/2003														0.97											**3.5**	
	4/27/2004														1.5 J											**4.2**	
	10/13/2004						1.2 J		0.93						2.0 J											**5.9**	
	4/27/2005														1.3 J											**3.1**	
	4/27/05 Dup						1.9 J								2.5											**6.2**	
	10/27/2005						1.2 J								2.0 J											**4.3**	
	4/25/2006						2.3 J								3.1				0.68 L							**7.7**	
	10/31/2006						2.0 J								2.1 J											**4.3**	
	5/1/2007						1.6J								2.5J											**6.2**	
	5/1/2007 Dup						1.6J								2.9											**6.7**	
	10/19/2007																									**3**	
	5/5/2008																									**1.3**	
	10/1/2008																									**1.6**	
	4/7/2009								0.96J																	**2.5**	
	10/28/2009																									**2**	
	2/25/2010								0.25J																	**1.8**	
	5/24/2010																									**4**	
	10/5/2010																									**1.6**	
	1/24/2011																									**2.6**	
	4/12/2011																									**2.6**	
	7/11/2011														1.2											**5.3**	
	10/18/2011																									**1.8**	
	1/23/2012																										
	4/4/2012																									**4.5**	
	7/25/2012																									**2.1**	
	10/17/2012																									**2**	
	1/16/2013																									**2.3**	
	4/26/2013																									**2.1**	
	7/2/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoroethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-108	10/18/1993	NR																					11				
	4/13/1994	NR																					2				
	5/8/1996	NR													0.2 J								0.2J				
	10/23/1996	NR							0.85 J																		
	5/12/1997	NR																									
	10/27/1997	NR																									
	4/14/1998	NR																									
	10/11/2001	NR																	0.34L								
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/5/2002	NR																									
	10/14/2004														1.2 J									1.3 J		0.67	
	4/27/2005														1.0									0.7		0.3	
	8/3/2005																							0.70 J			
	10/25/2005																										
	02/01/2006																										
	4/28/2006																										
	7/27/2006								0.36 J																		
	11/2/2006																										
	2/1/2007																										
	5/2/2007																										
	8/14/2007																										
	10/16/2007																										
	5/6/2008	2.7J																									
	10/2/2008																										
	4/8/2009																										
	11/4/2009																										
	11/4/2009 Dup																										
	5/20/2010																										
	5/20/2010 Dup																										
	4/11/2011																										
	4/11/2011 Dup																										
	4/2/2012																										
P-108	10/25/1993	NR																									
	10/25/93 Dup	NR																									
	4/13/1994	NR																									
	4/13/94 Dup	NR																									
	10/11/2001	NR																	0.32L								
	2/5/2002	NR			NA																	NA					
	5/21/2002	NR			NA																	NA					
	10/14/2004								0.45 J																		
	1/28/2005																										
	10/25/2005																										
	7/27/2006								0.75 J																		
	8/14/2007										2.7 J																
	5/6/2008																										
	4/8/2009																										
	5/20/2010																										
	4/11/2011																										
	4/2/2012																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																									
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-111	4/19/1994	NR																									
	10/11/2001	NR																	0.30L								
	05/21/2002*	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002	NR																				NA					
	12/5/2002	NR																									
	10/13/2004																										
	10/26/2005																										
	4/24/2006																										
	8/8/2007																										
	5/5/2008																										
	4/7/2009																		0.44J								
	10/28/2009																										
	5/24/2010																										
	10/4/2010																		0.80J								
	1/26/2011																										
	4/11/2011																										
	4/3/2012																										
P-111	4/19/1994	NR																					2				
	10/11/2001	NR																									
	2/5/2002	NR			NA																	NA					
	5/22/2002	NR			NA																	NA					
	8/19/2002	NR																				NA					
	08/19/02 Dup	NR																				NA					
	12/5/2002	NR																									
	12/05/02 Dup	NR																									
	4/22/2003																										
	10/22/2003																										
	4/28/2004																										
	8/3/2005																										
	7/27/2006																										
	8/8/2007																										
	5/5/2008																										
	4/7/2009																										
	10/28/2009																										
	5/24/2010																										
	10/5/2010																										
	1/24/2011																										
	4/13/2011																										
	4/4/2012	10.5 J																									

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																										
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-111D	4/4/2002	NR													0.6								0.3			13	
	5/22/2002	NR			NA										0.59 J							NA				15	
	8/19/2002	NR													0.37 J							NA				12	
	12/5/2002	NR													0.42 J											11	
	4/23/2003																									12	
	10/23/2003																									9.1	
	5/11/2004						1.4																			15	
	07/23/2004																									14	
	10/13/2004						1.9 J																1.6 J			11	
	1/27/2005																									8.8	
	4/26/2005						3.7								0.87 J											13	
	4/26/05 Dup						3.5																			13	
	8/3/2005								2.9 J						0.96 J											10	
	10/26/2005						3.1 J								1.1 J											10	
	10/26/2005 dup						2.7 J								0.93 J											10	
	02/01/2006						4.2								0.89 J											11	
	4/24/2006						2.8 J								1.3 J											11	
	7/27/2006								0.30 J						1.2 J											10	
	10/31/2006						1.4 J								1.3 J											8.5	
	1/31/2007						3.0J								1.4J											8.2	
	5/1/2007						3.1J								1.3J											8.2	
	8/8/2007						2.9 J								1.5 J											8.5	
	10/17/2007						2.7 J								1.5 J											8	
	5/5/2008														1.5											4.7	
	10/2/2008						1.8								1.5											5.7	
	4/7/2009						1.4								1.7											5.5	
	10/28/2009						1.8								1.5											5	
	2/25/2010						1.8								1.5											4.4	
	2/25/2010 Dup						1.5								1.5											3.9	
	5/24/2010						1.9								1.5											5.9	
	5/24/2010 Dup						1.8								1.4											4.4	
	10/5/2010						1.5								1.3				0.55J							4.7	
	10/5/10 Dup						1.6								1.3				1.2							4.7	
	1/24/2011						1.9								1.1											5.2	
	1/24/11 Dup						1.7								1.4											4.5	
	4/13/2011						2.3								1.6											5.8	
	4/13/2011 Dup						2.8								1.3											7.1	
	7/11/2011														1.4				0.88J							5.3	
	10/18/2011						1.5								1.4											4.5	
	10/18/2011 Dup						1.4								1.5											4.8	
	1/23/2012						2								1.7											4.3	
	4/4/2012	8.0 J					2.1								2											6	
	4/4/2012 Dup	8.3 J					2								2											5.7	
	7/25/2012														1.6											6.5	
	10/17/2012						1.3								1.7											7.2	
	10/17/2012 Dup						1.8								1.9											6.9	
	1/16/2013						2.2								1.7											8.1	
	4/26/2013						2.3								1.4											6.5	
	4/26/2013 Dup						2.2								1.3											6.7	
	7/2/2013						1.9								1.9											6.8	

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloromethane	1,2-dichloromethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
MW-112	11/27/1996	NR	0.6J				2 J								59	1 J								3J		15	
	11/27/96 Dup	NR	0.7J				2 J								58	1 J								4J		16	
	5/12/1997	NR	0.59			0.27									5.4											2.2	
	10/26/1997	NR	0.5			0.29									1.3												
	4/13/1998	NR	0.69				1.4								57	1.3								1.9		12	
	10/13/1998	NR	0.76												80									1.2		25	
	4/6/1999	NR	0.72				1.4								40	0.56								1.7		7.9	
	10/27/1999	NR													7.6									1			
	5/2/2000	NR	0.46												3.4									0.39			
	10/30/2000	NR				0.37									5.6									0.37			
	5/9/2001	NR	0.42			0.42									3.5											0.98	
	10/11/2001	NR	0.36			0.39	0.53								27									0.83		3.7	
	2/4/2002	NR	0.23		NA	0.48									0.49							NA					
	05/21/2002*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/19/2002 *	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002														150									2.7 J		56	
	4/22/2003		1.2 J				7.4 &								220	4.5 J								5.9		45	
	10/22/2003	2.5	0.88				5.9								60	1.4								1.6		51	
	4/28/2004		0.53 J			0.45 J	4								18									1.1 J		9.9	
	4/28/04 dup	6.5	0.61 J			0.48 J	4.7								22									1.1 J		9.3	
	07/23/2004	110	1.1				23								140	2.6	0.58				1			7.4		31	
	10/13/2004		1.0 J			0.42	14								110	2.4 J								2.9		25	
	10/13/04 Dup		0.87 J				15		0.56 J						94	2.1 J					0.60 J			2.9		29	
	1/26/2005		0.76 J				20								85	2.3 J										27	
	4/26/2005		0.6 J				13								64	1.2 J								1.8		17	
	8/3/2005					0.48J									4.6											1.5	
	10/25/2005														2.5 J											1.4	
	02/01/2006		0.41 J			0.45 J	3.2 J								11									0.76 J		4.9	
	4/25/2006					0.48 J	0.97 J								5.4											2.8	
	7/27/2006					0.43 J			0.24 J						2.9											1.7	
	7/27/2006 dup								0.52 J																	1.5	
	11/2/2006														2.3 J											1.7	
	2/1/2007					0.46J	1.4J								3.8											2.5	
	5/2/2007					0.53J	1.3J								6.1											2.6	
	8/14/2007					0.51 J									4.4											1.8	
	8/14/2007 dup					0.51 J									4.9											1.6	
	10/18/2007					0.49 J									4											1.2	
	5/5/2008														33.3									1.8		1.3	
	10/2/2008														13.3									0.60J		0.79J	
	4/7/2009														5.1									0.57J		0.56J	
	11/4/2009																										
	5/20/2010														2.7											0.33J	
	4/11/2011														1.8												
	7/11/2011														5.3				0.60J					1.5		0.27J	
	10/19/2011														1.4												
	1/24/2012																							0.76J			
	4/3/2012																										
	7/25/2012														1.5												
	10/17/2012																										
	1/16/2013																										
	4/24/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																									
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-113A	9/12/2002	NR						0.37J															1.0J				
	12/3/2002	NR																									
	4/23/2003																						2.2				
	10/22/2003																										
	5/11/2004																										
	8/2/2005																										
	7/27/2006								0.84																		
	8/8/2007																										
	5/6/2008																										
	4/6/2009																										
	10/29/2009								0.42J																		
	5/25/2010																										
	10/6/2010																										
	1/25/2011																										
	4/13/2011																										
	7/12/2011																		1.3								
	10/19/2011																										
	1/23/2012																										
	4/4/2012	7.5 J																									
	7/25/2012																										
	10/16/2012																										
	1/15/2013																										
	4/26/2013																										
	7/2/2013																										
P-113B	09/11/2002 [3]	NR						1										0.41J					6.6				2.6
	12/3/2002	NR																									
	4/23/2003																										
	7/30/2003																										
	10/22/2003																										
	2/4/2004																										
	5/11/2004																										
	07/22/2004																										
	10/14/2004								0.49 J																		
	1/27/2005																										
	4/27/2005																										
	8/2/2005																										
	10/26/2005								0.42 J																		
	02/01/2006																										
	4/24/2006																										
	7/27/2006								0.49 J																		
	10/31/2006																										
	1/31/2007																										
	5/1/2007																										
	8/8/2007																										
	10/19/2007																										
	5/6/2008																										
	10/1/2008								0.29J																		
	4/6/2009																										
	4/6/2009 Dup																										
	10/29/2009																										
	5/25/2010																										
	10/6/2010																		0.51J								
	1/25/2011																		1.6								
	4/13/2011																										
	7/12/2011																		1.3								
	10/19/2011								0.43J																		
	1/23/2012																										
	4/4/2012																										
	7/25/2012																										
	10/16/2012																										
	1/15/2013																										
	4/26/2013																										
	7/2/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																									
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-114 (former Ehster well)	11/19/2001	NR													0.93											7	
	2/5/2002	NR													0.85											5.5	
	5/22/2002	NR													1.2											6.2	
	8/21/2002	NR													0.93											5.4	
	12/3/2002	NR													1.3								0.40J			6.3	
	4/23/2003																									3.3	
	10/23/2003														1.2											8.6	
	10/23/03 Dup														1.4											9.2	
	5/11/2004														1.5 J											10	
	07/22/2004														1.4 J											7.9	
	10/13/2004								0.39J						1.7 J											10	
	1/27/2005																									3.5	
	4/26/2005																									3.0	
	8/2/2005														1.1 J											6.1	
	10/26/2005								0.84						1.3 J											6.6	
	10/26/2005 dup								0.49						1.4 J											6.9	
	01/31/2006														1.3 J											8.4	
	4/24/2006														1.3 J											7.6	
	4/24/2006 dup														1.3 J											7.9	
	7/27/2006								0.48 J						1.6 J											8.9	
	7/27/2006 dup								0.38 J						1.6 J											8.7	
	11/2/2006														2.7 J											13	
	11/02/2006 dup														2.7J											13	
	2/1/2007														1.2J				0.46J							7.5	
	2/1/2007 dup														1.4J											8.5	
	5/1/2007														1.1J											7.4	
	5/1/2007 dup														1.2J											7.8	
	8/8/2007														1.1 J											6.7	
	8/8/2007 dup														1.2 J											7.5	
	10/22/2007														0.95 J											7.8	
	10/22/2007 Dup														1.2 J											8.1	
	5/6/2008														1.5											6.6	
	10/2/2008														1.2											6.1	
	4/6/2009														1.6				0.47J							6.5	
	10/29/2009								1.5						1.5											4.7	
	2/26/2010														1.6											5.1	
	5/26/2010														1.3											4.5	
	5/26/2010 Dup														1.3											4.3	
	10/6/2010														1.4											5.4	
	10/6/10 Dup														1.3											5.4	
	1/25/2011														1.3											4.8	
	1/25/11 Dup														1.3											5.3	
	4/13/2011														1.6											8.2	
	4/13/2011 Dup														1.7											8.5	
	7/12/2011														1.3				0.80J							5.6	
	7/12/2011 Dup														1.5				0.67J							5.8	
	10/19/2011														1.2											5.6	
	10/19/2011 Dup														1.3											5.5	
	1/23/2012														1.1											5	
	1/23/2012 Dup														1.3											5.1	
	4/4/2012														1.5											7.2	
	4/4/2012 Dup														1.5											7.5	
	7/25/2012														1.2											6.5	
	7/25/2012 Dup														1.4											6.3	
	10/17/2012														1.6											6.6	
	10/17/2012 Dup														1.6											6.4	
	1/16/2013														1.2											8.2	
	1/16/13 Dup														1.3											7.6	
	4/26/2013														1.2											6.5	
	4/2 /2013 Dup														1.1												
	7/2/2013																										
	7/2/2013 Dup														1.3												

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-115 (former Wiese well)	10/9/2001	NR																									
	10/09/01 Dup	NR																									
	11/19/2001	NR																									
	2/5/2002	NR																									
	5/22/2002	NR																									
	8/19/2002	NR							0.20J																		
	12/3/2002	NR																									
	4/22/2003																										
	7/30/2003																										
	10/22/2003																										
	2/4/2004																										
	4/27/2004																										
	10/14/2004																									**0.33 J**	
	1/27/2005																										
	4/26/2005																										
	8/2/2005																									**0.34 J**	
	10/26/2005								0.24J																	**0.33 J**	
	1/31/2006																										
	4/24/2006																									**0.62**	
	7/27/2006																									**0.44 J**	
	10/31/2006																									**0.39J**	
	2/1/2007																									**0.50J**	
	5/1/2007																									**0.54J**	
	8/14/2007																									**0.62**	
	10/22/2007																									**0.49 J**	
	10/22/2007																									**0.55 J**	
	5/6/2008																									**1.1**	
	10/2/2008																									**1.9**	
	4/6/2009																									**1.3**	
	10/29/2009								1.6																	**1.3**	
	2/26/2010								0.30J																	**0.95J**	
	5/26/2010																										
	10/6/2010																									**1.2**	
	1/25/2011																									**0.86J**	
	4/13/2011																									**1.4**	
	7/12/2011																		0.69J							**0.99J**	
	10/19/2011																									**1**	
	1/23/2012																									**0.77J**	
	4/4/2012	7.2 J																								**1.3**	
	7/25/2012																									**1.1**	
	10/17/2012																										
	1/16/2013																									**1.3**	
	4/26/2013																									**1.1**	
	7/2/2013																										

Table 2. Groundwater VOC Analytical Results for Monitoring Wells
FF/NN Landfill, Ripon, WI

		Parameters																								
Sampling Point	Collection Date	Acetone[1]	Benzene	Bromomethane	2-Butanone (MEK)	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	1	90	NE	80	0.6	0.3	15	200	85	0.5	0.7	7	20	0.5	140	0.5	12	0.5	10	200	0.5	NE	0.02	1000
	ES	1000	5	10	460	NE	400	6	3	75	1000	850	5	7	70	100	5	700	5	60	5	50	1000	5	NE	0.2	10000
P-116 (former Hadel well)	10/9/2001	NR																									
	11/19/2001	NR																									
	2/5/2002	NR																									
	5/22/2002	NR																									
	8/19/2002	NR																									
	08/19/02 Dup	NR																									
	12/3/2002	NR																									
	12/03/02 Dup	NR																									
	4/22/2003																										
	7/30/2003																										
	10/22/2003																										
	2/4/2004																										
	5/11/2004																										
	7/22/2004																										
	10/14/2004																										
	1/27/2005																										
	4/26/2005																										
	8/2/2005																										
	10/26/2005																										
	1/31/2006																										
	01/31/06 Dup																										
	4/24/2006																										
	7/27/2006								0.35 J																		
	10/31/2006																										
	2/1/2007																										
	5/1/2007																										
	8/8/2007																										
	10/22/2007																										
	5/6/2008																										
	10/2/2008																										
	4/6/2009																										
	10/29/2009																										
	2/26/2010																		1.1								
	5/25/2010																										
	10/6/2010																		0.44J								
	1/25/2011																										
	4/13/2011																										
	7/12/2011																		0.46J								
	10/19/2011																										
	1/23/2012																										
	4/4/2012																										
	7/25/2012																										
	10/17/2012																										
	1/15/2013																										
	4/26/2013																										
	7/2/2013																										

Results in µg/L

B = analyte found in method blank as well as sampl
E = exceeds calibration range
J = estimated value between LOD and LOQ
L = Lab Artifact
& = Laboratory control spike recovery not within control limi
NE = None Established
NA= Not Analyzed; no sample collected for analysi
NR = Value not reported by lab or not recorded during initial evaluation by GeoTra

PAL = Preventive Action Limi
ES = Enforcement Standarc
Underline indicates exceeds NR 140 PAL
Bolding indicates exceeds NR 140 ES
Blank = Sample Collected but No VOCs detecte
Historical data for abandoned wells MW-105, P-105, P-109 and MW-110 can be found in reports prior to October 20

* Not sampled due to insufficient water for sample collectio

[1] The reporting of acetone on an 8260B VOC scan varies with labs. Enchem, which began analyzing samples in April 2003, does report acetone. Acetone has appeared in several wells beginning in October 2(

[2] MW-103 had low concentrations of isopropyl ether detected in October 1997 and February 2002. Acetone at 27 ppb was detected in April 2004. Carbon disulfide at 2.2J ppb was detected in January 2(

[3] this sample had detections of bromodichloromethane at 0.59 ppb and dibromocbloromethane at 0.35 ppl

[4] this sample in P-116 had 0.18 ppb of 1,1,1-trichloroethanc

Table 3. Groundwater Natural Attenuation Parameters
FF/NN Landfill, Ripon, WI

Well ID	Compound	Nitrate	Nitrite	Iron 2	Sulfate	Sulfide	Methane	ORP**	Dissolved Oxygen	Specific Conductivity	pH	Temperature
		NO_3^-	NO_2^-	Fe^{2+}	SO_4^{2-}	S^{2-}	CH_4					
	Detection Ranee	0.2to 1.5*	0.08 to 0.8*	0.1 to2.5*	8 to 100*	0.2 to3*						
	Target	>	<	<1	>20	<1	<0.5	>50	>0.5			
	Units	mg/1	mg/1	mg/1	mg/1	mg/1	mg/1	mV	mg/1	uS/cm	Units	C
MW-101	2/1/2007									558	6.59	7.4
	5/1/2007									1021	6.92	13.1
	5/6/2008									782	7.18	12.4
	4/8/2009									940	6.75	12.5
	10/29/2009	<0.20	0.39	>2.5	>100	<0.2	0.015	-98	3.17	914	6.85	11.8
	5/25/2010	<0.20	0.08	>2.5	>100	<0.2	0.0192	-73	1.65	961	6.55	25.3
	10/4/2010	0.08			>100		0.0136	-63	2.13	1265	6.95	15.8
	1/26/2011			>2.5				-14	2.51	938	7.39	6.2
	4/11/2011									1020	7.48	14.1
	4/3/2012									960	7.10	13.0
MW-103	2/1/2007									2670	6.95	5.7
	5/2/2007									1180	6.64	10.8
	10/18/2007									1609	6.74	13.0
	5/5/2008									1420	7.06	12.2
	10/2/2008									1411	6.69	11.3
	4/7/2009									1433	7.17	10.3
	10/28/2009	<0.20	>0.80	0.42	>100	<0.2	0.00042	24	4.21	1780	6.79	10.7
	2/25/2010	>1.5	<0.08	<0.1	>100	<0.2	<0.0028	55	4.1	2	6.96	8.6
	5/24/2010	>1.5	<0.08	0.11	>100	<0.2	<0.0028	86	2.84	2110	6.49	17.7
	10/4/2010	>1.5			>100		0.0235	46	3.33	1920	7.22	12.9
	1/26/2011			0.09				62	4.52	1700	7.22	5.5
	4/11/2011			0.07				136	5.02	1217	6.79	13.8
	7/11/2011			0.13				33	3.54	1660	7.14	18.7
	10/19/2011			<0.1				171	4.01	1580	6.88	8.7
	1/24/2012			<0.1				144	3.28	1930	6.98	6.1
	4/3/2012			<0.1				98	3.25	2130	6.88	12.4
	7/25/2012			0.323				58	2.56	1950	6.71	21.4
	10/17/2012			<0.1				59	6.02	1690	6.96	12.7
	1/16/2013			<0.1				36	3.67	1730	7.00	6.6
	4/24/2013			0.394				41	3.29	1454	7.05	11.3
MW-104	10/19/2011									1312	6.78	9.9
	4/3/2012									1134	6.90	12.3
	10/17/2012									1517	6.71	12.7
	4/24/2013									1396	6.87	12.2
MW-107	4/21/2003						0.13	185.70	21.27	1021	7.00	9.84
	4/22/2003				30			74.10	5.70	1024	7.06	10.32
	10/21/2003	3.3			32			79.30	5.80	1211	6.92	9.64
	5/1/2007									570	6.93	10.5
	10/17/2007									1297	7.09	13.1
	5/5/2008									796	7.54	11.5
	10/1/2008									1240	6.86	10.1
	4/7/2009									1226	7.50	10.2
	10/28/2009	>1.5	0.18	0.61	>100	<0.2	<0.000180	-1	5.78	956	7.13	11.6
	5/24/2010	>1.5	0.32	1.86	>100	0.71	<0.0028	61	3.08	1087	6.89	20.7
	10/4/2010	>1.5		0.7	49.95		ND	76	6.38	1650	7.62	10.6
	1/26/2011			0.85				45	4.74	249	7.35	6.0
	4/11/2011									1100	8.12	11.2
	10/18/2011									1225	7.51	10.1
	4/3/2012									983	7.50	11.5
	10/17/2012									1076	7.10	13.0
	4/24/2013									1144	7.34	11.0
MW-111	12/5/2002									866	7.15	7.84
	8/8/2007									920	7.45	11.4
	5/5/2008									732	7.45	11.9
	4/7/2009									867	7.22	10.8
	10/28/2009	>1.5	<0.08	0.26	>100	<0.2	0.00031	3	6.66	836	6.66	11.4
	5/24/2010	1.09	0.22	1.39	>100	0.44	<0.0028	71	2.73	958	6.80	22.7
	10/4/2010	0.99		0.02	>100		ND	85	4.87	995	7.72	9.6
	1/26/2011			0.25				26	4.56	849	7.28	7.6
	4/11/2011									900	7.94	11.2
	4/3/2012									846	7.60	11.7
MW-112	7/11/2011			>2.5				-51	1.49	951	7.34	16.5
	10/19/2011			>2.5				-46	1.12	907	7.01	8.9
	1/24/2012			>2.5				-26	1.32	1060	7.16	8.0
	4/3/2012			>2.5				-77	1.19	1210	6.96	11.7
	7/25/2012			>2.5				-75	1.37	1071	6.89	18.9
	10/17/2012			>2.5				-113	1.08	992	7.15	12.7
	1/16/2013			>2.5				-72	1.80	1003	7.10	7.9
	4/24/2013			>2.5				45	1.56	1052	7.11	12.1
P-101	12/4/2002				50			-53.5	0.08	843	7.12	9.26
	4/22/2003				51			-36.9	0.81	646	7.46	10.12
	10/23/2003	<0.058			49			-65.5	0.66	754	7.04	10.20
	5/1/2007									828	7.57	11.7
	5/6/2008									735	7.69	11.3
	4/8/2009									749	7.24	11.4
	10/29/2009	0.39	0.12	1.84	71.36	<0.2	0.00059	-108	2.2	880	7.32	11.2
	5/25/2010	<0.20	<0.08	1.38	70.81	<0.2	<0.0028	-48	1.04	925	6.62	25.5
	10/4/2010	0.08			69.72		ND	-92	1.9	948	7.51	15.0
	1/26/2011			1.24				-31	2.65	829	7.26	5.8
	4/11/2011									840	7.96	12.8
	4/3/2012									776	7.40	11.6

Table 3. Groundwater Natural Attenuation Parameters
FF/NN Landfill, Ripon, WI

Well ID	Compound	Nitrate	Nitrite	Iron 2	Sulfate	Sulfide	Methane	ORP**	Dissolved Oxygen	Specific Conductivity	pH	Temperature
		NO_3^-	NO_2^-	Fe^{2+}	SO_4^{2-}	S^{2-}	CH_4					
	Detection Range	0.2to 1.5*	0.08to 0.8*	0.1 to2.5*	8 to 100*	0.2 to 3*						
	Target	>	<	<1	>20	<1	<0.5	>50	>0.5			
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	mg/l	uS/cm	Units	C
P-103	12/4/2002				54		0.037	-60.50	1.17	956	7.00	9.49
	4/21/2003				58			-29.90	0.71	388	7.28	10.50
	10/22/2003	0.41			54			-147.10	0.82	874	7.17	10.06
	2/1/2007							172	0.53	903	6.86	9.0
	5/2/2007							206	0.92	896	6.78	9.9
	8/14/2007							226	0.70	863	7.09	11.4
	10/18/2007							300	0.51	863	6.35	11.0
	5/5/2008							30	0.93	956	6.98	10.5
	10/2/2008							323	1.37	888	6.70	10.8
	4/7/2009							-95	1.09	813	7.40	9.8
	10/28/2009	0.45	<0.08	<0.1	78.95	<0.2	0.052	-125	0.85	739	7.19	10.2
	2/25/2010	>1.5	NM	NM	83.29	<0.2	0.0416	-120	1.62	845	7.25	9.0
	5/24/2010	<0.20	<0.08	>2.5	89.8	<0.2	0.0489	-104	0.38	815	7.00	11.2
	10/5/2010	0.08			85.02		0.0562	-128	1.15	874	7.86	10.9
	1/25/2011			2.5				-69	0.64	776	7.60	9.3
	4/12/2011			>2.5				-125	1.22	906	7.19	10.0
	7/11/2011			>2.5				-123	0.83	743	7.92	11.5
	10/18/2011			>2.5				-76	1.60	737	7.38	10.3
	1/24/2012			>2.5				-47	0.65	878	7.27	9.0
	4/4/2012			2.489				-96	0.93	985	7.26	10.2
	7/25/2012			>2.5				-100	0.67	855	6.94	11.7
	10/17/2012			>2.5				-101	1.00	808	6.83	10.5
	1/16/2013			2.102				-123	0.51	824	7.15	9.3
	4/26/2013			>2.5				-86	0.59	790	7.45	10.4
P-106	4/24/2013							-6	3.17	764	7.26	9.8
P-107	12/4/2002	NM	NM	NM	66		0.11	-28.00	0.86	791	7.22	9.40
	4/21/2003				74			37.30	0.76	646	7.43	9.62
	10/21/2003	<0.058						-70.40	0.92	716	7.18	9.73
	5/1/2007							240	1.64	840	6.66	9.6
	10/19/2007							330	1.80	863	6.42	10.7
	5/5/2008							8	1.50	925	7.50	11.0
	10/1/2008							350	2.63	923	6.66	10.2
	4/7/2009							-95	1.75	852	7.34	9.0
	10/28/2009	<0.20	<0.08	1.68	89.8	<0.2	0.31	-78	1.19	778	7.08	10.9
	5/24/2010	<0.20	<0.08	1.76	99.39	<0.2	0.383	-70	1.12	869	6.92	13.2
	10/5/2010	0.06			88.68		0.345	-117	1.84	930	7.86	10.8
	1/24/2011			1.33				-28	1.82	838	6.73	7.8
	4/12/2011							-68	1.39	966	7.16	10.1
	10/18/2011							-49	1.50	796	7.34	10.4
	4/4/2012							-82	1.64	1051	7.26	10.2
	10/17/2012							-88	1.55	886	7.28	11.3
	4/26/2013							-76	2.16	860	7.53	10.8
P-111	12/5/2002				44			-88.30	-0.03	639	7.43	9.76
	4/22/2003				39			-74.20	0.67	486	7.71	12.06
	10/22/2003	<0.058			31			-94.00	0.75	566	7.53	9.87
	8/14/2007							118	0.35	580	7.46	11.1
	5/5/2008							65	0.35	614	7.72	10.5
	4/7/2009							-89	0.26	624	7.62	9.1
	10/28/2009	<0.20	<0.08	0.53	64.03	<0.2	0.0085	-140	0.48	616	7.57	10.1
	5/24/2010	<0.20	<0.08	0.61	70.99	<0.2	0.0051	-101	0.24	673	7.25	10.5
	10/5/2010	0.06			69.06		0.0065	-131	0.28	715	8.26	10.3
	1/24/2011			0.45				-98	0.58	632	7.35	9.1
	4/13/2011							-53	1.46	683	6.99	9.7
	4/4/2012							-104	0.60	832	7.53	9.9
MW-3B	12/5/2002				36			-87	-0.11	1248	6.57	9.84
	12/5/2002				36							
	4/22/2003				46			-92	0.37	815	7.18	9.86
	10/22/2003	<0.058			43			-161	0.55	662	7.45	9.79
	1/31/2007							140	0.51	710	7.27	8.2
	5/1/2007							125	1.32	703	6.99	9.5
	8/8/2007							-233	0.43	605	7.49	10.3
	10/19/2007							170	0.29	598	6.63	9.8
	5/6/2008							21	0.40	672	7.89	9.7
	10/1/2008							334	1.35	646	6.90	9.7
	4/7/2009							-116	0.20	604	7.48	8.8
	10/28/2009	<0.20	<0.08	0.72	37.68	<0.2	0.098	-230	0.35	567	7.65	9.4
	5/24/2010	<0.20	<0.08	0.78	50.67	<0.2	0.0275	-176	0.17	650	7.27	10.2
	10/5/2010	0.05		0.61	43.23		0.0159	-161	8.80	697	8.24	9.9
	1/24/2011			0.66				-109	0.44	614	6.90	8.4
	4/13/2011			0.84				-207	0.52	694	7.65	9.5
	7/12/2011			0.68				-195	0.96	591	7.54	9.9
	10/19/2011			0.71				-171	2.18	604	7.89	9.5
	1/23/2012			0.79				-110	0.28	734	7.37	8.7
	4/4/2012			0.861				-151	1.39	811	7.57	9.3
	7/25/2012			0.681				-231	0.39	693	7.65	11.6
	10/16/2012			0.72				-157	0.42	675	7.36	10.0
	1/15/2013			0.874				-233	1.60	702	7.62	8.9
	4/26/2013			0.85				-158	2.59	681	7.90	9.6
	7/2/2013			0.804				-91	0.35	707	7.34	9.9

Table 3. Groundwater Natural Attenuation Parameters
FF/NN Landfill, Ripon, WI

Well ID	Compound	Nitrate	Nitrite	Iron 2	Sulfate	Sulfide	Methane	ORP**	Dissolved Oxygen	Specific Conductivity	pH	Temperature
		NO_3^-	NO_2^-	Fe^{2+}	SO_4^{2-}	S^{2-}	CH_4					
	Detection Range	0.2 to 1.5*	0.08 to 0.8*	0.1 to2.5*	8 to 100*	0.2 to 3*						
	Target	>	<	<1	>20	<1	<0.5	>50	>0.5			
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	mg/l	uS/cm	Units	C
P-103D	5/2/2007							260	0.57	879	6.89	9.9
	10/18/2007							321	0.54	854	6.43	11.2
	5/5/2008							20	0.63	935	7.02	10.8
	10/2/2008							327	3.40	877	6.85	10.7
	4/7/2010							-110	0.45	808	7.61	10.0
	10/28/2009	<0.20	0.17	>2.5	76.38	<0.2	0.098	-146	0.52	746	7.30	10.2
	2/25/2010		<0.08	>2.5	78.05	<0.2	0.0747	-146	0.76	842	7.39	9.2
	5/24/2010	<0.20	<0.08	>2.5	88.88	<0.2	0.0303	-111	0.37	853	7.08	11.1
	10/5/2010	0.11			93.48		0.0659	-147	1.10	898	7.97	10.9
	1/25/2011			>2.5				-71	0.73	781	7.56	9.4
	4/12/2011			>2.5				-132	1.09	906	7.26	10.2
	7/11/2011			>2.5				-138	1.34	751	8.12	11.6
	10/18/2011			>2.5				-82	1.28	768	7.41	10.2
	1/24/2012			>2.5				-64	0.40	895	7.28	9.3
	4/4/2012			>2.5				-114	0.59	1004	7.36	10.2
	7/25/2012			>2.5				-109	0.78	846	6.75	11.4
	10/17/2012			>2.5				-115	1.74	835	7.13	10.4
	1/16/2013			1.715				-129	0.31	832	7.00	9.4
	4/26/2013			>2.5				-97	1.41	806	7.50	10.4
	7/2/2013			>2.5				6	0.57	839	6.56	10.7
	12/5/2002				62			-75.60	-0.02	910	7.32	9.75
P-111D	4/23/2003				64			-20.50	0.94	706	7.63	9.98
	10/23/2003	<0.058			65			-68.30	0.70	838	7.17	9.78
	1/31/2007							74	0.72	885	7.30	8.9
	5/1/2007							78	3.37	900	7.05	10.0
	8/8/2007							55	0.55	900	7.25	10.9
	10/19/2007							296	0.53	897	6.90	10.7
	5/6/2008							15	0.56	980	7.56	10.6
	10/1/2008							330	2.31	907	7.07	10.0
	4/7/2009							-97	1.98	821	7.52	9.3
	10/28/2009	<0.20	<0.08	1.79	60.63	<0.2	0.33	-171	0.46	764	7.51	10.0
	2/25/2010	0.43	<0.08	1.62	65.7	<0.2	0.123	-125	0.86	871	7.45	6.0
	5/24/2010	<0.20	<0.08	1.83	70.59	0.25	0.31/0.239 Dup	-136	0.24	840	7.21	10.7
	10/5/2010	0.08		1.75	61.2		0.269/0.222 Dup	-148	0.75	886	8.13	10.3
	1/24/2011			1.72				-101	0.77	801	6.83	8.9
	4/13/2011			1.89				-126	0.42	873	7.19	9.9
	7/11/2011			1.87				-178	0.88	759	7.37	11.0
	10/18/2011			1.57				-95	2.43	752	7.71	10.0
	1/23/2012			1.87				-68	0.33	898	7.31	9.3
	4/4/2012			1.693				-128	0.72	1009	7.50	10.0
	7/25/2012			1.227				-171	0.65	850	7.49	11.5
	10/17/2012			1.324				-131	0.51	838	7.56	10.5
	1/16/2013			0.339				-177	1.93	870	7.45	9.4
	4/26/2013			1.486				-114	1.16	838	7.71	10.5
	7/2/2013			1.505				-53	1.38	870	7.27	10.5
P-113B	12/3/2002				47			27.20	0.39	960	6.80	10.18
	4/23/2003				56			-54.30	1.05	715	7.22	10.13
	10/22/2003	<0.058			49			-125.40	0.46	616	7.42	10.13
	1/31/2007							109	0.40	620	7.33	8.8
	5/1/2007							113	1.03	625	7.03	10.2
	8/14/2007							110	0.28	618	7.28	11.1
	10/22/2007							252	0.53	629	6.70	10.3
	5/6/2008							-16	0.33	716	7.31	10.3
	10/2/2008							328	2.47	674	7.12	10.6
	4/6/2009							-122	0.40	627	7.54	9.2
	10/29/2009	<0.20	<0.08	0.83	70.14	<0.2	0.057	-187	0.42	579	7.33	10.3
	5/25/2010	<0.20	<0.08	1.19	80.11	<0.2	<0.0028	-145	0.17	646	7.26	10.9
	10/6/2010	0.1		0.98	75.55		ND	-183	0.35	685	8.09	11.0
	1/25/2011			0.9				-86	0.94	619	7.50	9.8
	4/13/2011			1.11				-164	1.11	675	7.44	10.2
	7/12/2011			0.99				-164	0.47	588	7.43	10.5
	10/19/2011			0.94				-118	0.50	588	7.71	10.2
	1/23/2012			0.99				-75	0.29	703	7.57	9.3
	4/4/2012			1.034				-104	0.72	783	7.08	9.7
	7/25/2012			0.947				-167	0.67	668	7.56	11.5
	10/16/2012			0.998				-117	0.43	655	7.51	11.0
	1/15/2013			1.06				-106	0.71	674	7.40	9.2
	4/26/2013			0.938				-125	0.78	651	7.84	10.3
	7/2/2013			1.081				-80	1.01	679	7.41	10.7
P-114 (Ehster)	12/3/2002				44					695	7.71	11.10
	4/23/2003				63			-117.00	0.85	669	7.71	10.00
	10/23/2003	<0.058			49			-125.10	0.54	1379	7.31	9.87
	2/1/2007							151	0.21	674	7.27	9.9
	5/1/2007							149	0.96	686	7.08	10.2
	8/8/2007							202	0.34	667	7.45	11.0
	10/22/2007							313	0.90	670	6.71	10.2
	5/6/2008							14	0.74	775	7.23	10.2
	10/2/2008							307	2.34	737	7.01	10.4
	4/6/2009							-76	0.45	687	7.58	9.5
	10/29/2009	0.22	<0.08	0.56	50.61	<0.2	0.28	-120	0.44	636	7.41	10.0
	2/26/2010	0.61	0.11	0.54	49.43	<0.2	0.295	-148	0.35	707	7.62	9.2
	5/26/2010	<0.20	0.15	0.6	57.47	<0.2	0.138/0.194 Dup	-129	0.66	703	7.27	10.4
	10/6/2010	0.11		0.72	57.18		0.186/0.224 Dup	-182	0.86	766	8.28	10.6
	1/25/2011			0.6				-58	0.42	679	7.60	9.3
	4/13/2011			0.65				-147	0.42	744	7.49	9.9
	7/12/2011			0.57				-134	1.95	646	7.48	10.5
	10/19/2011			0.62				-123	1.49	652	7.82	10.0
	1/23/2012			0.93				-78	0.35	785	7.60	9.1
	4/4/2012			0.598				-116	0.66	873	7.63	9.8
	7/25/2012			0.556				-200	0.40	748	7.63	11.0
	10/17/2012			0.757				-131	0.76	733	7.55	10.5
	1/16/2013			<0.1				-184	0.43	753	7.55	9.4
	4/26/2013			0.96				3	1.56	731	7.61	9.7
	7/2/2013			0.721				-88	0.34	766	7.47	10.5

Table 3. Groundwater Natural Attenuation Parameters
FF/NN Landfill, Ripon, WI

Well ID	Compound	Nitrate	Nitrite	Iron 2	Sulfate	Sulfide	Methane	ORP**	Dissolved Oxygen	Specific Conductivity	pH	Temperature
		NO_3^-	NO_2^-	Fe^{2+}	SO_4^{2-}	S^{2-}	CH_4					
	Detection Range	0.2 to 1.5*	0.08 to 0.8*	0.1 to 2.5*	8 to 100*	0.2 to 3*						
	Target	>	<	<1	>20	<1	<0.5	>50	>0.5			
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	mg/l	uS/cm	Units	C
P-115 (former Wiese well)	2/1/2007							128	0.29	590	7.35	9.6
	5/1/2007							112	0.85	589	7.12	10.5
	8/14/2007							216	0.43	582	7.44	10.7
	10/22/2007							313	0.54	579	6.74	10.6
	5/6/2008							-16	0.48	690	7.27	10.7
	10/2/2008							315	2.44	654	6.89	10.7
	4/6/2009							-72	0.30	605	7.58	9.9
	10/29/2009	<0.20	<0.08	0.92	40.7	<0.2	0.044	-166	0.47	551	7.52	10.2
	2/26/2010	0.36	<0.08	1.48	43.65	<0.2	0.0579	-155	0.35	620	7.64	9.8
	5/26/2010	<0.20	<0.08	1.01	46.07	<0.2	0.049	-135	0.40	608	7.30	10.5
	10/6/2010	0.1		0.95	41.23		0.0562	-175	1.42	646	8.15	10.7
	1/25/2011			0.95				-78	0.42	572	7.68	9.8
	4/13/2011			1.05				-178	0.44	626	7.51	10.5
	7/12/2011			0.86				-143	1.74	546	7.47	10.6
	10/19/2011			0.82				-128	0.55	543	7.87	10.3
	1/23/2012			1.41				-78	0.34	647	7.53	9.6
	4/4/2012			0.804				-126	0.40	724	7.65	10.1
	7/25/2012			0.7				-223	0.39	619	7.72	11.3
	10/17/2012			0.797				-137	1.22	602	7.62	10.8
	1/16/2013			<0.1				-185	1.00	619	7.59	9.9
	4/26/2013			0.866				-30	1.20	597	7.75	10.2
	7/2/2013			0.911				-89	0.48	626	7.57	10.6
P-116 (former Hadel well)	2/1/2007							171	0.38	528	7.34	8.8
	5/1/2007							142	0.59	528	7.09	10.5
	8/8/2007							202	0.42	523	7.53	12.1
	10/22/2007							301	0.59	522	6.75	10.8
	5/6/2008							38	0.71	603	7.18	12.3
	10/2/2008							295	2.70	559	7.04	11.2
	4/6/2009							-49	0.89	518	7.57	9.5
	10/29/2009	0.33	0.21	0.51	41.29	0.32	0.0031	-96	0.44	476	7.53	10.3
	2/26/2010	0.48	0.23	0.51	41.82	0.4	0.0042	-97	0.44	535	7.64	9.1
	5/25/2010	0.33	0.24	0.73	49.87	0.49	0.004	-75	0.33	530	7.30	12.2
	10/6/2010	0.45		0.92	58.53		0.0051	-106	0.55	567	8.20	12.1
	1/25/2011			0.45				37	0.56	506	7.76	9.0
	4/13/2011			0.51				-109	0.58	556	7.49	10.7
	7/12/2011			0.35				-91	1.42	485	7.50	11.9
	10/19/2011			0.37				-77	0.89	482	7.92	10.4
	1/23/2012			0.52				-21	0.38	576	7.64	8.8
	4/4/2012			0.353				-56	0.33	646	7.68	10.3
	7/25/2012			0.305				-150	0.31	546	7.64	12.7
	10/17/2012			0.351				-87	0.52	535	7.52	11.5
	1/15/2013			0.517				-187	0.95	549	7.65	9.1
	4/26/2013			0.257				99	0.52	528	7.51	9.9
	7/2/2013			0.336				-14	0.39	552	7.56	11.4
MW-3A	12/5/2002				20			-312	0.03	589	7.30	9.79
	4/22/2003				26			3	0.66	464	7.52	10.22
	10/22/2003	<0.058			14			-98	0.87	552	7.29	10.06
	1/31/2007							163	0.79	556	7.13	6.1
	5/1/2007							34	1.96	558	6.95	10.2
	8/8/2007							-144	0.74	549	7.32	12.4
	10/19/2007							201	1.07	551	6.51	10.5
	5/6/2008							13	0.33	630	7.55	9.8
	10/1/2008							297	7.35	591	6.89	9.8
	10/28/2009	<0.20	<0.08	0.51	14.67	<0.2	0.0073	-236	0.55	505	7.45	9.5
	5/24/2010	<0.20	0.04	0.49	22.35	0.21	0.0074	-227	0.55	561	7.13	12.5
	10/5/2010	0.05			15.33		0.0397	-204	1.51	600	8.20	11.3
	1/24/2011			0.19				-77	0.74	535	7.30	7.2
	4/13/2011			0.44				-240	1.14	589	7.42	10.8
	7/12/2011			0.19				-213	1.86	512	7.15	11.3
	10/19/2011			0.16				-175	1.25	511	7.76	9.7
	1/23/2012			<0.1				-34	0.70	606	7.09	8.0
	4/4/2012			0.217				-115	0.47	678	7.37	9.4
	7/25/2012			0.101				-265	0.67	584	7.50	13.5
	10/16/2012			<0.1				-175	1.33	564	7.01	10.7
	1/15/2013			0.144				-267	2.03	579	7.49	7.8
	4/26/2013			0.131				-171	1.38	560	7.77	10.2
	7/2/2013			0.127				-126	1.27	582	7.26	10.9
P-107D	12/4/2002				19					594	7.64	7.90
	4/21/2003				27					388	7.28	10.50
	10/21/2003	<0.058			19			51.40	1.25	528	7.34	10.05
	5/1/2007							113	3.20	583	6.96	12.4
	10/19/2007							261	1.10	581	6.56	10.0
	5/5/2008							61	1.07	653	7.55	10.6
	10/1/2008							354	4.48	607	6.89	10.4
	4/7/2009							-101	2.01	569	7.53	9.1
	10/28/2009	<0.20	<0.08	<0.1	23.84	<0.2	0.073	-188	0.45	528	7.48	10.1
	2/25/2010	0.51	<0.08	<0.1	23.57	<0.2	0.0613	-191	0.74	605	7.50	8.5
	5/24/2010	<0.20	<0.08	0.19	31.82	<0.2	0.163	-147	3.12	618	7.15	11.2
	10/5/2010	0.06		0.03	21.24		0.0737	-132	0.93	619	8.09	10.6
	1/24/2011			0.3				-59	0.79	564	6.62	9.0
	4/12/2011			0 11				-222	0.64	649	7.33	9.9
	7/11/2011			0.12				-211	1.32	2	8.16	11.7
	10/18/2011			0.11				-107	2.61	535	7.69	10.1
	1/23/2012			0.27				-45	0.69	634	7.45	8.9
	4/4/2012			0.235				-105	0.73	740	7.49	9.9
	7/25/2012			<0.1				-207	1.71	627	7.42	12.6
	10/17/2012			0.104				-168	2.13	589	7.53	10.9
	1/16/2013			<0.1				-214	2.30	609	7.46	8.8
	4/26/2013			0.276				-146	2.18	585	7.84	10.3
	7/2/2013			0.123				-75	1.92	606	7.15	11.6

Table 3. Groundwater Natural Attenuation Parameters
FF/NN Landfill, Ripon, WI

Well ID	Compound	Nitrate	Nitrite	Iron 2	Sulfate	Sulfide	Methane	ORP**	Dissolved Oxygen	Specific Conductivity	pH	Temperature
		NO_3^-	NO_2^-	Fe^{2+}	SO_4^{2-}	S^{2-}	CH_4					
	Detection Range	0.2 to 1.5*	0.08 to 0.8*	0.1 to2.5*	8 to 100*	0.2to3*						
	Target	>	<	<1	>20	<1	<0.5	>50	>0.5			
	Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mV	mg/l	uS/cm	Units	C
P-113A	12/3/2002				12			111.80	20.00	579	7.26	10.39
	4/23/2003				15			42.00	2.98	465	7.50	10.37
	10/22/2003	0.3			10			-62.60	2.23	576	7.30	10.17
	8/8/2007							-140	0.57	544	7.37	13.3
	5/6/2008							-88	0.55	620	7.22	10.4
	4/6/2009							-137	0.74	542	7.42	8.4
	10/29/2009	0.35	0.16	>2.5	31.67	0.37	0.27	-240	0.87	498	7.41	10.7
	5/25/2010	0.26	0.21	>2.5	44.79	0.39	0.169	-183	0.96	554	7.16	15.6
	10/6/2010	0.43			44.48		0.239	-196	0.89	591	7.98	12.8
	1/25/2011			1.09				-78	1.98	533	7.58	5.9
	4/13/2011			0.68				-202	1.13	578	7.46	12.8
	7/12/2011			1.44				-195	1.47	509	7.33	14.3
	10/19/2011			0.94				-141	0.92	509	7.71	10.6
	1/23/2012			0.77				-76	1.20	604	7.67	7.3
	4/4/2012			1.219				-125	0.64	673	7.40	9.9
	7/25/2012			0.893				-257	0.83	585	7.46	15.4
	10/16/2012			0.196				-73	3.31	559	7.36	13.1
	1/15/2013			0.473				-248	1.67	574	7.56	7.0
	4/26/2013			0.814				-120	1.64	555	7.66	11.8
	7/2/2013			0.516				-127	1.04	578	7.45	13.6
Perry/Watkins	10/29/2009	<0.20	<0.08	>2.5	15.18	<0.2	0.0098	-167	3.00	489	7.55	10.8
	2/26/2010	<0.20			16.34	0.42	0.0067	-159	1.57	549	7.70	8.6
	5/26/2010	<0.20	<0.08	1.7	24.6	<0.2	0.0082	-135	0.91	552	7.35	16.7
	10/6/2010	0.1			20.12		0.0081	-183	1.38	582	8.18	14.4
	1/28/2011								2.42		6.93	10.1
	4/18/2011									410	7.17	10.1
	4/3/2012									519	8.00	11.2
	4/26/2013									600	7.47	11.4
Gaastra	10/29/2009	<0.20	<0.08	0.98	16.04	<0.2	0.01	-163	0.27	490	7.56	10.3
	2/26/2010	<0.20			19.35	<0.2	0.0086	-146	1.22	584	7.45	10.7
	5/26/2010	<0.20	<0.08	2.44	27.28	0.22	0.0121	-156	0.52	553	7.28	17.3
	10/6/2010	0.11			22.65		0.0103	-201	1.14	597	8.22	15.0
	1/26/2011			2.34				33	1.24	552	7.37	7.9
	4/14/2011									620	6.88	13.8
	4/3/2012									538	7.80	11.3
	4/26/2013									585	7.54	11.4
Rohde	11/4/2009	<0.20	<0.08	0.36	19.88	<0.2	0.0011	-76	0.99	500	7.25	10.0
	2/25/2010	<0.20			21.03	<0.2	<0.0028	0	2.61	606	7.61	9.4
	5/26/2010	<0.20	<0.08	0.25	25.64	<0.2	<0.0028	7	1.19	635	6.42	18.53
	10/6/2010	0.08			26.48		ND	-117	1.91	612	8.08	13.7
	1/26/2011			0				116	3.83	571	7.56	7.36
	4/13/2011									550	6.85	7.5
	4/3/2012									528	7.5	11.5
	4/26/2013									581	7.63	12.7

indicates that ample was not analyzed for that parameter
* detection range only applies to samples collected on or after 10/2009
** ORP is believed to be incorrect from 2/2007 to 10/2008 due to equipment malfunction

Table 6a. Landfill Gas Field Parameter Monitoring Results of Active Extraction Points

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:31	3/20/2006	61.5	37.7	0.7	0.1	pre-startup
	10:02	3/22/2006	43.6	26.3	6.4	23.7	
	15:32	3/22/2006	56.0	33.3	3.8	6.9	
	8:29	3/23/2006	50.1	29.5	4.3	16.1	
	16:35	3/23/2006	44.2	24.6	4.9	26.3	
	15:40	3/24/2006	18.8	11.8	15.9	53.5	
	14:25	3/28/2006	7.0	8.7	10.8	73.5	
	18:58	3/30/2006	15.8	21.0	6.9	56.3	
	13:50	4/5/2006	11.2	17.1	9.8	61.9	
	12:50	4/6/2006	6.2	9.0	13.9	70.9	
	13:10	4/11/2006	9.6	16.7	8.6	65.1	
	10:45	4/14/2006	11.2	17.9	7.2	63.7	
	15:26	4/14/2006	12.2	24.1	4.0	59.7	
	9:58	4/17/2006	16.7	30.2	5.3	47.8	
	19:12	4/27/2006	7.8	17.5	2.9	71.8	
	13:12	5/4/2006	6.1	18.7	2.0	73.2	
	10:17	5/22/2006	5.8	21.6	1.3	71.3	
	12:20	6/2/2006	18.0	22.7	0.6	58.7	
	8:20	6/9/2006	1.1	0.2	20.4	78.3	
	12:34	6/14/2006	3.9	0.6	20.2	75.3	
	10:41	6/22/2006	3.3	7.6	13.8	75.3	
LC-1	12:06	7/5/2006	3.7	12.5	10.1	73.7	
	11:31	7/10/2006	3.5	10.9	11.8	73.8	
	10:49	7/17/2006	3.9	10.7	11.8	73.6	
	14:00	7/28/2006	5.0	12.0	10.2	72.8	
	9:46	8/8/2006	2.7	9.5	12.9	74.9	
	7:20	8/16/2006	2.4	6.6	14.5	76.5	
	7:12	8/21/2006	0.1	0.2	15.1	84.6	
	14:07	8/28/2006	2.1	12.5	12.4	73.0	
	11:21	9/13/2006	0.6	0.6	13.3	85.5	
	11:19	9/25/2006	0.0	0.0	16.2	83.8	
	8:18	10/10/2006	2.7	8.4	14.8	74.1	
	8:19	10/23/2006	2.0	1.5	12.8	83.7	
	14:00	11/2/2006	3.8	21.6	1.7	72.9	
	14:54	11/14/2006	7.5	23.0	0.7	68.8	
	11:26	11/27/2006	5.5	23.0	0.4	71.1	
	12:57	12/26/2006	5.0	23.6	0.3	71.1	
	13:57	1/27/2007	9.5	22.8	0.3	67.4	
	11:20	2/24/2007	6.5	23.0	0.8	69.7	
	11:20	3/1/2007	17.5	23.2	1.8	57.5	
	12:28	3/1/2007	16.5	23.2	1.8	58.5	
	14:30	3/1/2007	15.5	22.8	1.6	60.1	
	8:10	3/5/2007	sampling port clogged with ice				adjust blower time, 12 on, 12 off
	8:10	3/24/2007	15.5	23.0	1.8	59.7	
	16:55	3/24/2007	14.0	22.2	2.2	61.6	
	17:10	3/26/2007	11.0	21.6	2.2	65.2	
	7:28	3/27/2007	10.0	22.4	1.7	65.9	
	16:27	3/28/2007	11.0	22.8	1.5	64.7	
	8:04	3/29/2007	11.5	23.0	1.5	64.0	
	17:00	3/29/2007	11.0	22.8	1.5	64.7	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	8:04	3/30/2007	13.0	24.0	1.0	62.0	blower off
	11:34	5/30/2007	43.0	28.0	2.0	27.0	restart and run 24 hrs
	13:35	5/30/2007	40.0	26.2	2.6	31.2	
	10:30	5/31/2007	0.1	0.0	20.7	79.2	reduce to 12 on 12 off
	16:32	6/1/2007	0.1	0.0	20.7	79.2	
	15:30	6/2/2007	20.0	22.8	1.7	55.5	
	16:09	6/3/2007	18.0	22.2	1.9	57.9	
	14:12	6/4/2007	16.5	21.8	2.2	59.5	reduce to 6 on 18 off
	15:10	6/7/2007	17.0	21.6	2.3	59.1	
	17:16	6/12/2007	10.5	21.0	2.1	66.4	
	14:49	6/14/2007	11.0	20.8	2.2	66.0	
	14:40	6/19/2007	10.5	21.0	2.2	66.3	
	14:40	6/21/2007	11.0	21.2	2.0	65.8	
	14:30	7/11/2007	11.5	21.4	2.0	65.1	
	14:00	7/23/2007	12.0	21.8	2.0	64.2	
	14:07	8/8/2007	12.0	21.6	2.2	64.2	
	13:30	6/13/2007	13.5	22.8	2.2	61.5	
	14:10	8/20/2007	10.0	21.4	2.8	65.8	
	14:25	8/28/2007	8.5	20.8	2.7	68.0	
	15:55	8/31/2007	5.5	18.2	4.2	72.1	
	14:55	9/4/2007	4.5	17.2	4.1	74.3	
LC-1	13:25	9/17/2007	3.2	15.4	5.1	76.4	
	9:50	9/29/2007	3.0	15.2	5.6	76.2	
	8:45	10/4/2007	3.1	15.2	5.6	76.1	
	9:45	10/7/2007	3.7	15.6	4.8	75.9	
	9:50	10/18/2007	6.0	17.0	3.6	73.4	
	9:00	10/25/2007	5.0	17.2	3.8	74.0	
	9:20	11/1/2007	6.0	18.6	2.2	73.2	
	10:25	11/13/2007	11.5	18.6	3.4	66.5	
	11:30	11/26/2007	4.8	16.2	4.8	74.3	
	11:00	12/10/2007	5.0	16.0	5.4	73.6	
	11:50	12/26/2007	5.5	16.6	4.3	73.6	
	10:15	1/9/2008	6.0	17.0	3.7	73.3	
	12:10	1/23/2008	5.0	15.8	5.2	74.0	
	9:20	2/4/2008	8.0	17.4	3.3	71.3	
	7:50	2/18/2008	12.0	17.6	3.8	66.6	
	7:30	3/4/2008	20.0	18.0	6.0	56.0	
	8:50	3/18/2008	23.0	19.8	3.9	53.3	
	14:30	5/12/2008	14.5	21.0	1.5	63.0	
	9:15	5/19/2008	4.4	17.4	2.4	75.9	
	13:50	5/30/2008	6.5	18.2	1.2	74.1	
	9:20	6/12/2008	3.8	19.0	2.6	74.6	
	9:20	6/25/2008	9.5	21.6	0.5	68.4	
	11:10	7/7/2008	6.0	19.4	1.3	73.3	opened GV-6 to 200 ft/min
	12:25	7/21/2008	6.5	20.6	1.1	71.8	
	9:50	8/5/2008	7.0	20.2	1.7	71.1	
	9:10	8/13/2008	12.5	23.2	0.1	64.2	increase to 12 on 12 off
	8:45	8/19/2008	8.0	21.2	2.2	68.6	
	14:15	9/2/2008	6.5	20.6	1.1	71.8	
	11:41	10/3/2008	8.0	21.6	0.8	69.6	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	10:40	10/13/2008	9.0	22.4	0.6	68.0	
	9:15	10/28/2008	9.0	23.4	0.0	67.6	
	7:40	11/6/2008	10.5	22.2	0.6	66.7	
	10:25	12/8/2008	7.0	21.4	1.4	70.2	
	10:20	12/24/2008	6.0	20.4	1.2	72.4	decrease to 10 on
	12:00	1/8/2008	5.0	15.4	2.4	77.2	
	11:25	1/18/2009	8.5	23.0	0.3	68.2	
	7:40	1/27/2009	5.0	18.0	4.9	72.1	
	8:40	2/6/2009	4.8	16.4	5.2	73.7	
	11:00	2/23/2009	3.9	17.4	4.5	74.3	decrease to 8 on
	10:20	3/9/2009	8.0	21.2	0.1	70.7	
	10:20	3/20/2009	10.0	21.8	0.6	67.6	
	11:46	4/9/2009	13.0	22.2	0.2	64.6	
	10:45	4/19/2009	5.6	18.2	2.1	74.1	
	8:05	5/4/2009	8.5	16.2	5.5	69.8	
	8:40	5/18/2009	4.3	17.6	3.4	74.8	
	9:35	6/1/2009	7.0	15.4	5.2	72.4	
	9:00	6/14/2009	5.0	18.8	1.5	74.7	
	8:45	7/2/2009	13.5	21.2	1.6	63.7	
	7:30	7/13/2009	7.0	12.6	8.6	71.8	
	8:20	7/22/2009	5.0	20.4	1.3	73.3	
	8:50	8/11/2009	4.6	17.4	4.1	74.0	
	8:45	8/24/2009	4.3	16.8	4.5	74.5	decrease to 6 on 18 off
	9:25	9/8/2009	10.0	21.6	0.6	67.8	
LC-1	9:20	9/21/2009	15.0	23.8	0.0	61.2	
	10:15	10/5/2009	15.0	23.8	0.1	61.1	
	11:00	10/28/2009	16.0	23.2	1.3	59.5	
	10:50	11/16/2009	7.5	21.8	0.8	69.9	
	10:00	12/18/2009	24.0	23.8	0.0	52.2	
	9:10	12/28/2009	27.0	27.0	0.0	46.0	
	9:50	1/11/2010	24.0	26.0	0.0	50.0	
	8:30	1/26/2010	26.0	26.0	0.0	48.0	
	12:00	2/25/2010	19.5	24.6	0.0	55.9	
	9:50	3/8/2010	20.0	24.0	0.0	56.0	
	9:25	3/22/2010	18.0	23.0	0.0	59.0	
	9:28	4/5/2010	17.0	23.0	0.0	60.0	
	9:18	4/19/2010	16.5	23	0	60.5	
	9:22	5/3/2010	20.0	23.6	0.0	56.4	
	9:47	5/17/2010	20.0	24.0	0.0	56.0	
	9:10	5/25/2010	10.5	22.8	0.0	66.7	
	9:15	6/24/2010	13.0	21.0	1.4	64.6	
	10:15	7/6/2010	6.0	20.4	1.5	72.1	
	9:08	7/19/2010	7.0	19.6	3.0	70.4	
	9:00	8/2/2010	6.5	19.4	2.2	71.9	
	9:50	8/16/2010	12.5	21.6	1.1	64.8	
	8:52	8/30/2010	21.0	24.2	0.7	54.1	
	9:08	9/13/2010	26.5	25.2	1.1	47.2	
	9:40	9/28/2010	29.5	26.0	1.1	43.4	
	8:05	10/12/2010	24.5	25.2	1.7	48.6	
	9:22	10/25/2010	24.5	25.4	1.1	49.0	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:36	11/2/2010	16.0	24.2	1.5	58.3	
	8:49	11/15/2010	15.5	23.4	1.5	59.6	
	9:45	12/10/2010	14.0	22.8	1.5	61.7	
	9:00	12/23/2010	15.5	22.6	1.6	60.3	
	9:18	1/10/2011	11.5	22.2	1.6	64.7	
	12:15	2/11/2011	34.0	24.6	1.7	39.7	
	9:20	3/7/2011	4.9	15.2	6.5	73.5	
	11:50	3/24/2011	19.5	22.2	0.7	57.6	
	8:55	4/6/2011	22.9	23.4	0.3	53.4	
	8:19	4/25/2011	23.5	23.0	0.6	52.9	
	8:52	5/9/2011	34.5	24.6	0.3	40.6	
	9:12	5/23/2011	38.0	25.4	0.3	36.3	
	10:50	6/6/2011	40.0	26.0	0.3	33.7	
	9:08	6/15/2011	41.5	26.2	0.3	32.0	
	9:15	7/5/2011	35.5	26.0	0.3	38.2	
	8:06	7/13/2011	31.0	26.0	0.2	42.8	
	8:20	7/26/2011	32.0	26.6	0.3	41.1	
	8:15	8/8/2011	19.0	24.1	0.3	56.6	
	7:50	8/23/2011	16.0	24.4	0.3	59.3	
	15:19	9/9/2011	28.5	28.0	0.5	43.0	
	16:03	9/15/2011	15.0	25.2	0.8	59.0	
	8:31	9/21/2011	17.5	22.8	2.6	57.1	
	9:38	9/21/2011	14.5	21.5	3.2	60.8	
	9:29	9/22/2011	17.5	24.4	1.6	56.5	
	10:11	9/22/2011	16.0	22.2	3.3	58.5	
	10:57	9/22/2011	16.0	24.2	1.6	58.2	
	10:46	10/3/2011	7.5	21.2	2.4	68.9	
	13:55	10/24/2011	11.0	23.0	1.0	65.0	
	11:00	10/26/2011	12.0	23.6	1.3	63.1	
	10:45	11/7/2011	10.5	23.4	0.5	65.6	
	9:20	11/14/2011	14.5	24.0	0.1	61.4	
	9:18	12/12/2011	12.7	24.2	0.2	62.9	
	10:24	12/27/2011	36.5	27.2	0.2	36.1	
	8:45	1/10/2012	24.5	25.4	0.1	50.0	
	10:10	1/25/2012	26.0	27.2	0.3	46.5	
LC-1	9:20	2/20/2012	32.5	26.6	0.6	40.3	
	9:10	3/8/2012	30.5	25.4	1.8	42.3	
	10:25	4/2/2012	24.0	25.2	0.9	49.9	
	9:09	4/16/2012	26.5	25.4	0.9	47.2	
	9:00	4/30/2012	16.5	23.0	1.5	59.0	
	9:21	5/14/2012	18.0	22.8	1.7	57.5	
	9:14	5/29/2012	24.5	24.6	1.1	49.8	
	7:57	6/11/2012	27.5	25.4	0.9	46.2	
	9:46	6/25/2012	24.5	25.2	1.0	49.3	
	9:05	7/9/2012	23.0	25.4	0.9	50.7	
	8:40	7/23/2012	7.0	20.2	2.2	70.6	
	8:21	7/25/2012	8.0	20.8	2.0	69.2	
	9:05	8/6/2012	8.0	21.4	1.7	68.9	
	9:31	8/21/2012	9.5	21.6	1.3	67.6	
	9:15	9/4/2012	7.0	19.8	2.0	71.2	
	9:10	10/1/2012	6.0	18.2	4.2	71.6	
	8:30	10/15/2012	4.5	11.4	9.2	75.0	
	7:55	12/6/2012	13.0	21.0	1.3	64.7	
	9:30	12/17/2012	17.0	21.2	0.8	61.0	
	9:00	12/31/2012	24.5	23.6	1.1	50.8	
	8:30	1/9/2013	29.5	24.0	1.1	45.4	
	8:05	1/15/2013	30.0	24.6	0.0	45.4	
	9:11	1/28/2013	27.0	23.4	0.6	49.0	
	10:55	2/11/2013	41.0	27.0	0.0	32.0	
	9:22	2/25/2013	44.5	26.0	0.0	29.5	
	7:40	3/8/2013	48.0	26.4	0.1	25.5	
	8:55	3/22/2013	50.5	26.0	0.1	23.4	
	14:00	4/8/2013	32.0	24.8	0.3	42.9	
	15:20	4/22/2013	12.0	21.6	0.4	66.0	
	9:39	4/29/2013	11.0	20.4	0.1	68.5	
	8:34	5/13/2013	8.0	20.0	0.7	71.3	
	13:40	5/28/2013	9.5	19.4	0.9	70.2	
	8:50	6/7/2013	8.5	19.4	1.1	71.0	
	8:17	6/21/2013	8.0	18.8	1.5	71.7	
	8:50	7/5/2013	7.0	18.8	1.5	72.7	
	7:52	7/22/2013	8.0	19.4	1.6	71.0	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:09	3/20/2006	61.9	36.8	1.0	0.3	pre-startup
	9:52	3/22/2006	50.2	28.3	4.9	16.6	
	15:51	3/22/2006	49.9	35.2	7.4	7.5	
	8:52	3/23/2006	45.2	27.1	6.8	20.9	
	16:52	3/23/2006	54.3	32.5	3.5	9.7	
	15:20	3/24/2006	25.5	14.8	15.3	44.4	
	15:10	3/28/2006	18.7	12.0	13.5	55.8	
	19:09	3/30/2006	52.6	28.7	3.7	15.0	
	13:45	4/5/2006	35.5	20.5	8.2	35.8	
	13:25	4/6/2006	33.4	21.0	9.1	36.5	
	13:35	4/11/2006	33.4	21.7	9.9	35.0	
	10:57	4/14/2006	58.5	39.5	2.0	0.0	
	15:56	4/14/2006	33.6	20.0	7.9	38.5	
	10:20	4/17/2006	30.0	20.0	4.3	45.7	
	19:59	4/27/2006	51.7	26.8	4.2	17.3	
	13:28	5/4/2006	43.6	24.8	4.2	27.4	
	12:00	5/22/2006	48.8	28.9	4.3	18.0	
	8:41	6/9/2006	34.2	20.0	10.5	35.3	
	13:05	6/14/2006	30.1	20.2	8.3	41.4	
	11:05	6/22/2006	45.1	35.4	5.1	14.4	
	12:09	7/5/2006	44.4	44.5	5.8	5.3	
LC-2	10:50	7/10/2006	0.1	0.2	5.4	94.3	
	10:15	7/17/2006	42.7	32.7	5.8	18.8	
	14:15	7/28/2006	43.6	33.4	4.7	18.3	
	9:51	8/8/2006	45.4	36.2	4.1	14.3	
	9:30	8/16/2006	31.2	24.6	8.6	35.6	
	8:38	8/21/2006	2.4	10.2	3.7	83.7	
	14:22	8/28/2006	20.0	36.2	4.2	39.6	
	11:36	9/13/2006	28.2	37.0	4.0	30.8	
	11:34	9/25/2006	2.4	0.8	5.9	90.9	
	8:32	10/10/2006	49.8	41.7	5.1	3.4	
	8:42	10/23/2006	37.8	29.5	7.6	25.1	
	14:20	11/2/2006	42.5	28.4	3.6	25.5	
	15:16	11/14/2006	39.5	28.2	3.5	28.8	
	11:40	11/27/2006	48.5	33.2	0.3	18.0	
	13:30	12/26/2006	44.0	29.4	2.6	24.0	
	14:10	1/27/2007	44.5	27.6	3.1	24.8	
	11:28	2/24/2007	9.0	0.2	20.5	70.3	
	11:02	3/1/2007	37.2	28.2	1.5	33.1	
	12:26	3/1/2007	36.0	29.0	1.5	33.5	
	14:45	3/1/2007	33.0	27.6	2.1	37.3	
	8:05	3/5/2007	1.1	1.0	19.7	78.3	adjust blower time, 12 on, 12 off
	8:00	3/24/2007	36.0	28.4	1.2	34.4	
	16:45	3/24/2007	36.0	28.0	1.0	35.0	
	17:00	3/26/2007	33.5	27.4	0.9	38.2	
	7:19	3/27/2007	33.5	27.4	1.0	38.1	
	16:35	3/28/2007	36.0	28.2	0.9	34.9	
	7:50	3/29/2007	36.5	28.6	0.8	34.1	
	16:52	3/29/2007	35.5	28.2	0.7	35.6	
	7:56	3/30/2007	11.5	11.0	11.5	66.0	blower off

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:45	5/30/2007	44.5	27.4	1.9	26.2	restart and run 24 hrs
	13:45	5/30/2007	46.0	28.2	1.5	24.3	
	10:20	5/31/2007	40.0	26.0	1.3	32.7	reduce to 12 on 12 off
	16:25	6/1/2007	40.5	25.4	1.4	32.7	
	15:20	6/2/2007	40.5	25.4	1.2	32.9	
	16:00	6/3/2007	39.5	25.2	1.4	33.9	
	14:04	6/4/2007	39.5	25.2	1.5	33.8	reduce to 6 on 18 off
	14:43	6/7/2007	39.5	25.0	1.4	34.1	
	16:46	6/12/2007	40.5	25.6	1.2	32.7	
	14:20	6/14/2007	40.5	25.4	1.2	32.9	
	13:55	6/19/2007	39.5	25.8	1.2	33.5	
	14:00	6/21/2007	39.5	25.4	1.5	33.6	
	13:50	7/11/2007	38.0	25.8	1.5	34.7	
	13:30	7/23/2007	38.5	26.6	1.4	33.5	
	14:17	8/8/2007	38.5	27.8	1.2	32.5	
	14:00	8/13/2007	38.5	28.2	1.5	31.8	
	13:20	8/20/2007	34.5	25.2	3.1	37.2	
	13:45	8/28/2007	36.5	27.8	1.3	34.4	
	15:30	8/31/2007	30.0	26.0	2.5	41.5	
	14:25	9/4/2007	26.0	26.0	2.0	46.0	
	12:55	9/17/2007	17.5	23.6	3.2	55.7	
LC-2	9:15	9/29/2007	17.5	23.8	2.9	55.8	
	8:15	10/4/2007	18.5	25.0	1.8	54.7	
	9:15	10/7/2007	19.0	25.2	1.7	54.1	
	9:30	10/18/2007	17.5	21.4	4.2	56.9	
	8:35	10/25/2007	23.0	25.2	2.3	49.5	
	8:50	11/1/2007	26.5	27.0	1.0	45.5	
	9:55	11/13/2007	28.0	25.8	1.8	44.4	
	11:05	11/26/2007	27.0	25.4	2.0	45.6	
	10:30	12/10/2007	26.0	25.8	2.1	46.1	
	11:15	12/26/2007	26.0	25.0	2.0	47.0	
	9:40	1/9/2008	24.5	21.6	4.7	49.2	
	11:58	1/23/2008	19.0	18.2	7.4	55.4	
	8:50	2/4/2008	17.0	15.4	9.4	58.2	
	7:20	2/18/2008	25.5	20.4	6.3	47.8	
	7:15	3/4/2008	30.5	21.2	7.1	41.2	
	8:25	3/18/2008	32.5	22.6	5.5	39.4	
	13:45	5/12/2008	43.0	25.8	2.5	28.7	
	8:45	5/19/2008	41.0	26.0	2.0	31.0	
	13:20	5/30/2008	31.0	23.6	3.2	42.2	
	8:35	6/12/2008	35.5	20.0	1.3	43.2	
	8:45	6/25/2008	33.0	24.8	3.6	38.6	
	10:45	7/7/2008	32.0	27.0	1.7	39.3	opened GV-6 to 200 ft/min
	12:20	7/21/2008	34.5	28.2	1.5	35.8	
	10:00	8/5/2008	34.5	27.6	2.1	35.8	
	9:20	8/13/2008	36.5	27.8	2.8	32.9	increase to 12 on 12 off
	9:05	8/19/2008	40.0	29.6	0.4	30.0	
	14:40	9/2/2008	34.0	29.6	1.3	35.1	
	11:49	10/3/2008	34.5	29.4	1.8	34.3	
	10:25	10/13/2008	36.5	29.8	1.7	32.0	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:35	10/28/2008	38.5	30.2	2.4	28.9	
	8:00	11/6/2008	39.0	30.4	1.5	29.1	
	10:55	12/8/2008	41.5	32.2	1.2	25.1	
	9:50	12/24/2008	23.0	20.8	7.0	49.2	decrease to 10 on
	11:20	1/8/2009	25.0	23.4	5.1	46.5	
	11:35	1/18/2009	13.5	19.8	5.5	61.2	
	7:45	1/27/2009	35.5	31.0	0.7	32.8	
	8:15	2/6/2009	26.5	25.2	3.5	44.8	
	10:15	2/23/2009	23.5	25.8	2.0	48.7	decrease to 8 on
	9:50	3/9/2009	23.0	23.8	3.7	49.5	
	9:40	3/20/2009	29.5	28.6	0.5	41.4	
	12:25	4/9/2009	47.0	18.6	2.0	32.4	
	10:15	4/19/2009	35.0	28.2	0.3	36.5	
	8:15	5/4/2009	29.0	27.8	0.3	42.9	
	8:30	5/18/2009	27.5	28.2	0.0	44.3	
	9:45	6/1/2009	23.0	26.8	0.0	50.2	
	9:20	6/14/2009	23.5	27.6	0.0	48.9	
	9:00	7/2/2009	26.5	26.0	1.3	46.2	
	7:45	7/13/2009	32.0	28.6	0.0	39.4	
	8:30	7/22/2009	33.9	28.6	0.0	37.5	
	9:10	8/11/2009	31.0	29.0	0.0	40.0	
LC-2	9:00	8/24/2009	27.5	29.0	0.0	43.5	decrease to 6 on 18 off
	9:45	9/8/2009	30.5	29.6	0.0	39.9	
	9:38	9/21/2009	30.5	27.0	1.5	41.0	
	10:40	10/5/2009	38.5	30.8	0.0	30.7	
	10:50	10/28/2009	43.5	31.8	0.0	24.7	
	11:15	11/16/2009	40.0	30.6	0.6	28.8	
	9:50	12/18/2009	44.5	33.0	0.1	22.4	
	8:50	12/28/2009	49.0	33.2	0.0	17.8	
	9:00	1/11/2010	50.0	33.4	0.0	16.6	
	8:39	1/26/2010	55.5	33.6	0.0	10.9	
	11:50	2/25/2010	45.0	27.8	3.3	23.9	
	9:40	3/8/2010	53.5	31.8	0.0	14.7	
	9:10	3/22/2010	52.5	30.8	0.4	16.3	
	9:15	4/5/2010	52.5	30.8	0.2	16.5	
	9:30	4/19/2010	53.5	31.0	0.3	16.5	
	9:30	5/3/2010	52.5	30.8	0.0	16.7	
	10:10	5/17/2010	51.5	30.6	0.4	17.5	
	9:10	5/25/2010	50.0	30.8	0.2	19.0	
	9:30	6/24/2010	41.0	27.8	1.6	29.6	
	10:30	7/6/2010	37.5	27.8	1.6	33.1	
	9:18	7/19/2010	34.5	27.4	1.7	36.4	
	9:20	8/2/2010	32.0	27.4	1.7	38.9	
	10:05	8/16/2010	35.0	29.0	1.1	34.9	
	9:10	8/30/2010	39.5	30.4	0.0	30.1	
	9:26	9/13/2010	41.5	30.6	1.1	26.8	
	10:00	9/28/2010	44.5	31.0	1.1	23.4	
	8:12	10/12/2010	44.5	31.0	1.8	22.7	
	9:37	10/25/2010	48.0	32.2	1.3	18.5	
	9:36	11/2/2010	50.0	32.6	1.6	15.8	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:15	11/15/2010	48.0	32.4	1.6	18.0	
	9:55	12/10/2010	44.5	32.2	1.6	21.7	
	9:15	12/23/2010	43.5	32.6	1.6	22.3	
	9:30	1/10/2011	43	31.4	2.3	23.3	
	11:45	2/11/2011	52.0	30.8	1.5	15.7	
	9:30	2/22/2011	12.0	8.4	15.1	64.5	
	9:05	3/7/2011	13.0	9.2	14.5	63.3	
	12:10	3/24/2011	47.5	31.0	0.4	21.1	
	9:15	4/6/2011	49.5	30.8	0.3	19.4	
	8:08	4/25/2011	51.0	29.4	1.3	18.3	
	9:08	5/9/2011	53.5	29.8	0.6	16.1	
	9:31	5/23/2011	46.0	25.8	3.3	24.9	
	11:05	6/6/2011	57.0	30.0	0.6	12.4	
	9:21	6/15/2011	58.0	30.6	0.7	10.7	
	9:30	7/5/2011	60.5	30.2	0.8	8.5	
	8:10	7/13/2011	57.0	28.4	2.0	12.6	
	8:30	7/26/2011	63.5	30.6	0.6	5.3	
	8:30	8/8/2011	60.5	31.4	0.6	7.5	
	8:10	8/23/2011	57.5	31.8	0.7	10	
	15:15	9/9/2011	60.0	33.2	0.9	5.9	
	16:03	9/15/2011	62.0	33.6	1.1	3.3	
	8:40	9/21/2011	58.0	32.4	1.5	8.1	
	9:45	9/21/2011	60.0	34.2	0.8	5	
	9:35	9/22/2011	53.0	31.2	2.7	13.1	
	10:15	9/22/2011	60.0	34.0	1.1	4.9	
	11:04	9/22/2011	53.5	30.2	3.0	13.3	
	10:53	10/3/2011	47.0	33.2	1.1	18.7	
	14:00	10/24/2011	23.0	21.4	4.6	51	
	12:08	10/26/2011	51.8	34.8	0.6	12.8	
	10:59	11/7/2011	44.5	33.8	0.5	21.2	
	9:35	11/14/2011	46.0	33.8	0.2	20	
	9:30	12/12/2011	49.5	34.8	0.3	15.4	
	10:41	12/27/2011	49.0	34.0	0.2	16.8	
	9:00	1/10/2012	52.0	34.4	0.1	13.5	
	10:00	1/25/2012	48.0	34.8	0.4	16.8	
LC-2	9:35	2/20/2012	54.5	33.6	0.0	11.9	
	9:30	3/8/2012	53.5	31.6	1.0	13.9	
	10:30	4/2/2012	54.5	31.2	1.1	13.2	
	9:25	4/16/2012	43.0	25.4	4.4	27.2	
	9:30	4/30/2012	47.5	28.2	2.6	21.7	
	9:35	5/14/2012	48.0	28.2	2.4	21.4	
	9:30	5/29/2012	49.5	29.0	1.9	19.6	
	8:04	6/11/2012	51.0	29.2	4.7	15.1	
	9:59	6/25/2012	53.0	29.6	1.5	15.9	
	9:15	7/9/2012	50.5	28.6	2.2	18.7	
	8:55	7/23/2012	43.5	29.2	1.9	25.4	
	8:15	7/25/2012	44.0	29.4	2.0	24.6	
	9:21	8/6/2012	43.0	30.2	1.5	25.3	
	9:50	8/21/2012	40.0	30.0	1.6	28.4	
	9:30	9/4/2012	36.0	29.4	1.9	32.7	
	10:00	10/1/2012	29.5	27.6	2.6	40.3	
	8:48	10/15/2012	16.0	15.8	9.7	58.5	
	8:05	12/6/2012	8.5	6.6	17.8	67.1	Using rental meter
	9:15	12/17/2012	7.2	10.0	14.9	67.9	Using rental meter
	9:20	12/31/2012	8.0	6.6	16.4	69	Using rental meter
	8:30	1/9/2013	40.0	27.0	1.9	31.1	
	10:05	1/16/2013	42.0	29.0	1.2	27.8	
	9:30	1/28/2013	57.5	33.8	0.2	8.5	
	11:00	2/11/2013	59.0	35.0	0.6	5.4	
	9:42	2/25/2013	53.5	31.0	2.6	12.9	
	8:00	3/8/2013	63.0	35.8	0.1	1.1	
	9:15	3/22/2013	56.0	34.4	0.6	9.0	
	14:10	4/8/2013	52.0	29.0	0.5	18.5	
	15:30	4/22/2013	49.5	29.4	0.5	20.6	
	9:50	4/29/2013	43.0	27.6	0.5	28.9	
	8:45	5/13/2013	38.0	27.4	1.2	33.4	
	13:59	5/28/2013	33.0	26.0	1.6	39.4	
	9:00	6/7/2013	31.5	25.4	2.1	41.0	
	8:30	6/21/2013	30.5	25.4	1.7	42.4	
	9:00	7/5/2013	29.5	24.8	1.8	43.9	
	8:05	7/22/2013	29.5	25.8	1.5	43.2	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:31	3/20/2006	62.3	36.3	0.5	0.9	pre-startup
	10:06	3/22/2006	55.9	33.2	3.5	7.4	
	8:37	3/23/2006	53.5	30.5	3.4	12.6	
	16:30	3/23/2006	59.9	30.5	2.0	7.6	
	14:30	3/24/2006	8.6	6.7	17.0	67.7	
	14:45	3/28/2006	21.1	14.8	12.0	52.1	
	19:21	3/30/2006	51.2	30.4	1.6	16.8	
	13:35	4/5/2006	30.7	22.2	6.6	40.5	
	13:05	4/6/2006	19.0	14.9	11.9	54.2	
	13:20	4/11/2006	36.9	26.6	3.5	33.0	
	10:49	4/14/2006	38.2	27.8	1.0	33.0	
	15:30	4/14/2006	37.7	28.8	1.2	32.3	
	10:10	4/17/2006	10.5	0.6	0.8	88.1	
	19:38	4/27/2006	27.6	23.6	0.5	48.3	
	13:20	5/4/2006	0.0	0.0	8.8	91.2	
	10:25	5/22/2006	9.6	15.7	8.9	65.8	
	14:41	6/2/2006	0.6	0.1	20.4	78.9	
	8:29	6/9/2006	22.5	31.2	4.0	42.3	
	12:42	6/14/2006	20.5	15.6	3.2	60.7	
	10:51	6/22/2006	13.1	28.7	3.5	54.7	
	12:23	7/5/2006	13.0	29.6	1.9	55.5	
LC-3	11:38	7/10/2006	0.0	0.0	1.7	98.3	
	10:17	7/17/2006	11.9	28.3	1.8	58.0	
	14:09	7/28/2006	16.3	28.7	1.5	53.5	
	10:02	8/8/2006	11.4	28.8	1.5	58.3	
	9:10	8/16/2006	11.9	28.4	1.4	58.3	
	8:27	8/21/2006	2.4	5.8	1.8	90.0	
	14:14	8/28/2006	12.1	10.2	1.4	76.3	
	11:26	9/13/2006	6.8	11.8	1.7	79.7	
	11:25	9/25/2006	10.1	0.4	1.9	87.6	
	8:25	10/10/2006	10.8	29.6	2.7	56.9	
	8:26	10/23/2006	10.9	29.4	3.9	55.8	
	14:12	11/2/2006	9.5	23.4	0.4	66.7	
	15:09	11/14/2006	2.5	0.0	20.0	77.5	
	12:00	11/27/2006	0.3	1.2	18.9	79.7	
	13:10	12/26/2006	13.5	21.2	3.3	62.0	
	14:20	1/27/2007	13.0	21.4	1.9	63.7	
	11:40	2/24/2007	4.3	0.2	19.7	75.9	
	11:22	3/1/2007	12.0	19.6	4.1	64.3	
	12:30	3/1/2007	11.5	19.2	4.2	65.1	
	14:32	3/1/2007	11.5	18.8	4.1	65.6	
	7:50	3/5/2007	0.3	0.0	20.3	79.5	adjust blower time, 12 on, 12 off
	7:50	3/24/2007	15.0	19.2	4.1	61.7	
	16:34	3/24/2007	14.5	19.2	4.0	62.3	
	16:48	3/26/2007	12.5	18.6	3.6	65.3	
	7:09	3/27/2007	12.0	19.2	3.5	65.3	
	16:45	3/28/2007	13.0	19.8	3.6	63.6	
	7:40	3/29/2007	12.0	19.2	3.7	65.1	
	16:43	3/29/2007	12.0	19.2	3.8	65.0	
	7:45	3/30/2007	7.0	12.6	8.0	72.4	blower off

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:30	5/30/2007	29.0	22.8	3.0	45.2	restart and run 24 hrs
	13:52	5/30/2007	30.5	22.8	3.2	43.5	
	10:10	5/31/2007	23.5	21.2	2.9	52.4	reduce to 12 on 12 off
	16:10	6/1/2007	21.5	20.8	2.8	54.9	
	15:13	6/2/2007	20.0	19.4	3.6	57.0	
	15:44	6/3/2007	19.0	20.2	2.8	58.0	
	13:45	6/4/2007	18.0	19.8	3.0	59.2	reduce to 6 on 18 off
	14:27	6/7/2007	23.0	22.2	2.8	52.0	
	16:15	6/12/2007	14.0	19.4	3.1	63.5	
	13:58	6/14/2007	14.5	19.2	3.1	63.2	
	13:35	6/19/2007	14.5	19.6	3.0	62.9	
	13:40	6/21/2007	14.0	19.2	3.2	63.6	
	13:20	7/11/2007	14.0	19.2	3.3	63.5	
	13:10	7/23/2007	13.0	19.0	3.4	64.6	
	14:04	8/8/2007	13.0	19.4	3.4	64.2	
	13:50	8/13/2007	14.0	21.6	2.1	62.3	
	13:10	8/20/2007	11.8	19.8	2.7	65.7	
	13:35	8/28/2007	11.5	19.2	2.8	66.5	
	15:20	8/31/2007	8.5	18.0	3.5	70.0	
	14:15	9/4/2007	7.0	17.0	3.9	72.1	
	12:45	9/17/2007	5.5	15.8	4.7	74.0	
	9:05	9/29/2007	5.0	16.2	4.6	74.2	
	8:05	10/4/2007	5.5	16.0	4.6	73.9	
	9:05	10/7/2007	6.0	16.4	4.2	73.4	
LC-3	9:20	10/18/2007	7.5	16.8	3.6	72.1	
	8:25	10/25/2007	6.5	16.6	4.2	72.7	
	8:40	11/1/2007	7.5	16.8	4.3	71.4	
	9:45	11/13/2007	11.5	16.2	5.5	66.8	
	10:55	11/26/2007	7.0	14.4	6.4	72.2	
	10:20	12/10/2007	7.0	14.6	6.8	71.6	
	11:05	12/26/2007	7.5	14.4	6.4	71.7	
	9:30	1/9/2008	8.5	14.6	6.6	70.3	
	11:50	1/23/2008	7.5	14.4	7.3	70.8	
	8:40	2/4/2008	10.0	15.6	6.1	68.3	
	7:10	2/18/2008	12.5	15.4	6.8	65.3	
	7:40	3/4/2008	17.5	17.8	7.5	57.2	
	8:15	3/18/2008	20.0	17.6	6.2	56.2	
	13:35	5/12/2008	20.0	19.6	4.5	55.9	
	8:45	5/19/2008	11.5	16.6	5.6	66.3	
	13:10	5/30/2008	10.0	16.2	5.1	68.7	
	8:25	6/12/2008	9.5	17.4	5.2	67.9	
	8:35	6/25/2008	14.5	19.8	4.3	61.4	
	10:35	7/7/2008	10.5	17.0	4.9	67.6	opened GV-6 to 200 ft/min
	12:15	7/21/2008	10.5	19.0	4.1	66.4	
	10:00	8/5/2008	12.5	19.2	4.2	64.1	
	9:15	8/13/2008	13.5	19.6	4.3	62.6	increase to 12 on 12 off
	8:55	8/19/2008	9.5	18.4	4.6	67.5	
	14:25	9/2/2008	11.5	18.4	4.4	65.7	
	12:12	10/3/2008	12.5	19.0	4.8	63.7	
	10:15	10/13/2008	13.0	19.0	4.9	63.1	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:25	10/28/2008	13.5	19.6	5.4	61.5	
	7:50	11/6/2008	13.5	19.2	5.1	62.2	
	10:40	12/8/2008	12.0	18.8	5.6	63.6	
	9:40	12/24/2008	10.0	17.4	5.2	67.4	decrease to 10 on
	11:10	1/8/2009	9.5	17.0	5.5	68.0	
	11:45	1/18/2009	29.5	22.6	7.4	40.5	
	8:05	2/6/2009	8.5	16.0	5.8	69.7	1/27/09 ice in port
	10:05	2/23/2009	6.5	16.2	5.7	71.6	decrease to 8 on
	9:40	3/9/2009	11.0	17.0	5.2	66.8	
	9:30	3/20/2009	13.5	17.6	5.3	63.6	
	11:25	4/9/2009	17.5	18.8	4.9	58.8	
	10:10	4/19/2009	11.0	17.2	5.3	66.5	
	8:40	5/4/2009	4.2	17.4	3.3	75.2	
	8:45	5/18/2009	7.5	16.4	5.5	70.6	
	10:10	6/1/2009	3.8	16.0	4.3	76.0	
	9:10	6/14/2009	7.5	16.0	5.3	71.2	
	8:55	7/2/2009	15.8	18.0	4.5	61.7	
	7:35	7/13/2009	15.5	19.0	4.4	61.1	
	8:35	7/22/2009	11.5	18.0	4.8	65.7	
	9:00	8/11/2009	9.0	17.2	4.7	69.1	
	8:50	8/24/2009	7.0	15.8	5.7	71.5	decrease to 6 on 18 off
	9:35	9/8/2009	12.0	17.4	4.8	65.8	
	9:28	9/21/2009	14.5	18.6	4.8	62.1	
	10:25	10/5/2009	16.5	19.2	4.9	59.4	
LC-3	11:05	10/28/2009	18.5	20.4	4.7	56.4	
	11:05	11/16/2009	12.5	18.6	5.5	63.4	
	9:35	12/18/2009	25.0	23.2	4.0	47.8	
	9:20	12/28/2009	25.0	22.4	5.0	47.6	
	9:20	1/11/2010	24.5	23.4	4.4	47.7	
	8:20	1/26/2010	27.5	23.6	4.4	44.5	
	11:45	2/25/2010	24.0	23.2	4.3	48.5	
	10:04	3/8/2010	25.0	23.0	3.9	48.1	
	9:30	3/22/2010	24.0	22.0	4.5	49.5	
	9:35	4/5/2010	24.9	22.6	4.0	48.5	
	9:21	4/19/2010	24.5	22.2	4.4	48.9	
	9:31	5/3/2010	26.5	22.6	4.0	46.9	
	9:59	5/17/2010	26.0	22.4	4.3	47.3	
	8:55	5/25/2010	22.0	22.2	3.4	52.4	
	9:20	6/24/2010	22.5	21.0	1.4	55.1	
	10:20	7/6/2010	17.0	19.8	4.5	58.7	
	9:14	7/19/2010	15.5	19.0	4.7	60.8	
	9:10	8/2/2010	10.5	18.6	4.7	66.2	
	10:00	8/16/2010	18.5	19.8	4.2	57.5	
	9:05	8/30/2010	24.5	22.0	3.0	50.5	
	9:15	9/13/2010	27.0	22.4	4.3	46.3	
	9:18	9/28/2010	27.0	22.6	4.7	45.7	
	8:17	10/12/2010	24.5	22.4	5.0	48.1	
	9:30	10/25/2010	24.5	22.2	4.7	48.6	
	9:45	11/2/2010	22.0	21.8	5.4	50.8	
	9:06	11/15/2010	21.5	21.2	1.7	55.6	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:50	12/10/2010	20.0	20.6	5.7	53.7	
	9:10	12/23/2010	19.5	21.2	5.9	53.4	
	9:25	1/10/2011	20.5	20.8	6	52.7	
	8:41	1/25/2011	18.5	18.8	7.4	55.3	
	12:30	2/11/2011	29.5	21.6	6.1	42.8	
	10:15	2/22/2011	15.5	17.0	7.7	59.8	
	9:30	3/7/2011	15.5	17.4	7.1	60.0	
	12:00	3/24/2011	23.0	20.6	4.9	51.5	
	9:05	4/6/2011	31.0	21.6	4.9	42.5	
	8:04	4/25/2011	31.0	21.2	5.6	42.2	
	9:00	5/9/2011	37.5	23.0	4.5	35.0	
	9:20	5/23/2011	39.5	24.0	4.2	32.3	
	11:00	6/6/2011	40.5	24.4	4.1	31.0	
	9:15	6/15/2011	40.5	24.4	4.0	31.1	
	9:20	7/5/2011	39.0	24.6	3.6	32.8	
	8:13	7/13/2011	38.5	24.6	3.5	33.4	
	8:15	7/26/2011	37.5	24.4	3.5	34.6	
	8:25	8/8/2011	31.5	23.4	3.4	41.7	
	8:00	8/23/2011	28.5	22.4	3.9	45.2	
	15:21	9/9/2011	34.0	24.6	3.9	37.5	
	16:03	9/15/2011	27.5	23.0	4.7	44.8	
	8:35	9/21/2011	25.0	21.8	4.7	48.5	
	9:42	9/21/2011	25.0	21.4	4.9	48.7	
	9:33	9/22/2011	26.0	22.2	4.8	47.0	
	10:13	9/22/2011	26.0	21.8	5.1	47.1	
	10:59	9/22/2011	27.5	22.6	4.6	45.3	
	10:50	10/3/2011	18.0	20.2	5.1	56.7	
	14:05	10/24/2011	41.0	28.6	3.7	26.7	
	11:08	10/26/2011	24.5	22.0	5.0	48.5	
	10:52	11/7/2011	21.5	21.4	4.7	52.4	
	9:27	11/14/2011	23.5	21.8	4.4	50.3	
	9:37	12/12/2011	23.0	22.2	4.7	50.1	
	10:30	12/27/2011	28.0	23.0	4.2	44.8	
	8:51	1/10/2012	32.5	24.0	4.2	39.3	
	9:55	1/25/2012	33.0	26.0	4.2	36.8	
LC-3	9:29	2/20/2012	37.5	25.8	5.0	31.7	
	9:21	3/8/2012	36.5	24.8	5.5	33.2	
	9:00	4/2/2012	32.0	24.4	4.7	38.9	
	9:15	4/16/2012	29.5	22.8	5.0	42.7	
	9:25	4/30/2012	25.0	21.8	5.3	47.9	
	9:25	5/14/2012	27.0	22.2	5.0	45.8	
	9:18	5/29/2012	30.9	23.0	4.5	41.6	
	7:59	6/11/2012	31.5	23.4	4.4	40.7	
	9:53	6/25/2012	33.5	24.4	4.0	38.1	
	9:10	7/9/2012	32.5	24.6	3.5	39.4	
	8:47	7/23/2012	19.0	21.0	4.2	55.8	
	8:11	7/25/2012	19.0	21.0	4.4	55.6	
	9:10	8/6/2012	19.0	21.4	4.2	55.4	
	9:40	8/21/2012	19.0	20.6	4.8	55.6	
	9:21	9/4/2012	14.5	19.8	4.5	61.2	
	8:17	10/1/2012	10.5	16.4	6.6	66.5	reduce from 23 hrs to 16.5 hrs on
	8:40	10/15/2012	9.0	12.0	9.9	69.1	reduce from 16.5 hrs to 8.5 hrs on
	7:50	12/6/2012	18.5	20.0	5.2	56.3	reduce from 8.5 hrs to 4 hrs on
	9:10	12/17/2012	22.5	20.2	4.5	52.8	reduce from 4 hrs to 2 hrs on
	9:10	12/31/2012	26.0	22.4	4.5	47.1	
	8:30	1/9/2013	28.0	22.6	4.3	45.1	Increase from 2 hrs to 4 hrs on
	9:40	1/15/2013	29.0	22.6	3.9	44.5	Increase from 4 hrs to 8 hrs on
	9:17	1/28/2013	27.5	22.8	4.3	45.4	Increase from 8 hrs to 12 hrs on
	11:05	2/11/2013	27.0	20.2	7.2	45.6	Reduce from 12 hrs to 9 hrs on
	9:30	2/25/2013	42.0	27.8	3.1	27.1	Increase from 9 hrs to 18 hrs on
	7:50	3/8/2013	53.0	33.0	0.0	14.0	Increase from 18 hrs to 23.5 hrs on
	9:08	3/22/2013	54.5	33.6	0.1	11.8	
	13:55	4/8/2013	30.0	23.4	4.1	42.5	
	15:25	4/22/2013	21.5	4.0	3.9	70.6	
	9:44	4/29/2013	18.5	19.6	4.1	57.9	
	8:37	5/13/2013	16.5	19.0	4.9	59.6	
	13:48	5/28/2013	16.5	18.8	4.4	60.3	
	9:05	6/7/2013	17.0	19.0	4.5	59.5	
	8:25	6/21/2013	16.0	18.4	4.5	61.1	
	8:55	7/5/2013	15.5	18.2	4.5	61.8	
	8:00	7/22/2013	16.0	19.0	4.3	60.7	

Table 6a. Landfill Gas Field Parameter Monitoring Results of Active Extraction Points

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:19	3/20/2006	0.4	0.2	20.9	78.5	pre-startup
	10:00	3/22/2006	45.9	26.6	2.6	24.9	
	15:49	3/22/2006	54.2	31.6	0.9	13.3	
	8:47	3/23/2006	51.5	29.5	1.3	17.7	
	16:50	3/23/2006	45.0	25.4	3.8	25.8	
	15:30	3/24/2006	24.0	13.9	15.0	47.1	
	14:30	3/28/2006	13.2	10.0	12.9	63.9	
	19:00	3/30/2006	34.4	24.9	2.9	37.8	
	13:25	4/5/2006	22.9	18.7	8.2	50.2	
	12:55	4/6/2006	21.9	17.4	7.9	52.8	
	13:10	4/11/2006	23.8	20.2	5.9	50.1	
	10:56	4/14/2006	26.9	23.4	2.3	47.4	
	15:53	4/14/2006	21.3	28.5	5.4	44.8	
	10:00	4/17/2006	31.3	34.0	3.0	31.7	
	19:55	4/27/2006	15.6	19.8	4.0	60.6	
	13:15	5/4/2006	0.0	0.0	2.4	97.6	
	10:19	5/22/2006	16.2	24.6	1.3	57.9	
	8:23	6/9/2006	24.4	32.8	6.2	36.6	
	12:37	6/14/2006	22.8	29.3	5.6	42.3	
	10:46	6/22/2006	12.1	23.0	5.4	59.5	
	12:07	7/5/2006	13.7	24.7	4.9	56.7	
GV-6	11:33	7/10/2006	12.6	26.2	4.0	57.2	
	10:54	7/17/2006	12.7	25.6	3.9	57.8	
	14:04	7/28/2006	4.8	24.5	4.4	66.3	
	9:53	8/8/2006	14.8	29.1	2.3	53.8	
	9:06	8/16/2006	14.8	27.1	4.1	54.0	
	8:22	8/21/2006	12.7	8.6	3.8	74.9	
	14:10	8/28/2006	16.6	25.7	5.0	52.7	
	11:24	9/13/2006	8.2	1.4	5.3	85.1	
	11:20	9/25/2006	8.1	0.8	1.8	89.3	
	8:20	10/10/2006	18.1	30.1	3.2	48.6	
	8:21	10/23/2006	12.8	18.1	4.6	64.5	
	14:05	11/2/2006	10.0	22.4	1.3	66.3	
	14:56	11/14/2006	19.0	21.8	4.5	54.7	
	11:27	11/27/2006	9.0	14.6	8.4	68.0	
	13:00	12/26/2006	15.5	22.8	1.5	60.2	
	14:02	1/27/2007	13.5	20.8	1.7	64.0	
	9:32	2/15/2007	0.6	11.4	8.0	80.1	
	11:24	2/24/2007	2.6	12.0	9.6	75.9	
	9:41	3/1/2007	23.0	24.0	0.2	52.8	
	10:15	3/1/2007	13.5	17.8	3.6	65.1	
	10:17	3/1/2007	12.0	19.2	1.3	67.5	
	11:13	3/1/2007	9.0	17.4	2.5	71.1	
	12:22	3/1/2007	7.5	16.6	3.0	72.9	
	13:53	3/1/2007	6.5	15.6	4.3	73.6	
	14:00	3/1/2007	7.0	15.5	4.2	73.3	
	14:40	3/1/2007	6.0	14.4	5.2	74.4	
	8:00	3/5/2007	6.0	14.4	6.4	73.2	adjust blower time, 12 on, 12 off
	8:05	3/24/2007	11.5	20.0	2.8	65.7	
	16:50	3/24/2007	12.0	19.4	2.8	65.8	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	17:05	3/26/2007	9.5	18.4	3.2	68.9	
	7:25	3/27/2007	7.0	17.6	4.1	71.3	
	16:31	3/28/2007	11.0	20.0	1.8	67.2	
	7:59	3/29/2007	8.5	19.8	1.4	70.3	
	16:55	3/29/2007	12.0	20.0	1.3	66.7	
	7:59	3/30/2007	9.0	20.8	0.3	69.9	blower off
	10:45	5/30/2007	31.0	22.6	0.7	45.7	restart and run 24 hrs
	13:40	5/30/2007	36.5	26.2	0.6	36.7	
	10:25	5/31/2007	21.5	22.8	1.5	54.2	reduce to 12 on 12 off
	16:28	6/1/2007	20.5	22.0	1.1	56.4	
	15:25	6/2/2007	20.0	21.8	1.1	57.1	
	16:05	6/3/2007	20.5	22.4	0.5	56.6	
	14:08	6/4/2007	16.5	22.0	0.8	60.7	reduce to 6 on 18 off
	15:04	6/7/2007	19.0	22.6	0.4	58.0	
	17:35	6/12/2007	14.0	21.6	1.7	62.7	
	15:00	6/14/2007	14.0	21.8	0.6	63.6	
	14:30	6/19/2007	13.0	22.8	0.7	63.5	
	14:30	6/21/2007	15.0	21.8	1.4	61.8	
	14:20	7/11/2007	14.0	20.2	3.1	62.7	
	14:20	7/23/2007	15.0	21.0	3.3	60.7	
	14:10	8/8/2007	14.0	20.2	3.8	62.0	
	13:15	8/13/2007	12.0	18.6	5.1	64.3	
	14:20	8/20/2007	9.5	18.0	5.1	67.4	
	14:15	8/28/2007	9.0	18.6	4.4	68.0	
GV-6	15:50	8/31/2007	6.0	19.2	2.5	72.3	
	14:45	9/4/2007	6.0	18.2	3.2	72.6	
	13:15	9/17/2007	5.0	16.8	4.3	73.9	
	9:35	9/29/2007	4.7	16.8	4.3	74.2	
	8:35	10/4/2007	4.4	16.2	4.7	74.8	
	9:35	10/7/2007	4.7	17.0	3.6	74.7	
	9:40	10/18/2007	7.5	20.0	0.6	71.9	
	9:10	10/25/2007	7.0	2.0	0.5	90.5	
	9:10	11/1/2007	7.0	20.6	0.2	72.2	
	10:05	11/13/2007	17.5	22.0	0.7	59.8	
	11:20	11/26/2007	6.0	15.6	5.5	72.9	reduce to 12 on 12 off
	10:50	12/10/2007	7.0	16.8	4.8	71.4	reduce to 10 on 14 off
	11:40	12/26/2007	6.5	15.6	4.9	73.0	reduce to 8 on 16 off
	10:05	1/9/2008	6.0	15.6	4.9	73.5	
	12:05	1/23/2008	5.5	13.4	7.3	73.8	
	9:10	2/4/2008	12.5	19.4	0.9	67.2	
	7:40	2/18/2008	17.0	20.4	0.7	61.9	
	7:20	3/4/2008	21.0	21.0	0.9	57.1	
	8:35	3/18/2008	31.0	22.8	0.8	45.4	
	14:15	5/12/2008	14.5	19.6	3.1	62.8	
	9:05	5/19/2008	5.5	14.8	6.4	73.3	
	13:40	5/30/2008	12.0	20.4	0.2	67.4	
	9:15	6/12/2008	5.0	16.8	5.5	72.7	
	9:10	6/25/2008	10.0	23.4	0.6	66.0	
	11:20	7/7/2008	5.5	20.0	0.0	74.5	opened GV-6 to 200 ft/min
	12:25	7/21/2008	7.5	20.8	1.3	70.4	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:45	8/5/2008	9.5	21.8	0.5	68.2	
	9:00	8/13/2008	11.5	21.6	1.4	65.5	increase to 12 on 12 off
	8:40	8/19/2008	4.9	15.4	6.8	73.0	
	14:00	9/2/2008	5.5	18.4	2.0	74.1	
	11:46	10/3/2008	3.7	9.6	11.0	75.7	
	10:35	10/13/2008	9.0	20.4	1.8	68.8	
	9:10	10/28/2008	7.0	19.2	2.8	71.0	
	7:30	11/6/2008	10.0	20.2	1.5	68.3	
	10:10	12/24/2008	6.0	15.6	4.5	73.9	12/8/08 meter failure
	11:45	1/8/2009	3.1	13.6	6.5	76.8	1/27/09 ice in port
	11:15	1/18/2009	8.5	19.0	3.2	69.3	
	8:30	2/6/2009	3.2	12.4	7.7	76.8	
	10:45	2/23/2009	1.5	10.8	9.7	78.1	decrease to 8 on
	10:10	3/9/2009	3.0	14.6	3.3	79.1	
	10:10	3/20/2009	4.4	16.8	2.1	76.8	
	12:21	4/9/2009	8.0	18.4	0.0	73.6	
	10:30	4/19/2009	3.6	13.0	6.7	76.7	
	8:30	5/4/2009	1.6	11.4	8.5	78.6	
	8:35	5/18/2009	2.0	12.4	7.2	78.4	
	10:05	6/1/2009	1.3	11.4	7.9	79.4	
	8:50	6/14/2009	1.7	13.8	4.7	79.8	
	8:40	7/2/2009	9.0	20.8	0.3	69.9	
	7:25	7/13/2009	11.5	23.0	0.0	65.5	
	8:25	7/22/2009	4.5	16.2	4.4	74.9	
GV-6	8:40	8/11/2009	1.9	11.8	7.7	78.6	
	8:40	8/24/2009	1.8	11.4	7.9	79.0	decrease to 6 on 18 off
	9:15	9/8/2009	7.0	18.4	1.6	73.0	
	9:10	9/21/2009	16.0	22.4	0.4	61.2	
	10:09	10/5/2009	9.5	19.8	2.0	68.7	
	10:55	10/28/2009	12.5	20.8	1.6	65.1	
	10:45	11/16/2009	15.5	4.5	16.0	64.0	
	9:15	12/18/2009	24.0	23.8	0.0	52.2	
	9:00	12/28/2009	21.5	22.4	5.0	51.1	
	9:10	1/11/2010	15.5	20.4	2.8	61.3	
	12:30	2/25/2010	21.2	21.2	0.7	56.9	
	9:45	3/8/2010	18.0	21.2	0.2	60.6	
	9:20	3/22/2010	18.0	21.2	0.3	60.5	
	9:20	4/5/2010	7.0	20.2	1.2	71.6	
	9:12	4/19/2010	14.0	21.0	0.1	64.9	
	9:12	5/3/2010	12.5	21.4	0.0	66.1	
	9:42	5/17/2010	22.5	23.6	0.0	53.9	
	9:04	5/25/2010	5.0	19.8	2.9	72.3	
	9:10	6/24/2010	9.0	19.6	1.7	69.7	
	9:00	7/19/2010	3.4	16.8	2.7	77.1	
	8:50	8/2/2010	4.5	12.0	3.0	80.6	
	9:43	8/16/2010	14.0	22.0	1.2	62.8	
	8:47	8/30/2010	21.5	25.0	1.0	52.5	
	9:00	9/13/2010	30.0	26.6	1.2	42.2	
	9:47	9/28/2010	37.0	28.2	1.2	33.6	

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	8:10	10/12/2010	24.0	25.0	1.7	49.3	
	9:12	10/25/2010	35.5	26.8	1.2	36.5	
	9:30	11/2/2010	15.5	22.0	1.9	60.6	
	8:45	11/15/2010	13.5	21.0	1.7	63.8	
	9:40	12/10/2010	9.0	19.2	2.1	69.7	
	8:50	12/23/2010	6.0	18.2	2.8	73.0	
	9:10	1/10/2011	28.0	4.8	15.7	51.5	
	12:00	2/11/2011	30.5	20.8	0.5	48.2	
	9:40	2/22/2011	1.7	7.4	14.2	76.7	
	9:15	3/7/2011	4.4	10.0	11.5	74.1	
	11:45	3/24/2011	7.5	12.2	6.9	73.4	
	8:45	4/6/2011	17.5	19.2	0.9	62.4	
	8:12	4/25/2011	18.6	20.8	0.7	59.9	
	8:45	5/9/2011	29.5	22.8	0.4	47.3	
	9:00	5/23/2011	35.5	24.4	0.4	39.7	
	10:45	6/6/2011	39.5	25.2	0.3	35.0	
	8:59	6/15/2011	41.0	26.8	0.3	31.9	
	9:10	7/5/2011	35.4	26.0	0.6	38.0	
	8:09	7/13/2011	24.0	24.8	0.6	50.6	
	8:10	7/26/2011	35.0	27.4	0.7	36.9	
	8:10	8/8/2011	20.0	23.6	0.5	55.9	
	7:45	8/23/2011	19.0	24.8	0.9	55.3	
	15:17	9/9/2011	29.0	1.2	26.4	43.4	
	16:01	9/15/2011	19.0	24.6	0.5	55.9	
	8:27	9/21/2011	39.5	29.0	0.5	31.0	
	9:35	9/21/2011	20.0	22.1	1.5	56.4	
	9:27	9/22/2011	26.0	22.2	4.8	47.0	
	10:09	9/22/2011	9.9	19.2	2.5	68.4	
	10:55	9/22/2011	11.5	18.8	3.3	66.4	
	10:40	10/3/2011	4.6	13.6	8.1	73.8	
	13:49	10/24/2011	7.5	20.4	1.2	70.9	
	10:55	10/26/2011	7.5	16.4	5.8	70.3	
	10:40	11/7/2011	4.5	14.6	6.6	74.3	
	9:15	11/14/2011	7	17.8	3	72.2	
	10:30	11/14/2011	5	6.8	2.7	85.5	
	9:12	12/12/2011	7.5	16.8	4.3	71.4	
	10:17	12/27/2011	9	7	13.9	70.1	
GV-6	8:40	1/10/2012	12	19.6	1	67.4	
	10:05	1/25/2012	11.5	22.6	0.2	65.7	
	9:15	2/20/2012	12.5	14.4	2.1	71	
	9:00	3/8/2012	11	18.4	2.9	67.7	
	10:20	4/2/2012	9.0	18.2	2.6	70.2	
	9:05	4/16/2012	14.9	20.4	1.2	63.5	
	9:10	4/30/2012	17.0	21.0	1.3	60.7	
	9:15	5/14/2012	16.0	21.0	1.3	61.7	
	9:10	5/29/2012	14.5	20.4	1.8	63.3	
	7:45	6/11/2012	23.0	23.8	1.4	51.8	
	9:40	6/25/2012	8.5	18.4	3.3	69.8	
	9:00	7/9/2012	12.0	19.4	3.1	65.5	
	8:33	7/23/2012	3.8	12.0	8.3	76.0	
	8:19	7/25/2012	10.0	18.8	2.8	68.4	
	9:00	8/6/2012	4.4	13.6	7.3	74.8	
	9:17	8/21/2012	4.1	13.8	6.5	75.7	
	9:10	9/4/2012	3.2	11.2	8.6	77.1	
	9:05	10/1/2012	2.3	9.4	10.2	78.2	
	8:30	10/15/2012	2.0	10.4	9.0	78.6	
	7:40	12/6/2012	15.0	19.4	1.4	64.2	
	9:00	12/17/2012	9.0	14.2	4.5	72.3	
	8:50	12/31/2012	42.0	2.6	18.7	36.7	1st time O2 over 5% (used rental meter)
	8:30	1/9/2013	28.0	1.8	19.6	50.6	wrong port used for O2 (3.3, 2nd reading)
	8:08	1/15/2013	21.0	20.4	0.3	58.3	
	9:05	1/28/2013	35.5	23.6	3.2	37.7	
	10:45	2/11/2013	18.5	12.8	9.4	59.3	
	9:15	2/25/2013	31.5	21.8	1.7	45.0	
	7:30	3/8/2013	34.5	22.6	0.1	42.8	
	8:50	3/22/2013	41.5	22.2	0.0	36.3	
	13:50	4/8/2013	10.5	15.6	4.3	69.6	
	15:15	4/22/2013	14.0	19.0	1.2	65.8	
	9:35	4/29/2013	4.3	13.2	5.0	77.6	Reduce from 23.5 hrs to 20.5 hrs on
	8:30	5/13/2013	3.4	11.6	7.4	77.7	Reduce from 20.5 hrs to 16 hrs on
	13:36	5/28/2013	4.8	13.2	5.8	76.2	Reduce from 16 hrs to 12 hrs on
	8:45	6/7/2013	3.9	13.0	6.1	77.1	
	8:12	6/21/2013	6.5	15.4	4.8	73.3	
	8:45	7/5/2013	3.6	13.0	6.2	77.2	
	7:48	7/22/2013	5.0	15.2	4.7	75.1	Reduce from 12 hrs to 10 hrs on

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	11:03	3/20/2006	**18.8**	8.1	0.4	72.7	pre-startup
	15:25	3/22/2006	**17.9**	8.0	0.4	73.7	
	14:10	3/23/2006	**21.4**	11.5	0.2	66.9	
	14:00	3/30/2006	0.8	2.4	15.0	81.8	
	13:45	4/6/2006	0.6	1.5	16.8	81.1	
	13:40	4/11/2006	1.2	0.8	19.3	78.7	
	11:33	4/14/2006	0.0	1.9	14.7	83.4	
	10:28	4/17/2006	3.8	4.8	16.8	74.6	
	7:15	4/28/2006	2.5	3.2	18.1	76.2	
	13:30	5/4/2006	0.0	3.4	13.9	82.7	
	10:45	5/22/2006	0.1	1.2	19.3	79.4	
	12:23	6/2/2006	0.1	3.5	12.1	84.3	
	8:02	6/9/2006	2.6	2.0	19.8	75.6	
	12:49	6/14/2006	1.1	3.9	15.4	79.6	
	11:10	6/22/2006	0.7	1.0	18.1	80.2	
GP-1	11:47	7/5/2006	0.6	2.4	14.9	82.1	
	11:15	7/10/2006	0.7	4.5	14.1	80.7	
	10:35	7/17/2006	0.8	2.9	15.8	80.5	
	13:42	7/28/2006	2.0	1.7	12.2	84.1	
	10:19	8/8/2006	4.4	8.5	12.9	74.2	
	8:20	8/16/2006	1.4	3.6	15.5	79.5	
	8:05	8/21/2006	0.5	0.6	13.0	85.9	
	13:52	8/28/2006	3.4	7.6	11.2	77.8	
	11:09	9/13/2006	4.6	0.1	12.5	82.8	
	10:28	9/25/2006	0.0	0.0	10.7	89.3	
	8:05	10/10/2006	0.7	2.3	17.6	79.4	
	8:07	10/23/2006	0.7	2.7	19.0	77.6	
	14:35	11/2/2006	0.3	2.6	17.6	79.5	
	13:35	11/14/2006	0.2	2.6	15.9	81.3	
	11:08	11/27/2006	0.2	0.4	19.3	80.2	
	12:20	12/26/2006	0.1	3.6	12.3	84.1	
	13:13	1/27/2007	0.5	2.8	14.6	82.2	
	10:50	2/24/2007	0.4	0.0	20.4	79.3	
	17:29	3/28/2007	0.3	2.4	14.6	82.8	
	10:25	5/1/2007	0.2	2.2	12.6	85.1	
	10:27	5/1/2007	0.1	1.2	16.1	82.6	
	12:00	5/30/2007	2.0	7.2	7.1	83.7	
	16:35	6/6/2007	**11.0**	10.6	0.8	77.6	
	14:48	6/7/2007	**6.0**	7.6	5.7	80.7	
	16:59	6/12/2007	1.1	6.0	9.4	83.5	
	14:25	6/14/2007	**7.0**	10.4	2.1	80.5	
	14:15	6/19/2007	3.5	6.6	9.7	80.3	
	14:10	6/21/2007	0.4	6.0	10.1	83.5	
	14:00	7/11/2007	4.0	8.4	8.3	79.3	
	14:35	7/23/2007	**8.5**	13.8	2.0	75.7	
	14:25	8/8/2007	**9.5**	14.8	2.4	73.3	
	11:45	8/13/2007	**6.5**	12.4	5.6	75.5	
	13:30	8/20/2007	**5.5**	10.8	9.2	74.5	
	13:55	8/28/2007	**12.0**	15.8	2.2	70.0	
	15:40	8/31/2007	**9.5**	14.0	4.2	72.3	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	14:35	9/4/2007	**8.0**	13.6	4.4	74.0	
	13:05	9/17/2007	0.2	6.0	12.0	81.8	
	9:25	9/29/2007	0.2	4.6	13.9	81.4	
	8:25	10/4/2007	0.4	2.8	17.1	79.7	
	9:25	10/7/2007	0.6	3.4	15.3	80.7	
	10:15	10/18/2007	**6.5**	12.2	4.2	77.1	
	8:45	10/25/2007	0.1	3.6	15.5	80.8	
	9:00	11/1/2007	0.1	5.4	13.8	80.7	
	9:40	11/13/2007	0.2	3.8	13.7	82.4	
	11:10	11/26/2007	0.3	1.2	19.3	79.3	
	10:40	12/10/2007	0.4	1.2	19.4	79.0	
	11:25	12/26/2007	0.3	1.4	18.6	79.8	
	13:00	1/23/2008	0.3	2.8	13.9	83.0	
	9:55	1/9/2008	0.4	1.0	17.7	81.0	
	13:00	1/23/2008	0.3	2.8	13.9	83.0	
	9:00	2/4/2008	0.1	2.2	14.6	83.1	
	7:30	2/18/2008	0.2	2.0	14.8	83.0	
	7:10	3/4/2008	0.1	1.2	19.1	79.6	
	8:05	3/18/2008	0.1	0.4	19.5	80.0	
	14:00	5/12/2008	0.0	4.8	3.5	91.7	
	8:55	5/19/2008	0.1	5.8	4.5	89.7	
	13:30	5/30/2008	**7.0**	7.8	0.8	84.4	
	8:55	6/12/2008	0.0	2.2	17.0	80.8	
	8:55	6/25/2008	**10.5**	10.0	0.0	79.5	
GP-1	10:55	7/7/2008	**8.5**	11.0	0.0	80.5	opened GV-6 to 200 ft/min
	11:50	7/21/2008	**13.5**	11.8	0.0	74.7	
	9:37	8/5/2008	**26.5**	13.4	0.0	60.1	
	10:40	8/5/2008	**18.0**	11.6	2.1	68.3	vent for 1 hour with cap off
	8:55	8/13/2008	**22.5**	14.4	0.0	63.1	increase to 12 on 12 off
	9:55	8/13/2008	**17.5**	11.4	3.1	68.0	vent for 1 hour with cap off
	8:35	8/19/2008	**7.0**	12.6	3.4	77.0	
	10:00	8/19/2008	**6.0**	14.0	1.3	78.7	vent for 1 hour with cap off
	11:58	10/3/2008	4.2	7.0	11.6	77.3	
	11:12	10/13/2008	1.8	4.4	14.2	79.6	
	9:00	10/28/2008	0.0	4.6	13.6	81.8	
	7:20	11/6/2008	0.4	3.4	15.1	81.1	
	10:15	12/8/2008	0.1	2.6	16.0	81.3	
	10:00	12/24/2008	0.0	2.2	15.7	82.1	
	11:30	1/8/2009	0.1	3.4	16.8	79.8	
	11:05	1/18/2009	0.1	3.6	16.1	80.2	
	7:20	1/27/2009	0.2	1.2	20.9	77.7	
	8:20	2/6/2009	0.1	0.6	19.8	79.5	
	10:30	2/23/2009	0.0	2.2	18.5	79.3	
	10:00	3/9/2009	0.0	1.8	17.9	80.3	
	10:00	3/20/2009	0.1	1.0	19.6	79.4	
	9:35	4/9/2009	0.0	2.8	8.7	88.5	
	10:20	4/19/2009	0.0	3.6	5.2	91.2	
	8:20	5/4/2009	0.0	3.8	1.8	94.4	
	8:25	5/18/2009	0.0	5.0	5.8	89.2	
	10:00	6/1/2009	0.0	6.6	6.1	87.3	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	8:40	6/14/2009	0.4	5.2	8.3	86.1	
	8:30	7/2/2009	0.0	3.2	15.1	81.7	
	7:20	7/13/2009	1.0	7.4	8.9	82.8	
	8:40	7/13/2009	0.0	0.8	18.9	80.3	vent for 1 hour with cap off
	7:20	7/22/2009	0.1	5.8	11.3	82.9	
	8:35	8/11/2009	0.0	3.4	14.7	81.9	
	8:30	8/24/2009	0.0	3.6	14.7	81.7	
	9:05	9/8/2009	2.0	7.8	9.4	80.8	
	9:05	9/21/2009	1.8	6.0	12.1	80.1	
	10:05	10/5/2009	0.0	5.8	12.9	81.3	
	10:30	10/28/2009	0.0	3.8	14.2	82.0	
	10:35	11/16/2009	0.0	2.4	16.5	81.1	
	9:05	12/18/2009	0.0	3.2	14.4	82.4	
	8:40	12/28/2009	0.0	1.0	18.4	80.6	
	8:45	1/11/2010	0.0	3.2	14.1	82.7	
	8:50	1/26/2010	0.3	4.0	9.1	86.7	
	10:32	2/25/2010	0.2	4.2	7.3	88.4	
	9:35	3/8/2010	0.0	5.4	1.0	93.6	
	9:05	3/22/2010	0.0	2.6	7.2	90.2	
	9:08	4/5/2010	0.0	3.8	14.6	81.6	
	9:05	4/19/2010	0.0	4.2	7.0	88.8	
	9:05	5/3/2010	0.0	1.2	17.6	81.2	
	9:35	5/17/2010	0.2	3.4	11.8	84.6	
	13:00	5/25/2010	0.0	4.8	10.7	84.5	
GP-1	9:05	6/24/2010	0.1	7.8	8.0	84.2	
	10:05	7/6/2010	0.0	8.8	3.0	88.2	
	8:38	7/19/2010	0.6	6.4	7.8	85.3	
	8:45	8/2/2010	2.6	9.4	3.9	84.1	
	9:35	8/16/2010	3.1	12.6	1.0	83.4	
	8:40	8/30/2010	2.2	9.0	6.6	82.3	
	8:50	9/13/2010	**5.5**	12.4	1.5	80.6	
	10:40	9/28/2010	3.7	11.2	1.9	83.2	
	6:50	10/12/2010	**14.0**	15.0	0.0	71.0	
	9:05	10/25/2010	**16.5**	16.0	0.0	67.5	
	9:20	11/2/2010	0.0	5.4	9.3	85.3	
	8:35	11/15/2010	4.4	9.0	3.8	82.8	
	9:30	12/10/2010	0.0	11.2	0.1	88.7	
	8:35	12/23/2010	0.0	1.2	17.9	80.9	
	9:05	1/10/2011	0.0	2.8	14.4	82.8	
	8:15	1/25/2011	0.2	5.0	8.1	86.7	
	11:35	2/11/2011	0.1	4.0	9.4	86.6	
	9:20	2/22/2011	0.2	1.0	18.1	80.8	
	8:55	3/7/2011	0.1	1.4	13.1	85.4	
	11:30	3/24/2011	0.3	0.2	20.9	78.6	
	8:35	4/6/2011	0.1	0.2	20.1	79.6	
	10:30	4/25/2011	0.1	0.2	20.7	79.0	
	8:35	5/9/2011	0.1	3.2	11.2	85.6	
	8:50	5/23/2011	0.0	5.4	3.8	90.8	
	10:35	6/6/2011	**6.4**	7.0	4.4	82.2	
	8:50	6/15/2011	**15.5**	9.6	0.3	74.6	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:00	7/5/2011	**15.0**	6.6	8.7	69.7	
	6:38	7/13/2011	**12.0**	13.0	0.4	74.6	
	8:00	7/26/2011	**13.0**	12.0	0.5	74.5	
	8:05	8/8/2011	**12.5**	12.6	0.3	74.6	
	7:35	8/23/2011	**25.0**	16.0	0.3	58.7	
	15:30	9/9/2011	**26.0**	18.2	0.2	55.6	
	15:58	9/15/2011	**11.5**	15.8	3.1	69.6	
	8:20	9/21/2011	**18.5**	18.2	0.4	62.9	
	9:25	9/21/2011	**13.5**	17.4	1.5	67.6	
	9:17	9/22/2011	**6.0**	10.8	8.1	75.1	
	10:04	9/22/2011	**7.0**	17.0	1.7	74.3	
	10:50	9/22/2011	3.8	9.6	10.2	76.5	
	10:35	10/3/2011	4.7	9.0	9.1	77.2	
	13:40	10/24/2011	1.9	15.0	2.2	80.9	
	10:45	10/26/2011	1.5	6.0	13.5	79.0	
	10:30	11/7/2011	0.3	4.0	14.8	81.0	
	9:08	11/14/2011	4.7	7.6	1.9	85.8	
	9:05	12/12/2011	0.1	1.6	15.3	83.1	
	10:05	12/27/2011	3.6	4.4	1.5	90.5	
	8:30	1/10/2012	4.6	4.4	0.1	91.0	
	10:15	1/25/2012	0.1	4.6	4.9	90.4	
	9:00	2/20/2012	**5.5**	3.6	3.1	87.8	
	8:40	3/8/2012	1.6	0.6	17.2	80.7	
	10:10	4/2/2012	0.1	1.2	18.4	80.3	
	8:50	4/16/2012	0.0	0.4	19.7	79.9	
	9:04	4/30/2012	0.4	5.6	1.4	92.7	
	9:05	5/14/2012	0.0	6.0	3.2	90.8	
	8:55	5/29/2012	2.1	10.4	1.1	86.5	
GP-1	7:35	6/11/2012	0.4	8.4	6.8	84.4	
	9:23	6/25/2012	4.6	10.4	4.2	80.8	
	8:50	7/9/2012	**10.0**	14.0	0.8	75.2	
	8:15	7/23/2012	2.6	9.2	7.8	80.5	
	10:15	7/25/2012	2.1	6.8	10.4	80.8	
	8:45	8/6/2012	3.3	10.4	7.3	79.0	
	9:05	8/21/2012	0.6	6.2	11.5	81.8	
	9:04	9/4/2012	3.3	9.2	8.4	79.1	
	8:45	10/1/2012	0.0	3.8	13.9	82.3	
	8:21	10/15/2012	0.0	3.8	14.0	82.2	
	7:20	12/6/2012	0.0	6.0	13.8	80.2	
	8:50	12/17/2012	0.0	3.2	14.4	82.4	
	8:35	12/31/2012	0.0	3.2	16.0	80.8	
	8:30	1/9/2013	0.0	6.2	12.2	81.6	
	10:15	1/15/2013	0.0	3.8	15.7	80.5	
	8:50	1/28/2013	0.0	3.4	14.7	81.9	
	10:35	2/11/2013	0.0	1.6	16.2	82.2	
	9:05	2/25/2013	0.0	1.4	17.7	80.9	
	7:18	3/8/2013	0.0	0.6	19.0	80.4	
	8:35	3/22/2013	0.0	1.4	17.8	80.8	
	13:35	4/8/2013	0.0	0.2	20.9	78.9	
	15:05	4/22/2013	0.0	0.0	20.0	80.0	
	9:30	4/29/2013	0.0	0.2	20.9	78.9	
	8:20	5/13/2013	0.0	1.2	18.8	80.0	
	13:05	5/28/2013	0.0	2.0	17.9	80.1	
	8:35	6/7/2013	0.0	4.8	11.7	83.5	
	8:05	6/21/2013	0.0	6.0	10.7	83.3	
	8:35	7/5/2013	0.0	3.4	9.2	87.4	
	7:40	7/22/2013	0.1	5.8	11.7	82.5	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:00	3/22/2006	**29.5**	27.8	0.5	42.2	pre-startup
	14:40	3/23/2006	**29.1**	24.5	0.8	45.6	
	14:20	3/30/2006	**11.5**	13.1	10.7	64.7	
	14:05	4/6/2006	**10.3**	12.6	10.2	66.9	
	14:15	4/11/2006	**5.4**	5.7	15.3	73.6	
	11:56	4/14/2006	**6.8**	12.1	8.7	72.4	
	11:00	4/17/2006	0.0	0.0	20.7	79.3	
	9:55	4/28/2006	0.0	0.1	20.7	79.2	
	14:15	5/4/2006	1.5	18.9	3.0	76.6	
	11:15	5/22/2006	0.0	0.0	20.5	79.5	
	12:49	6/2/2006	1.0	0.1	19.7	79.2	
	9:00	6/9/2006	1.9	0.5	20.4	77.2	
	13:20	6/14/2006	4.8	1.0	20.1	74.1	
	10:00	6/22/2006	0.6	0.2	20.4	78.8	
	12:34	7/5/2006	0.7	1.5	19.9	77.9	
	11:48	7/10/2006	0.7	0.8	19.6	78.9	
	11:15	7/17/2006	0.7	1.2	18.8	79.3	
	13:05	7/28/2006	0.5	0.7	19.1	79.7	
	10:50	8/8/2006	0.6	0.2	19.6	79.6	
	7:53	8/16/2006	0.1	0.0	19.9	80.0	
	7:40	8/21/2006	0.5	0.1	20.4	79.0	
	13:40	8/28/2006	0.0	0.0	20.2	79.8	
	10:50	9/13/2006	0.1	0.1	20.2	79.6	
	10:10	9/25/2006	0.6	9.5	13.7	76.2	
GP-2	7:45	10/10/2006	0.7	1.8	19.8	77.7	
	7:46	10/23/2006	0.7	3.9	18.0	77.4	
	13:24	11/2/2006	0.5	0.3	17.6	81.6	
	12:38	11/14/2006	0.1	5.2	15.7	79.1	
	10:51	11/27/2006	0.1	0.6	20.0	79.3	
	13:55	12/26/2006	0.3	6.2	14.5	79.1	
	12:25	1/27/2007	0.3	1.6	19.1	79.1	
	12:15	2/24/2007	0.3	3.6	16.5	79.7	
	16:05	3/28/2007	0.2	2.4	18.0	79.5	
	11:07	5/1/2007	0.0	3.8	15.2	81.0	
	12:17	5/30/2007	0.0	1.2	18.5	80.3	
	13:20	6/19/2007	0.1	7.6	11.5	80.9	
	11:20	8/13/2007	0.0	0.4	20.5	79.1	
	10:54	10/18/2007	0.1	1.0	18.8	80.1	
	13:10	1/23/2008	0.4	1.2	20.2	78.2	
	7:45	6/12/2008	0.0	2.2	18.6	79.2	
	11:05	7/21/2008	0.0	0.6	20.4	79.0	
	12:34	10/3/2008	0.0	0.6	20.9	78.5	
	11:40	10/13/2008	0.0	0.4	20.9	78.7	
	11:15	1/27/2009	0.3	1.8	20.3	77.6	
	10:46	4/9/2009	0.0	0.0	20.1	79.9	
	10:40	7/22/2009	0.0	0.8	18.9	80.3	
	10:05	10/28/2009	0.0	2.2	18.1	79.7	
	10:15	1/26/2010	0.3	3.0	17.1	79.7	
	11:39	5/25/2010	0.0	0.0	19.1	80.9	
	10:10	9/28/2010	0.0	2.4	17.1	80.5	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-2	11:10	1/25/2011	0.2	0.4	20.0	79.4	
	7:45	4/25/2011	0.2	3.0	17.4	79.4	
	7:37	7/13/2011	0.0	0.8	19.9	79.3	
	7:45	10/26/2011	0.0	1.0	20.0	79.0	
	9:26	1/25/2012	0.1	3.6	17.0	79.4	
	9:35	4/2/2012	0.1	0.4	20.9	78.7	
	11:00	7/25/2012	0.0	3.4	16.3	80.3	
	11:30	10/15/2012	0.0	1.8	17.7	80.5	
	10:10	1/15/2013	0.0	3.2	17.5	79.3	
	7:45	4/29/2013	0.0	1.0	20.4	78.6	
	9:35	7/22/2013	0.0	2.4	18.0	79.6	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	7:49	3/22/2006	1.4	1.9	19.9	76.8	pre-startup
	12:57	3/23/2006	0.6	1.2	19.3	78.9	
	15:20	3/23/2006	2.2	4.5	16.4	76.9	
	14:35	3/30/2006	2.1	7.6	11.5	78.8	
	14:30	4/6/2006	1.6	11.8	7.2	79.4	
	14:40	4/11/2006	0.4	4.0	15.6	80.0	
	12:11	4/14/2006	0.0	1.5	18.1	80.4	
	11:20	4/17/2006	1.4	0.2	20.7	77.7	
	10:50	4/28/2006	0.4	0.1	20.7	78.8	
	15:00	5/4/2006	0.0	0.0	20.4	79.6	
	11:38	5/22/2006	0.2	0.0	2.5	97.3	
	13:18	6/2/2006	0.2	0.0	20.2	79.6	
	9:09	6/9/2006	0.8	0.1	20.5	78.6	
	13:45	6/14/2006	1.1	0.1	20.4	78.4	
	11:25	6/22/2006	0.7	0.0	20.1	79.2	
GP-3	11:19	7/5/2006	0.6	0.0	20.0	79.4	
	10:37	7/10/2006	0.6	0.0	19.6	79.8	
	0:57	7/17/2006	0.1	0.0	19.0	80.9	
	12:25	7/28/2006	0.6	0.0	19.7	79.7	
	11:32	8/8/2006	0.6	0.0	19.6	79.8	
	7:35	8/16/2006	0.5	0.0	20.0	79.5	
	7:24	8/21/2006	0.0	0.0	20.3	79.7	
	13:26	8/28/2006	0.1	0.0	19.9	80.0	
	10:31	9/13/2006	0.0	0.3	20.3	79.4	
	9:56	9/25/2006	0.6	3.0	17.6	78.8	
	7:20	10/10/2006	0.5	0.9	19.8	78.8	
	7:36	10/23/2006	0.1	0.0	20.6	79.3	
	13:10	11/2/2006	0.5	0.4	20.8	78.3	
	13:00	11/14/2006	0.1	4.2	16.1	79.6	
	10:39	11/27/2006	0.1	0.4	19.4	80.2	
	13:58	12/26/2006	0.3	0.2	20.0	79.6	
	12:00	1/27/2007	0.1	0.0	19.6	80.4	
	12:30	2/24/2007	0.3	4.6	14.7	80.4	
	15:32	3/28/2007	0.1	0.0	19.9	80.0	
	10:57	5/1/2007	0.1	2.6	16.5	80.8	
	12:33	5/30/2007	0.0	0.4	18.9	80.7	
	13:30	6/19/2007	0.0	0.0	20.9	79.1	
	11:00	8/13/2007	0.0	0.0	20.9	79.1	
	10:00	10/18/2007	0.1	4.0	15.7	80.2	
	13:55	1/23/2008	0.4	0.8	20.6	78.3	
	7:05	6/12/2008	0.0	0.0	20.9	79.1	
	10:30	7/21/2008	0.0	0.0	20.9	79.1	
	12:16	10/3/2008	0.0	0.0	20.9	79.1	
	10:00	10/13/2008	0.0	0.0	20.9	79.1	
	7:50	1/27/2009	0.2	3.6	17.4	78.8	
	11:10	4/9/2009	0.0	0.0	20.2	79.8	
	8:40	7/22/2009	0.0	0.4	19.1	80.5	
	9:24	10/28/2009	0.0	0.2	19.5	80.3	
	8:09	1/26/2010	0.2	0.0	20.4	79.4	
	9:15	5/25/2010	0.0	0.0	19.1	80.9	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-3	8:50	9/28/2010	0.0	1.8	17.2	81.0	
	8:45	1/25/2011	0.2	0.2	19.8	79.8	
	8:25	4/25/2011	0.2	4.6	14.9	80.3	
	8:15	7/13/2011	0.0	0.0	20.1	79.9	
	11:12	10/26/2011	0.0	0.2	20.4	79.4	
	11:30	1/25/2012	0.1	4.2	15.4	80.3	
	8:50	4/2/2012	0.0	0.0	20.9	79.1	
	8:27	7/25/2012	0.0	2.4	15.4	82.2	
	10:59	10/15/2012	0.0	0.0	19.0	81.0	
	11:00	1/15/2013	0.0	3.8	15.3	80.9	
	13:00	4/29/2013	0.0	1.2	19.3	79.5	
	9:12	7/22/2013	0.0	2.0	18.3	79.7	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:11	3/22/2006	0.0	1.4	20.4	78.2	pre-startup
	15:35	3/23/2006	0.0	0.8	19.8	79.4	
	15:40	3/30/2006	0.5	0.8	21.8	76.9	
	14:40	4/6/2006	0.8	1.3	18.9	79.0	
	14:35	4/11/2006	0.2	0.9	19.2	79.7	
	12:18	4/14/2006	0.0	1.3	18.1	80.6	
	11:35	4/17/2006	1.3	0.8	20.4	77.5	
	10:40	4/28/2006	0.0	0.5	20.2	79.3	
	15:10	5/4/2006	1.3	0.6	13.2	84.9	
	11:50	5/22/2006	0.1	0.2	20.4	79.3	
	13:10	6/2/2006	0.2	0.8	19.1	79.9	
	9:12	6/9/2006	3.4	1.2	20.2	75.2	
	14:00	6/14/2006	0.0	0.0	19.9	80.1	
	10:39	6/22/2006	**6.0**	18.8	6.4	68.8	
	11:26	7/5/2006	0.6	0.6	20.0	78.8	
GP-4	10:43	7/10/2006	0.4	3.8	19.9	75.9	
	10:08	7/17/2006	0.9	0.6	19.6	78.9	
	12:34	7/28/2006	0.6	0.4	19.6	79.4	
	9:21	8/8/2006	0.6	0.3	19.7	79.4	
	7:42	8/16/2006	0.5	0.7	19.9	78.9	
	7:28	8/21/2006	0.4	0.5	20.0	79.1	
	13:31	8/28/2006	0.5	0.5	20.1	78.9	
	10:35	9/13/2006	0.7	0.6	20.2	78.5	
	9:59	9/25/2006	0.1	0.2	19.1	80.6	
	7:24	10/10/2006	0.6	0.5	20.3	78.6	
	7:40	10/23/2006	0.4	0.0	20.4	79.2	
	13:17	11/2/2006	0.5	0.2	21.0	78.3	
	13:11	11/14/2006	0.2	1.4	19.0	79.5	
	10:42	11/27/2006	0.1	0.6	19.7	79.7	
	14:04	12/26/2006	0.3	0.8	19.6	79.4	
	12:09	1/27/2007	0.1	0.4	19.6	79.9	
	12:38	2/24/2007	0.4	1.0	19.4	79.3	
	15:40	3/28/2007	0.1	0.2	19.8	79.9	
	10:50	5/1/2007	0.0	1.2	18.2	80.6	
	12:37	5/30/2007	0.0	1.8	17.5	80.7	
	13:40	6/19/2007	0.0	0.8	20.0	79.2	
	11:05	8/13/2007	0.0	0.6	20.6	78.8	
	10:10	10/18/2007	0.1	1.2	17.9	80.8	
	13:25	1/23/2008	0.3	0.4	20.9	78.4	
	7:25	6/12/2008	0.0	0.2	20.9	78.9	
	10:45	7/21/2008	0.0	1.2	19.2	79.6	
	11:18	10/3/2008	0.0	0.0	20.9	79.1	
	10:05	10/13/2008	0.0	1.2	19.7	79.1	
	7:05	1/27/2009	0.1	1.4	20.1	78.5	
	11:15	4/9/2009	0.0	0.6	19.4	80.0	
	10:37	7/22/2009	0.0	0.6	18.9	80.5	
	9:33	10/28/2009	0.0	0.6	19.3	80.1	
	8:14	1/26/2010	0.3	0.2	20.5	79.1	
	8:11	5/25/2010	0.1	0.8	18.5	80.7	
	9:05	9/28/2010	0.0	2.2	16.6	81.2	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-4	7:20	1/25/2011	0.0	0.0	19.6	80.4	
	7:30	4/25/2011	0.2	1.6	18.9	79.3	
	7:18	7/13/2011	0.0	1.0	19.4	79.6	
	11:15	10/26/2011	0.0	0.8	20.4	78.8	
	7:17	1/25/2012	0.1	1.0	19.1	79.8	
	9:15	4/2/2012	0.1	0.0	20.9	79.0	
	7:51	7/25/2012	0.0	1.2	18.2	80.6	
	11:08	10/15/2012	0.0	0.6	18.7	80.7	
	11:10	1/15/2013	0.0	2.4	18.4	79.2	
	8:06	4/29/2013	0.0	2.2	18.7	79.1	
	9:20	7/22/2013	0.0	2.2	17.6	80.2	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:13	3/22/2006	0.0	4.4	17.6	78.0	pre-startup
	14:15	3/23/2006	0.0	4.2	17.6	78.2	
	14:05	3/30/2006	1.2	2.5	18.8	77.5	
	13:40	4/6/2006	1.1	3.0	17.9	78.0	
	13:45	4/11/2006	0.7	2.7	17.5	79.1	
	12:50	4/14/2006	0.1	3.5	15.4	81.0	
	10:30	4/17/2006	0.0	3.6	16.2	80.2	
	10:35	4/28/2006	2.2	7.0	13.0	77.8	
	10:40	5/22/2006	1.5	8.5	11.2	78.8	
	12:25	6/2/2006	0.1	7.2	9.4	83.3	
	8:45	6/9/2006	0.1	0.3	10.5	89.1	
	12:18	6/14/2006	0.1	0.0	9.1	90.8	
	11:18	6/22/2006	0.7	10.7	10.5	78.1	
	11:51	7/5/2006	0.6	11.9	11.1	76.4	
	11:17	7/10/2006	0.7	12.0	10.1	77.2	
GP-5	10:22	7/17/2006	0.8	11.9	11.1	76.2	
	8:24	7/28/2006	0.6	10.1	11.5	77.8	
	10:16	8/8/2006	0.6	11.8	10.1	77.5	
	8:35	8/16/2006	0.8	10.0	10.5	78.7	
	8:02	8/21/2006	0.5	0.8	10.9	87.8	
	13:54	8/28/2006	0.6	11.3	13.3	74.8	
	11:07	9/13/2006	0.1	0.0	13.4	86.5	
	10:26	9/25/2006	0.0	0.0	13.4	86.6	
	8:52	10/10/2006	0.7	8.9	14.4	76.0	
	8:00	10/23/2006	0.3	1.4	15.5	82.8	
	14:37	11/2/2006	0.3	7.2	14.0	78.5	
	13:25	11/14/2006	0.2	6.0	14.9	78.9	
	11:10	11/27/2006	0.2	5.2	15.7	79.0	
	12:35	12/26/2006	0.1	4.8	15.7	79.5	
	13:09	1/27/2007	0.4	5.4	15.8	78.4	
	10:55	2/24/2007	0.4	4.2	17.3	78.2	
	17:30	3/28/2007	0.3	3.4	16.6	79.8	
	10:22	5/1/2007	0.1	3.4	14.0	82.5	
	12:40	5/30/2007	0.0	6.4	9.9	83.7	
	16:25	6/19/2007	0.0	7.4	12.1	80.5	
	11:39	8/13/2007	0.0	8.4	11.8	79.8	
	10:20	10/18/2007	0.1	9.6	9.4	80.9	
	13:12	1/23/2008	0.3	5.6	15.7	78.4	
	9:00	6/12/2008	0.0	6.0	9.7	84.3	
	12:05	7/21/2008	0.0	10.6	7.7	81.7	
	11:55	10/3/2008	0.0	8.2	12.7	79.1	
	11:08	10/13/2008	0.0	6.6	14.1	79.3	
	7:10	1/27/2009	0.2	3.2	14.0	82.7	
	11:02	4/9/2009	0.0	2.8	16.8	80.4	
	7:30	7/22/2009	0.0	7.8	13.0	79.2	
	10:20	10/28/2009	0.0	5.6	14.4	80.0	
	9:05	1/26/2010	0.3	4.8	16.2	78.8	
	8:40	5/25/2010	0.0	6.4	9.5	84.1	
	11:00	9/28/2010	0.0	8.8	11.6	79.6	
	8:04	1/25/2011	0.2	4.4	17.0	78.4	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-5	10:35	4/25/2011	0.2	3.0	16.0	80.8	
	6:28	7/13/2011	0.0	9.4	10.7	79.9	
	12:05	10/26/2011	0.0	6.6	15.5	77.9	
	10:25	1/25/2012	0.1	4.8	14.9	80.2	
	10:48	4/2/2012	0.1	3.8	16.3	79.8	
	10:24	7/25/2012	0.0	7.0	11.9	81.1	
	9:00	10/15/2012	0.0	4.8	15.2	80.0	
	11:18	1/15/2013	0.0	4.6	16.9	78.5	
	10:08	4/29/2013	0.0	2.0	16.4	81.6	
	8:15	7/22/2013	0.0	9.2	7.4	83.4	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	7:45	3/22/2006	0.0	6.1	13.9	80.0	pre-startup
	15:55	3/23/2006	0.0	4.9	16.3	78.8	
	15:15	3/30/2006	0.0	1.7	18.3	80.0	
	14:25	4/6/2006	0.0	2.8	16.9	80.3	
	14:30	4/11/2006	0.7	2.8	17.3	79.2	
	12:04	4/14/2006	0.0	3.8	14.6	81.6	
	11:15	4/17/2006	**10.4**	2.3	17.6	69.7	
	10:30	4/28/2006	0.0	2.5	18.3	79.2	
	14:30	5/4/2006	0.0	2.7	17.9	79.4	
	11:30	5/22/2006	3.8	3.9	18.1	74.2	
	13:04	6/2/2006	0.2	2.4	17.2	80.2	
	9:25	6/9/2006	0.1	0.8	17.7	81.4	
	14:10	6/14/2006	1.3	3.3	16.8	78.6	
	9:50	6/22/2006	0.5	3.1	17.3	79.1	
	11:13	7/5/2006	0.5	3.6	17.1	78.8	
GP-6	10:34	7/10/2006	0.6	3.9	16.7	78.8	
	9:58	7/17/2006	0.1	0.6	16.8	82.5	
	12:10	7/28/2006	0.6	3.6	16.5	79.3	
	9:05	8/8/2006	0.6	3.5	17.0	78.9	
	7:29	8/16/2006	0.1	0.0	17.2	82.7	
	7:18	8/21/2006	0.5	3.6	18.1	77.8	
	13:21	8/28/2006	0.0	0.0	18.1	81.9	
	10:20	9/13/2006	0.6	1.0	19.1	79.3	
	11:05	9/25/2006	0.7	2.6	18.5	78.2	
	7:30	10/10/2006	0.8	2.3	19.7	77.2	
	7:34	10/23/2006	0.9	2.4	14.4	82.3	
	13:05	11/2/2006	2.4	0.8	19.7	77.1	
	13:14	11/14/2006	0.2	3.0	17.9	78.9	
	10:35	11/27/2006	0.1	0.6	19.6	79.8	
	14:20	12/26/2006	0.3	3.0	18.0	78.7	
	13:45	1/27/2007	0.2	3.4	17.0	79.5	
	12:45	2/24/2007	0.4	3.0	18.1	78.5	
	16:00	3/28/2007	0.2	2.4	18.0	79.5	
	10:45	5/1/2007	0.1	3.0	16.4	80.5	
	12:23	5/30/2007	0.0	3.2	15.8	81.0	
	16:15	6/19/2007	0.0	2.4	17.8	79.8	
	10:54	8/13/2007	0.1	2.6	18.5	78.9	
	11:14	10/18/2007	0.1	3.4	16.4	80.1	
	11:28	1/23/2008	0.0	3.0	18.0	79.0	
	6:55	6/12/2008	0.0	2.6	17.8	79.6	
	11:00	7/21/2008	0.0	3.0	15.5	81.5	
	12:53	10/3/2008	0.0	3.8	17.7	78.5	
	9:55	10/13/2008	0.0	3.4	18.2	78.4	
	10:05	1/27/2009	0.2	3.0	18.4	78.4	
	10:58	4/9/2009	0.0	3.2	16.6	80.2	
	10:20	7/22/2009	0.0	3.6	17.1	79.3	
	9:10	10/28/2009	0.0	2.6	17.2	80.2	
	8:00	1/26/2010	0.1	3.0	17.4	79.6	
	8:18	5/25/2010	0.0	2.4	16.5	81.1	
	8:42	9/28/2010	0.0	4.2	14.6	81.2	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-6	11:25	1/25/2011	0.2	0.4	20.0	79.4	
	7:00	4/25/2011	0.1	3.0	17.2	79.7	
	7:32	7/13/2011	0.0	2.8	17.1	80.1	
	7:25	10/26/2011	0.0	3.0	18.3	78.7	
	7:08	1/25/2012	0.1	1.2	18.8	79.9	
	8:40	4/2/2012	0.1	0.2	20.9	78.8	
	8:01	7/25/2012	0.0	2.4	17.7	79.9	
	10:38	10/15/2012	0.0	1.8	18.1	80.1	
	8:50	1/15/2013	0.0	2.8	18.0	79.2	
	7:58	4/29/2013	0.0	2.4	17.8	79.8	
	9:46	7/22/2013	0.0	3.0	16.7	80.3	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	7:40	3/22/2006	1.0	7.0	13.0	79.0	pre-startup
	15:50	3/23/2006	0.1	5.0	14.7	80.2	
	15:00	3/30/2006	**7.1**	4.6	18.2	70.1	
	14:20	4/6/2006	0.1	2.3	17.0	80.6	
	14:25	4/11/2006	0.2	3.2	16.3	80.3	
	12:07	4/14/2006	0.1	5.2	11.8	82.9	
	10:15	4/17/2006	**10.5**	1.3	18.5	69.7	
	10:25	4/28/2006	0.0	1.7	19.2	79.1	
	14:25	5/4/2006	1.2	2.2	18.8	77.8	
	11:22	5/22/2006	0.0	1.0	19.5	79.5	
	13:00	6/2/2006	0.2	1.6	18.5	79.7	
	9:20	6/9/2006	3.7	2.4	20.0	73.9	
	14:05	6/14/2006	3.1	2.5	19.2	75.2	
	9:45	6/22/2006	0.5	1.7	19.1	78.7	
	11:10	7/5/2006	0.5	1.5	19.3	78.7	
GP-7	10:30	7/10/2006	0.0	0.0	18.6	81.4	
	9:55	7/17/2006	0.1	0.0	18.5	81.4	
	12:05	7/28/2006	0.0	3.7	18.5	77.8	
	9:00	8/8/2006	0.6	1.3	19.0	79.1	
	7:25	8/16/2006	0.5	1.5	19.2	78.8	
	7:16	8/21/2006	0.5	1.4	19.8	78.3	
	13:19	8/28/2006	0.4	1.2	19.5	78.9	
	10:19	9/13/2006	0.6	1.3	19.9	78.2	
	11:03	9/25/2006	1.8	2.2	17.7	78.3	
	7:28	10/10/2006	0.7	1.4	19.5	78.4	
	7:32	10/23/2006	3.0	2.8	19.0	75.2	
	13:00	11/2/2006	0.5	1.6	19.8	78.1	
	13:18	11/14/2006	0.2	3.2	17.2	79.4	
	10:30	11/27/2006	0.0	1.2	19.0	79.8	
	14:15	12/26/2006	0.3	2.6	18.0	79.1	
	13:40	1/27/2007	0.1	3.4	16.7	79.9	
	12:40	2/24/2007	0.4	3.2	17.2	79.2	
	15:55	3/28/2007	0.1	1.2	18.9	79.8	
	10:43	5/1/2007	0.1	3.6	15.1	81.2	
	12:26	5/30/2007	0.0	3.6	15.6	80.8	
	16:20	6/19/2007	0.0	2.6	17.5	79.9	
	10:50	8/13/2007	0.1	1.4	19.3	79.3	
	11:10	10/18/2007	0.1	3.6	15.5	80.8	
	11:24	1/23/2008	0.0	3.2	17.6	79.2	
	10:48	6/12/2008	0.0	1.4	18.4	80.2	
	10:55	7/21/2008	0.0	2.6	17.3	80.1	
	12:50	10/3/2008	0.0	1.8	19.6	78.6	
	9:50	10/13/2008	0.1	1.6	19.4	79.0	
	10:00	1/27/2009	0.2	3.0	18.2	78.6	
	10:58	4/9/2009	0.0	3.2	16.6	80.2	
	10:15	7/22/2009	0.0	0.4	19.1	80.5	
	9:05	10/28/2009	0.0	1.4	18.2	80.4	
	7:50	1/26/2010	0.0	0.4	20.0	79.6	
	8:14	5/25/2010	0.0	1.8	17.7	80.5	
	8:35	9/28/2010	0.0	4.0	14.3	81.7	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-7	11:20	1/25/2011	0.2	0.4	20.0	79.4	
	6:55	4/25/2011	0.1	3.2	16.6	80.1	
	7:29	7/13/2011	0.0	1.4	19.1	79.5	
	7:20	10/26/2011	0.0	0.6	19.9	79.5	
	7:05	1/25/2012	0.1	2.0	18.0	79.9	
	8:35	4/2/2012	0.0	2.4	18.3	79.3	
	7:59	7/25/2012	0.0	1.8	17.4	80.8	
	10:30	10/15/2012	0.0	1.6	18.0	80.4	
	8:37	1/15/2013	0.0	3.2	17.1	79.7	
	7:55	4/29/2013	0.0	3.2	16.2	80.6	
	9:52	7/22/2013	0.0	2.6	17.6	79.8	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:03	3/22/2006	0.0	2.4	18.6	79.0	pre-startup
	14:50	3/23/2006	0.0	1.9	18.6	79.5	
	14:55	3/30/2006	3.0	7.2	14.8	75.0	
	14:10	4/6/2006	0.0	7.0	10.9	82.1	
	14:20	4/11/2006	0.0	4.8	13.6	81.6	
	12:25	4/14/2006	0.0	5.4	12.2	82.4	
	11:10	4/17/2006	0.0	0.1	20.7	79.2	
	10:00	4/28/2006	0.0	0.2	20.4	79.4	
	14:20	5/4/2006	0.0	0.2	19.3	80.5	
	11:18	5/22/2006	0.6	0.1	20.4	78.9	
	12:55	6/2/2006	0.2	0.7	19.3	79.8	
	9:03	6/9/2006	2.4	0.6	20.3	76.7	
	13:37	6/14/2006	4.0	1.6	19.6	74.8	
	9:55	6/22/2006	0.5	0.5	19.8	79.2	
	12:27	7/5/2006	1.6	0.9	19.6	77.9	
	11:45	7/10/2006	0.7	1.2	19.2	78.9	
	11:10	7/17/2006	0.6	2.3	17.7	79.4	
	12:45	7/28/2006	0.6	0.8	19.0	79.6	
	10:58	8/8/2006	**17.8**	1.3	19.1	61.8	
	7:47	8/16/2006	0.1	0.2	19.5	80.2	
	7:33	8/21/2006	0.8	1.3	19.6	78.3	
	13:35	8/28/2006	0.0	0.0	19.1	80.9	
	10:47	9/13/2006	0.0	0.0	20.1	79.9	
	10:06	9/25/2006	0.0	0.0	17.5	82.5	
GP-8	7:26	10/10/2006	0.1	0.0	19.3	80.6	
	7:44	10/23/2006	0.7	1.4	19.6	78.3	
	13:20	11/2/2006	3.7	0.3	20.5	75.5	
	13:04	11/14/2006	0.1	4.2	15.1	80.6	
	10:45	11/27/2006	0.1	0.6	19.4	79.9	
	14:09	12/26/2006	0.3	0.8	19.2	79.7	
	12:15	1/27/2007	0.2	0.0	19.7	80.1	
	12:20	2/24/2007	0.3	5.2	12.8	81.8	
	15:47	3/28/2007	0.1	0.6	19.6	79.7	
	11:00	5/1/2007	0.0	8.5	7.6	83.9	
	12:20	5/30/2007	0.0	3.4	15.2	81.4	
	13:25	6/19/2007	0.0	0.6	20.2	79.2	
	11:10	8/13/2007	0.0	1.0	19.8	79.2	
	11:05	10/18/2007	0.1	6.0	11.5	82.4	
	11:38	1/23/2008	0.1	1.0	19.2	79.8	
	7:35	6/12/2008	0.0	0.6	20.7	78.7	
	10:50	7/21/2008	0.0	1.0	19.3	79.7	
	12:45	10/3/2008	0.0	0.4	20.9	78.7	
	10:10	10/13/2008	0.0	1.4	19.4	79.2	
	10:10	1/27/2009	0.3	1.8	19.0	78.9	
	10:51	4/9/2009	0.0	0.4	19.4	80.2	
	10:27	7/22/2009	0.0	0.8	18.8	80.4	
	10:00	10/28/2009	0.0	1.8	17.8	80.4	
	9:30	1/26/2010	0.3	0.4	20.0	79.4	
	8:25	5/25/2010	0.0	1.0	18.4	80.6	
	9:11	9/28/2010	0.0	5.4	12.7	81.9	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-8	11:15	1/25/2011	0.2	0.4	20.0	79.4	
	7:40	4/25/2011	0.2	4.4	14.4	81.0	
	7:23	7/13/2011	0.0	0.8	19.2	80.0	
	7:30	10/26/2011	0.0	0.8	20.4	78.8	
	7:27	1/25/2012	0.1	1.6	18.7	79.6	
	9:25	4/2/2012	0.1	1.0	20.4	78.5	
	11:07	7/25/2012	0.0	3.0	16.0	81.0	
	11:15	10/15/2012	0.0	1.0	18.3	80.7	
	8:59	1/15/2013	0.0	3.2	16.8	80.0	
	7:49	4/29/2013	0.0	3.6	15.3	81.1	
	9:30	7/22/2013	0.0	3.0	16.5	80.5	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	8:58	3/22/2006	0.0	4.5	15.4	80.1	pre-startup
	14:42	3/23/2006	0.0	4.3	15.5	80.2	
	14:50	3/30/2006	0.0	1.6	18.7	79.7	
	14:15	4/6/2006	0.0	2.3	17.1	80.6	
	13:55	4/11/2006	0.0	1.5	18.3	80.2	
	11:54	4/14/2006	0.0	1.9	17.4	80.7	
	10:50	4/17/2006	0.0	3.0	16.5	80.5	
	9:50	4/28/2006	0.0	3.6	15.0	81.4	
	14:00	5/4/2006	0.0	3.4	15.4	81.2	
	11:04	5/22/2006	0.0	1.3	19.0	79.7	
	12:45	6/2/2006	0.1	1.8	17.6	80.5	
	8:55	6/9/2006	0.7	0.9	19.6	78.8	
	13:15	6/14/2006	0.0	0.0	17.7	82.3	
	10:05	6/22/2006	0.6	0.8	19.9	78.7	
	12:38	7/5/2006	0.6	5.3	14.9	79.2	
	11:50	7/10/2006	0.6	5.5	14.6	79.3	
	11:19	7/17/2006	0.6	1.4	19.4	78.6	
	13:09	7/28/2006	0.6	1.0	19.2	79.2	
	11:11	8/8/2006	0.6	4.7	14.7	80.0	
	7:58	8/16/2006	0.1	0.2	16.4	83.3	
	7:44	8/21/2006	0.4	3.5	17.3	78.8	
	13:42	8/28/2006	0.0	0.0	17.7	82.3	
	10:53	9/13/2006	0.6	2.4	18.6	78.4	
	10:12	9/25/2006	0.7	5.5	16.0	77.8	
GP-10	7:48	10/10/2006	0.7	5.3	19.2	74.8	
	7:48	10/23/2006	0.6	5.0	17.5	76.9	
	13:31	11/2/2006	0.6	4.3	17.3	77.8	
	12:35	11/14/2006	0.1	4.2	16.3	79.5	
	10:55	11/27/2006	0.1	4.0	16.8	79.1	
	13:50	12/26/2006	0.3	4.2	16.7	78.9	
	12:35	1/27/2007	0.3	4.0	17.2	78.5	
	12:10	2/24/2007	sampling port clogged with ice				
	16:10	3/28/2007	0.2	3.2	17.5	79.2	
	11:10	5/1/2007	0.0	3.8	15.7	80.5	
	12:15	5/30/2007	0.0	3.4	16.0	80.6	
	13:15	6/19/2007	0.1	1.8	18.7	79.5	
	11:24	8/13/2007	0.0	1.0	19.4	79.6	
	10:50	10/18/2007	0.1	2.4	16.9	80.6	
	14:20	1/23/2008	0.4	2.8	18.8	78.0	
	7:55	6/12/2008	0.0	4.0	16.0	80.0	
	11:15	7/21/2008	0.0	4.6	12.6	82.8	
	12:30	10/3/2008	0.0	5.0	16.4	78.6	
	11:50	10/13/2008	0.0	4.6	16.4	79.0	
	11:30	1/27/2009	0.3	3.4	18.2	78.1	
	10:41	4/9/2009	0.0	3.2	16.6	80.2	
	10:47	7/22/2009	0.0	2.8	17.2	80.0	
	10:05	10/28/2009	0.0	2.8	17.5	79.7	
	10:30	1/26/2010	0.3	0.8	19.6	79.3	
	11:50	5/25/2010	0.0	0.4	19.0	80.6	
	10:16	9/28/2010	0.0	1.8	17.7	80.5	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-10	11:00	1/25/2011	0.2	0.4	20.0	79.4	
	7:50	4/25/2011	0.2	3.4	17.0	79.4	
	7:41	7/13/2011	0.0	1.4	19.2	79.4	
	7:50	10/26/2011	0.0	2.4	19.2	78.4	
	9:45	1/25/2012	0.1	4.4	16.2	79.3	
	9:45	4/2/2012	0.1	4.2	17.0	78.7	
	10:52	7/25/2012	0.0	4.0	15.7	80.3	
	10:21	10/15/2012	0.0	3.2	15.0	81.8	
	10:20	1/15/2013	0.0	3.0	17.5	79.5	
	7:43	4/29/2013	0.0	3.0	17.1	79.9	
	8:33	7/22/2013	0.0	4.8	13.5	81.7	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:09	3/22/2006	0.0	3.5	17.6	78.9	pre-startup
	14:27	3/23/2006	0.0	3.4	17.6	79.0	
	14:40	3/30/2006	0.0	0.8	19.7	79.5	
	13:55	4/6/2006	0.0	1.7	18.0	80.3	
	14:00	4/11/2006	0.0	0.7	19.8	79.5	
	11:43	4/14/2006	0.0	0.5	18.9	80.6	
	10:55	4/17/2006	0.3	0.1	20.4	79.2	
	7:30	4/28/2006	0.0	0.7	20.2	79.1	
	14:05	5/4/2006	0.0	0.0	19.9	80.1	
	11:07	5/22/2006	2.6	0.3	20.4	76.7	
	12:34	6/2/2006	1.0	0.1	20.4	78.5	
	9:45	6/9/2006	4.9	0.6	20.2	74.3	
	13:23	6/14/2006	0.8	0.3	20.0	78.9	
	10:10	6/22/2006	0.6	0.0	20.4	79.0	
	12:41	7/5/2006	0.5	1.4	18.5	79.6	
GP-11	11:55	7/10/2006	0.6	2.5	18.6	78.3	
	11:21	7/17/2006	0.5	1.5	18.1	79.9	
	13:15	7/28/2006	0.1	0.2	18.2	81.5	
	10:36	8/8/2006	0.6	2.2	17.8	79.4	
	8:01	8/16/2006	0.1	0.0	17.9	82.0	
	7:46	8/21/2006	0.5	2.4	19.0	78.1	
	13:45	8/28/2006	0.6	2.6	18.6	78.2	
	10:55	9/13/2006	0.1	2.7	19.2	78.0	
	10:14	9/25/2006	0.7	2.1	19.0	78.2	
	8:00	10/10/2006	0.7	2.0	18.5	78.8	
	7:52	10/23/2006	0.7	1.0	20.6	77.7	
	13:34	11/2/2006	0.6	1.5	19.8	78.1	
	12:44	11/14/2006	0.1	2.0	18.4	79.6	
	10:58	11/27/2006	0.1	1.0	19.6	79.3	
	13:40	12/26/2006	0.3	2.0	18.4	79.4	
	12:41	1/27/2007	0.4	2.6	18.2	78.9	
	11:10	2/24/2007	0.4	2.6	18.1	78.9	
	16:14	3/28/2007	0.2	2.6	17.8	79.5	
	11:15	5/1/2007	0.0	3.4	15.9	80.7	
	12:06	5/30/2007	0.0	3.0	16.8	80.2	
	13:05	6/19/2007	0.1	2.8	18.3	78.8	
	11:27	8/13/2007	0.0	2.2	18.8	79.0	
	10:34	10/18/2007	0.1	2.8	17.0	80.1	
	12:10	1/23/2008	0.2	2.4	19.2	78.2	
	8:05	6/12/2008	0.0	2.6	18.0	79.4	
	11:20	7/21/2008	0.0	3.4	16.6	80.0	
	12:23	10/3/2008	0.0	2.0	19.4	78.6	
	12:00	10/13/2008	0.0	2.2	19.1	78.7	
	10:45	1/27/2009	0.3	3.0	18.5	78.2	
	9:50	4/9/2009	0.0	3.4	16.8	79.8	
	10:53	7/22/2009	0.0	2.0	18.1	79.9	
	10:11	10/28/2009	0.0	2.4	17.9	79.7	
	9:15	1/26/2010	0.3	2.6	18.5	78.6	
	8:30	5/25/2010	0.0	3.2	16.5	80.3	
	10:25	9/28/2010	0.0	3.0	16.8	80.2	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-11	10:29	1/25/2011	0.2	3.6	16.6	79.6	
	7:55	4/25/2011	0.2	4.0	17.2	78.6	
	6:47	7/13/2011	0.0	2.8	18.3	78.9	
	10:10	10/26/2011	0.0	3.0	18.5	78.5	
	7:40	1/25/2012	0.1	2.6	18.4	78.9	
	9:55	4/2/2012	0.1	3.6	17.9	78.4	
	10:39	7/25/2012	0.0	1.8	17.9	80.3	
	10:05	10/15/2012	0.0	1.6	18.2	80.2	
	7:40	1/15/2013	0.0	2.2	19.1	78.7	
	7:35	4/29/2013	0.0	2.6	17.4	80.0	
	8:40	7/22/2013	0.0	2.4	18.5	79.1	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:06	3/22/2006	0.0	5.7	13.0	81.3	pre-startup
	14:22	3/23/2006	0.0	5.5	13.2	81.3	
	14:20	3/30/2006	0.0	2.6	17.7	79.7	
	13:50	4/6/2006	0.2	2.1	17.3	80.4	
	13:50	4/11/2006	0.0	2.5	17.1	80.4	
	11:40	4/14/2006	0.0	2.5	15.5	82.0	
	10:45	4/17/2006	1.4	3.7	18.4	76.5	
	12:20	4/28/2006	0.0	2.4	18.0	79.6	
	13:54	5/4/2006	0.0	0.0	17.3	82.7	
	11:00	5/22/2006	1.4	2.7	17.5	78.4	
	12:28	6/2/2006	0.1	1.8	17.4	80.7	
	8:50	6/9/2006	0.9	2.1	19.2	77.8	
	13:10	6/14/2006	0.1	0.0	17.5	82.4	
	10:20	6/22/2006	0.5	2.2	18.2	79.1	
	11:57	7/5/2006	0.6	2.2	18.2	79.0	
	11:22	7/10/2006	0.6	2.7	18.2	78.5	
	10:39	7/17/2006	0.7	2.6	17.5	79.2	
	13:28	7/28/2006	0.6	1.5	18.2	79.7	
	11:22	8/8/2006	0.6	2.6	17.5	79.3	
	8:58	8/16/2006	4.1	18.6	10.0	67.3	
	8:44	8/21/2006	0.6	3.2	18.5	77.7	
	14:26	8/28/2006	0.0	0.0	19.4	80.6	
	11:42	9/13/2006	0.1	0.9	17.9	81.1	
	11:40	9/25/2006	0.8	3.4	16.8	79.0	
	8:47	10/10/2006	0.7	3.8	17.6	77.9	
GP-12	8:50	10/23/2006	0.7	4.1	16.4	78.8	
	14:55	11/2/2006	3.9	14.0	7.7	74.5	
	15:30	11/14/2006	0.3	3.6	16.7	79.5	
	11:05	11/27/2006	0.2	2.4	18.0	79.5	
	13:35	12/26/2006	0.3	3.8	15.7	80.3	
	13:18	1/27/2007	0.4	3.8	15.7	80.1	
	12:00	2/24/2007	0.2	3.2	16.6	80.0	
	17:40	3/28/2007	0.2	3.4	16.4	80.0	
	10:30	5/1/2007	0.1	2.6	16.1	81.3	
	12:02	5/30/2007	0.0	2.8	16.0	81.2	
	16:30	6/19/2007	0.0	2.8	18.1	79.1	
	11:35	8/13/2007	0.0	2.6	18.3	79.1	
	10:26	10/18/2007	0.1	4.0	15.2	80.7	
	13:08	1/23/2008	0.3	7.2	12.2	80.3	
	9:10	6/12/2008	0.0	2.4	17.1	80.5	
	11:45	7/21/2008	0.0	2.6	17.0	80.4	
	12:00	10/3/2008	0.0	4.0	17.6	78.4	
	11:30	10/13/2008	0.0	3.0	18.0	79.0	
	7:15	1/27/2009	0.2	5.6	15.3	78.9	
	9:44	4/9/2009	0.0	3.4	15.8	80.8	
	7:35	7/22/2009	0.0	2.4	17.9	79.7	
	11:15	10/28/2009	0.0	3.2	16.4	80.4	
	9:10	1/26/2010	0.3	5.2	14.9	79.7	
	11:55	5/25/2010	0.0	2.4	16.1	81.5	
	11:10	9/28/2010	0.0	4.0	15.3	80.7	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-12	8:19	1/25/2011	0.3	5.4	14.6	79.7	
	11:00	4/25/2011	0.1	3.2	16.1	80.6	
	6:35	7/13/2011	0.0	2.4	17.5	80.1	
	11:30	10/26/2011	0.0	3.6	17.8	78.6	
	10:35	1/25/2012	0.1	4.6	14.8	80.5	
	11:00	4/2/2012	0.1	3.2	16.1	80.6	
	10:32	7/25/2012	0.0	2.6	16.9	80.5	
	9:08	10/15/2012	0.0	3.2	16.1	80.7	
	11:30	1/15/2013	0.0	5.4	13.6	81.0	
	8:12	4/29/2013	0.0	3.2	16.0	80.8	
	8:24	7/22/2013	0.0	3.2	16.8	80.0	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:24	3/23/2006	2.9	18.1	0.8	78.2	pre-startup
	14:25	3/30/2006	1.0	8.0	10.9	80.1	
	14:00	4/6/2006	0.8	0.2	20.0	79.0	
	14:05	4/11/2006	0.0	0.0	20.3	79.7	
	11:50	4/14/2006	0.0	1.8	17.9	80.3	
	10:58	4/17/2006	2.0	0.3	20.5	77.2	
	7:35	4/28/2006	0.0	0.0	20.7	79.3	
	14:10	5/4/2006	0.0	0.0	20.2	79.8	
	11:10	5/22/2006	0.0	0.0	20.5	79.5	
	12:38	6/2/2006	0.2	0.0	20.4	79.4	
	9:50	6/9/2006	1.1	0.2	20.5	78.2	
	13:48	6/14/2006	4.1	0.3	20.4	75.2	
	10:15	6/22/2006	0.0	0.0	20.4	79.6	
	12:46	7/5/2006	0.6	20.0	20.0	59.4	
	12:00	7/10/2006	0.6	0.0	20.0	79.4	
	11:30	7/17/2006	0.0	0.0	19.8	80.2	
	13:20	7/28/2006	0.6	0.0	19.3	80.1	
	10:41	8/8/2006	0.8	0.0	19.8	79.4	
	8:05	8/16/2006	0.1	0.0	19.6	80.3	
	7:52	8/21/2006	0.9	0.1	20.4	78.6	
	13:47	8/28/2006	0.6	0.1	20.2	79.1	
	10:57	9/13/2006	0.6	0.2	19.8	79.4	
	10:16	9/25/2006	0.6	0.2	20.2	79.0	
	8:03	10/10/2006	0.7	0.2	20.5	78.6	
	7:55	10/23/2006	0.9	0.7	19.8	78.6	
MW-101	15:00	11/2/2006	0.3	0.0	20.8	78.9	
	12:48	11/14/2006	0.1	0.4	19.4	80.1	
	11:00	11/27/2006	0.1	0.2	20.0	79.7	
	13:45	12/26/2006	0.3	0.0	19.3	80.5	
	12:45	1/27/2007	0.4	0.6	20.0	79.1	
	11:14	2/24/2007	0.5	0.6	20.1	78.9	
	16:18	3/28/2007	0.2	0.2	20.1	79.5	
	11:19	5/1/2007	0.0	0.2	18.8	81.0	
	12:08	5/30/2007	0.0	0.2	18.9	80.9	
	13:10	6/19/2007	0.1	0.0	20.9	79.1	
	11:30	8/13/2007	0.0	0.0	20.9	79.1	
	10:37	10/18/2007	0.1	0.0	19.6	80.4	
	12:18	1/23/2008	0.2	5.8	14.4	79.6	
	14:45	5/12/2008	0.0	0.0	19.8	80.2	
	8:15	6/12/2008	0.0	0.0	20.9	79.1	
	11:30	7/21/2008	0.0	0.0	20.9	79.1	
	12:20	10/3/2008	0.0	0.4	20.9	78.7	
	12:05	10/13/2008	0.0	0.0	20.9	79.1	
	10:40	1/27/2009	0.3	4.8	15.7	79.3	
	11:57	4/9/2009	0.0	0.0	19.9	80.1	
	10:57	7/22/2009	0.0	0.0	19.4	80.6	
	10:16	10/28/2009	0.0	0.6	19.6	79.8	
	9:20	1/26/2010	0.3	0.8	19.4	79.5	
	8:34	5/25/2010	0.0	0.0	19.3	80.7	
	10:32	9/28/2010	0.0	1.0	17.7	81.3	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-101	10:45	1/25/2011	0.2	0.4	20.0	79.4	
	8:00	4/25/2011	0.2	0.4	20.9	78.5	
	6:50	7/13/2011	0.0	0.0	20.5	79.5	
	10:15	10/26/2011	0.0	0.6	20.4	79.0	
	7:38	1/25/2012	0.1	0.6	19.5	79.8	
	10:00	4/2/2012	0.1	0.2	20.9	78.8	
	10:43	7/25/2012	0.0	0.0	19.1	80.9	
	10:15	10/15/2012	0.0	0.4	18.9	80.7	
	7:50	1/15/2013	0.0	1.8	18.7	79.5	
	7:39	4/29/2013	0.0	0.4	20.9	78.7	
	8:45	7/22/2013	0.0	0.0	20.9	79.1	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	14:20	3/23/2006	0.0	0.7	20.5	78.8	pre-startup
	14:15	3/30/2006	1.0	0.5	20.6	77.9	
	13:35	4/6/2006	1.0	0.6	20.3	78.1	
	13:43	4/11/2006	0.5	0.3	19.7	79.5	
	11:50	4/14/2006	0.0	0.3	18.6	81.1	
	10:34	4/17/2006	0.8	0.7	20.1	78.4	
	14:00	4/28/2006	0.0	0.0	20.7	79.3	
	13:35	5/4/2006	0.0	0.2	20.5	79.3	
	10:42	5/22/2006	0.2	0.1	2.4	97.3	
	8:48	6/9/2006	0.0	0.0	19.8	80.2	
	12:20	6/14/2006	0.1	0.0	19.5	80.4	
	11:20	6/22/2006	0.7	0.1	19.9	79.3	
	11:53	7/5/2006	0.6	0.0	20.0	79.4	
	11:19	7/10/2006	0.6	4.7	15.1	79.6	
	10:20	7/17/2006	0.9	0.8	19.0	79.3	
	12:40	7/28/2006	0.6	0.6	18.6	80.2	
	10:13	8/8/2006	0.6	1.2	18.5	79.7	
	8:42	8/16/2006	0.1	0.0	17.7	82.2	
	8:00	8/21/2006	0.1	0.0	18.5	81.4	
	13:55	8/28/2006	0.6	1.8	18.8	78.8	
	11:05	9/13/2006	0.1	0.0	19.5	80.4	
	10:25	9/25/2006	0.1	0.0	19.2	80.7	
	8:44	10/10/2006	0.7	1.0	19.6	78.7	
	8:05	10/23/2006	0.8	0.4	19.6	79.2	
	14:42	11/2/2006	0.3	0.0	20.8	78.9	
MW-102	13:30	11/14/2006	0.2	0.2	20.0	79.6	
	11:12	11/27/2006	0.2	0.0	20.2	79.7	
	12:39	12/26/2006	0.1	0.0	20.0	79.9	
	13:10	1/27/2007	0.4	0.2	20.2	79.2	
	11:00	2/24/2007	0.4	0.2	20.6	78.9	
	17:35	3/28/2007	0.2	0.2	20.0	79.6	
	10:24	5/1/2007	0.0	1.4	17.0	81.6	
	11:57	5/30/2007	0.0	1.4	16.7	81.9	
	16:00	6/19/2007	0.0	0.0	20.6	79.4	
	11:42	8/13/2007	0.0	2.8	16.6	80.6	
	10:24	10/18/2007	0.1	4.2	15.0	80.7	
	14:05	1/23/2008	0.4	1.2	20.9	77.5	
	9:05	6/12/2008	0.0	0.6	18.9	80.5	
	12:10	7/21/2008	0.0	1.6	16.4	82.0	
	11:52	10/3/2008	0.0	3.6	16.8	79.6	
	11:03	10/13/2008	0.0	18.7	1.8	79.5	
	11:00	1/27/2009	0.3	1.0	20.8	78.0	
	9:29	4/9/2009	0.0	0.4	19.1	80.5	
	11:35	7/22/2009	0.0	1.8	16.1	82.1	
	10:25	10/28/2009	0.0	2.6	17.4	80.0	
	10:40	1/26/2010	0.3	2.2	18.4	79.1	
	8:44	5/25/2010	0.0	1.4	16.8	81.8	
	11:05	9/28/2010	0.0	4.6	14.1	81.3	
	8:08	1/25/2011	0.2	1.2	19.2	79.4	
	10:10	4/25/2011	0.1	0.2	20.7	79.0	
	6:30	7/13/2011	0.0	1.8	14.2	84.0	

Table 6c. Landfill Gas Field Parameter Monitoring Results of Gas Probes

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-102	12:08	10/26/2011	0.0	2.4	18.4	79.2	
	10:30	1/25/2012	0.1	0.4	17.9	81.6	
	10:37	4/2/2012	0.1	1.4	18.5	80.0	
	10:28	7/25/2012	0.0	3.0	15.0	82.0	
	9:05	10/15/2012	0.0	2.8	16.7	80.5	
	11:21	1/15/2013	0.0	1.6	19.6	78.8	
	10:05	4/29/2013	0.0	0.6	19.2	80.2	
	8:11	7/22/2013	0.0	2.2	14.3	83.5	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	7:49	3/23/2006	0.0	0.2	21.8	78.0	pre-startup
	15:30	3/30/2006	0.0	1.9	18.2	79.9	
	14:35	4/6/2006	0.4	8.0	9.4	82.2	
	14:40	4/11/2006	0.0	6.4	10.8	82.8	
	12:15	4/14/2006	0.0	3.2	15.6	81.2	
	11:30	4/17/2006	0.0	0.0	20.7	79.3	
	10:45	4/28/2006	0.0	0.0	20.5	79.5	
	15:05	5/4/2006	0.4	0.0	13.5	86.1	
	11:42	5/22/2006	0.2	0.0	20.6	79.2	
	13:14	6/2/2006	0.2	0.0	20.1	79.7	
	9:10	6/9/2006	1.1	0.1	20.5	78.3	
	13:30	6/14/2006	0.6	0.3	20.4	78.7	
	11:28	6/22/2006	0.7	0.0	20.2	79.1	
	11:27	7/5/2006	0.6	0.0	20.4	79.0	
	10:40	7/10/2006	0.0	0.0	19.9	80.1	
	10:06	7/17/2006	0.8	0.4	19.4	79.4	
	12:30	7/28/2006	0.6	0.0	19.9	79.5	
	9:17	8/8/2006	0.6	0.0	19.9	79.5	
	7:34	8/16/2006	0.1	0.0	19.9	80.0	
	7:25	8/21/2006	0.5	0.0	20.1	79.4	
	13:29	8/28/2006	0.1	0.0	20.3	79.6	
	10:34	9/13/2006	0.0	0.0	20.4	79.6	
	9:57	9/25/2006	0.0	0.1	19.3	80.6	
	7:22	10/10/2006	0.5	0.2	20.4	78.9	
MW-103	7:38	10/23/2006	0.6	0.0	20.8	78.6	
	13:14	11/2/2006	0.0	0.3	21.0	78.7	
	13:08	11/14/2006	0.2	9.2	11.2	79.5	
	10:40	11/27/2006	0.1	0.0	20.1	79.9	
	14:00	12/26/2006	0.3	0.2	20.1	79.5	
	12:05	1/27/2007	0.1	0.0	19.8	80.2	
	12:34	2/24/2007	0.4	4.2	16.3	79.2	
	15:35	3/28/2007	0.1	0.0	20.0	79.9	
	10:52	5/1/2007	0.1	0.8	18.7	80.4	
	12:40	5/30/2007	0.0	0.4	18.9	80.7	
	13:35	6/19/2007	0.0	0.0	20.9	79.1	
	11:05	8/13/2007	0.0	0.0	20.9	79.1	
	10:05	10/18/2007	0.1	1.2	18.5	80.2	
	13:45	1/23/2008	0.4	0.2	20.9	78.5	
	7:15	6/12/2008	0.0	0.4	20.9	78.7	
	10:40	7/21/2008	0.0	0.0	20.9	79.1	
	11:20	10/3/2008	0.0	0.0	20.9	79.1	
	10:05	10/13/2008	0.0	0.4	20.7	78.9	
	7:00	1/27/2009	0.0	0.0	20.9	79.1	
	11:17	4/9/2009	0.0	0.0	20.0	80.0	
	10:32	7/22/2009	0.0	0.4	19.6	80.0	
	9:27	10/28/2009	0.0	0.0	19.8	80.2	
	8:14	1/26/2010	0.3	2.2	18.0	79.5	
	8:08	5/25/2010	0.0	0.0	19.3	80.7	
	8:57	9/28/2010	0.0	0.0	18.9	81.1	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-103	7:15	1/25/2011	0.0	0.2	19.4	80.4	
	7:25	4/25/2011	0.2	3.0	17.5	79.3	
	7:15	7/13/2011	0.0	0.0	20.5	79.5	
	7:35	10/26/2011	0.0	0.0	20.9	79.1	
	7:14	1/25/2012	0.2	2.6	16.9	80.3	
	9:10	4/2/2012	0.0	0.0	20.9	79.1	
	7:48	7/25/2012	0.0	3.4	15.5	81.1	
	10:50	10/15/2012	0.0	0.2	18.9	80.9	
	11:05	1/15/2013	0.0	3.8	16.5	79.7	
	8:03	4/29/2013	0.0	0.6	20.9	78.5	
	9:15	7/22/2013	0.0	0.6	20.7	78.7	

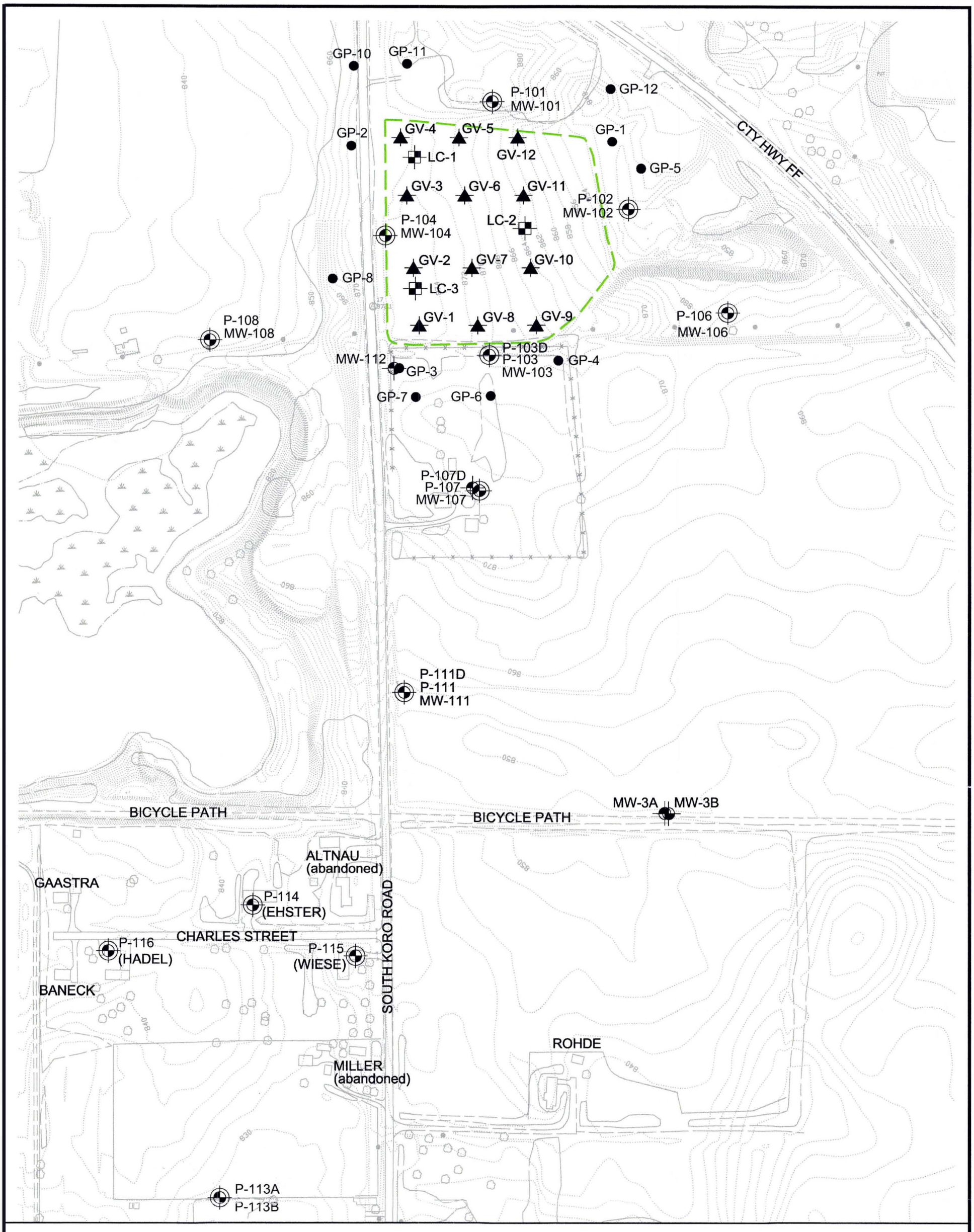
Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	9:29	3/23/2006	**12.8**	18.5	0.8	67.9	pre-startup
	15:45	3/30/2006	0.0	0.0	20.7	79.3	
	13:10	4/6/2006	**6.8**	8.9	10.5	73.8	
	14:50	4/11/2006	4.1	7.1	9.2	79.6	
	11:40	4/17/2006	2.0	0.3	21.0	76.7	
	14:10	4/28/2006	0.0	0.0	20.7	79.3	
	15:40	5/4/2006	0.0	0.0	8.1	91.9	
	10:27	5/22/2006	0.0	0.1	19.9	80.0	
	8:32	6/9/2006	0.0	0.0	19.6	80.4	
	12:45	6/14/2006	3.2	0.8	18.8	77.2	
	10:54	6/22/2006	0.8	0.1	19.7	79.4	
	12:19	7/5/2006	0.6	0.0	20.0	79.4	
	11:40	7/10/2006	0.7	0.6	19.8	78.9	
	11:05	7/17/2006	0.1	0.0	19.6	80.3	
	12:38	7/28/2006	0.6	0.0	19.8	79.6	
	9:49	8/8/2006	0.6	0.0	20.0	79.4	
	9:14	8/16/2006	0.7	0.2	19.4	79.7	
	8:30	8/21/2006	0.1	0.3	18.1	81.5	
	14:16	8/28/2006	0.0	0.0	17.6	82.4	
	11:29	9/13/2006	0.7	0.2	16.8	82.3	
	11:27	9/25/2006	0.0	0.2	19.5	80.3	
	8:27	10/10/2006	0.7	13.1	4.3	81.9	
	8:30	10/23/2006	0.7	0.3	16.7	82.3	
	14:14	11/2/2006	0.3	0.0	20.6	79.1	
	15:06	11/14/2006	0.2	0.6	19.4	79.8	
MW-104	12:04	11/27/2006	0.2	3.0	17.6	79.2	
	13:15	12/26/2006	0.2	0.0	20.0	79.9	
	14:16	1/27/2007	0.1	0.0	19.4	80.5	
	11:35	2/24/2007	0.5	12.8	5.6	81.1	
	16:55	3/28/2007	0.2	0.2	20.0	79.6	
	11:45	5/1/2007	0.0	0.0	18.9	81.1	
	11:48	5/30/2007	0.0	0.0	19.0	81.0	
	15:30	6/19/2007	0.0	0.0	20.9	79.1	
	12:05	8/13/2007	0.0	0.0	20.9	79.1	
	9:50	10/18/2007	0.1	0.0	19.6	80.3	
	13:20	1/23/2008	0.3	0.6	20.6	78.5	
	9:25	6/12/2008	0.0	0.0	20.9	79.1	
	12:30	7/21/2008	0.0	0.0	20.9	79.1	
	11:37	10/3/2008	0.0	0.0	20.9	79.1	
	10:45	10/13/2008	0.0	0.2	20.9	78.9	
	10:50	1/27/2009	0.2	14.6	3.9	81.3	
	11:40	4/9/2009	0.0	1.2	19.2	79.6	
	7:50	7/22/2009	0.0	0.0	19.6	80.4	
	9:48	10/28/2009	0.0	0.0	20.0	80.0	
	8:25	1/26/2010	0.4	0.2	20.4	79.1	
	11:30	5/25/2010	0.0	0.0	19.3	80.7	
	9:25	9/28/2010	0.0	0.2	18.6	81.2	
	7:45	1/25/2011	0.2	0.6	19.6	79.6	
	8:21	4/25/2011	0.2	0.4	20.5	78.9	
	7:47	7/13/2011	0.0	0.0	20.5	79.5	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-104	11:05	10/26/2011	0.0	0.2	20.4	79.4	
	7:10	1/25/2012	0.1	1.0	18.5	80.4	
	9:05	4/2/2012	0.0	0.0	20.9	79.1	
	8:07	7/25/2012	0.0	11.0	3.9	85.1	
	8:35	10/15/2012	0.0	0.0	18.1	81.9	
	9:55	1/15/2013	0.0	0.6	20.9	78.5	
	10:00	4/29/2013	0.0	9.4	6.8	83.8	
	7:55	7/22/2013	0.0	5.0	14.2	80.8	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	2:00	3/28/2006	4.4	4.0	17.8	73.8	
	12:52	5/4/2006	8.6	14.7	7.4	69.3	
	11:15	6/28/2006	5.9	14.5	9.5	70.1	
	11:45	7/5/2006	6.1	18.7	7.2	68.0	
	11:12	7/10/2006	6.7	21.7	5.1	66.5	
	10:31	7/17/2006	6.2	18.6	6.5	68.7	
	14:24	7/28/2006	2.1	19.2	6.1	72.6	
	10:23	8/8/2006	5.9	18.0	6.8	69.3	
	8:30	8/16/2006	6.8	17.3	7.3	68.6	
	8:07	8/21/2006	6.9	18.0	7.6	67.5	
	14:00	8/28/2006	7.1	18.6	7.3	67.0	
	11:13	9/13/2006	15.2	20.0	8.1	56.7	
	11:37	9/25/2006	14.2	24.3	4.8	56.7	
	8:09	10/10/2006	7.4	19.2	8.2	65.2	
	8:13	10/23/2006	12.8	16.3	9.1	61.8	
	9:00	11/2/2006	5.0	14.0	8.2	72.8	
	13:43	11/14/2006	4.4	10.4	10.6	74.6	
	11:19	11/27/2006	3.8	10.2	10.8	75.2	
	12:31	12/26/2006	6.5	14.8	6.9	71.8	
	13:30	1/27/2007	8.0	15.8	6.4	69.8	
	10:45	2/24/2007	6.0	11.6	10.0	72.4	
	7:35	3/5/2007	0.1	0.2	19.8	79.9	
	8:20	3/24/2007	9.0	12.6	9.7	68.7	
	17:10	3/24/2007	8.5	12.6	9.4	69.5	
	17:25	3/26/2007	6.5	11.4	9.8	72.3	
System Exhaust	7:39	3/27/2007	6.5	11.2	10.2	72.1	
	17:25	3/28/2007	6.5	10.0	11.6	71.9	
	8:16	3/29/2007	5.5	8.8	12.3	73.4	
	17:15	3/29/2007	5.0	8.6	12.3	74.1	
	16:09	6/19/2007	12.5	18.2	4.6	64.7	
	11:55	8/13/2007	13.5	20.2	4.1	62.2	
	9:12	10/19/2007	7.5	16.2	5.0	71.3	
	12:50	1/23/2008	8.5	15.6	7.1	68.8	
	8:55	6/12/2008	8.0	15.2	7.3	69.5	
	12:03	7/21/2008	9.5	17.0	5.6	67.9	
	11:15	10/13/2008	6.5	9.8	12.0	71.7	
	7:20	1/27/2009	3.8	6.4	15.7	74.2	
	9:37	4/9/2009	6.5	7.6	13.3	72.6	
	7:40	7/22/2009	5.0	7.8	12.8	74.4	
	10:35	10/28/2009	6.5	7.4	13.9	72.2	
	7:20	1/27/2009	3.8	6.4	15.7	74.2	
	13:15	5/25/2010	5.0	5.2	15.2	74.6	
	10:45	9/28/2010	6.5	5.4	15.3	72.8	
	8:11	1/25/2011	4.4	4.2	17.1	74.3	
	10:40	4/25/2011	24.0	5.5	16.3	54.2	
	8:24	7/13/2011	5.5	3.8	17.4	73.3	
	16:15	9/15/2011	13.0	13.8	9.9	63.3	
	8:22	9/21/2011	34.0	26.8	2.9	36.3	
	9:28	9/21/2011	18.5	18.4	6.5	56.6	
	9:20	9/22/2011	22.5	22.6	3.7	51.2	
	10:05	9/22/2011	17.0	18.0	7.0	58.0	

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	10:51	9/22/2011	18.0	18.8	6.0	57.2	
	10:32	10/3/2011	6.0	8.4	13.9	71.7	
	13:43	10/24/2011	7.5	10.0	12.0	70.5	
	10:50	10/26/2011	7.5	16.4	5.8	70.3	
	10:33	11/7/2011	5.5	7.4	14.6	72.5	
	9:11	11/14/2011	5.0	6.4	14.8	73.8	
	10:20	12/12/2011	7.5	4.8	16.6	71.1	
	10:10	12/27/2011	6.5	5.0	15.8	72.7	
	9:10	1/10/2012	6.0	6.0	14.4	73.6	
	10:17	1/25/2012	3.1	2.4	17.6	76.9	
	9:08	2/20/2012	3.1	3.0	19.3	74.6	
	9:35	3/8/2012	8.0	7.2	14.8	70.0	
	10:15	4/2/2012	4.3	4.4	17.4	73.9	
	8:55	4/16/2012	5.0	4.8	16.4	73.8	
	9:45	4/30/2012	7.5	7.4	13.6	71.5	
	9:08	5/14/2012	7.5	7.6	14.2	70.7	
	9:00	5/29/2012	5.5	5.2	15.7	73.6	
	7:38	6/11/2012	7.0	6.0	15.5	71.5	
	9:35	6/25/2012	4.8	4.6	16.3	74.4	
	8:55	7/9/2012	5.0	5.0	15.6	74.4	
	8:20	7/23/2012	6.0	8.0	13.0	73.0	
	10:17	7/25/2012	7.0	8.9	12.1	72.0	
System	8:49	8/6/2012	3.9	5.6	15.0	75.6	
Exhaust	9:10	8/21/2012	4.7	6.6	14.2	74.6	
	9:07	9/4/2012	4.5	6.8	13.5	75.2	
	8:50	10/1/2012	4.4	7.6	13.0	75.1	
	8:25	10/15/2012	4.8	8.4	12.2	74.7	
	7:25	12/6/2012	8.5	9.8	11.6	70.1	
	9:50	12/17/2012	7.5	7.8	12.4	72.3	
	8:40	12/31/2012	10.5	9.0	12.5	68.0	
	8:30	1/9/2013	12.0	10.6	11.6	65.8	
	9:40	1/16/2013	13.5	9.8	11.3	65.4	
	8:55	1/28/2013	6.5	5.4	17.1	71.0	
	10:25	2/11/2013					have to fix drop tube for readings
	9:10	2/25/2013	1.0	0.8	20.9	77.3	
	7:20	3/8/2013					No readings
	8:40	3/22/2013					No readings
	13:40	4/8/2013	6.0	5.8	15.7	72.5	
	15:10	4/22/2013	6.5	7.2	14.9	71.4	
	9:35	4/29/2013	3.5	4.6	16.3	75.7	
	8:22	5/13/2013	3.0	4.4	16.6	76.0	
	13:08	5/28/2013	3.9	5.6	15.2	75.3	
	8:39	6/7/2013	4.5	6.6	14.3	74.6	
	8:09	6/21/2013	5.5	8.4	12.7	73.4	
	8:40	7/5/2013	4.8	7.8	12.9	74.6	
	7:44	7/22/2013	5.5	8.6	12.4	73.5	

FIGURES



EXPLANATION

P-104 / MW-104	MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION
LC-2	LEACHATE HEAD WELL LOCATION, DESIGNATION
	OUTLINE OF CLOSED LANDFILL
GP-1	GAS PROBE LOCATION AND DESIGNATION
GV-1	GAS VENT LOCATION AND DESIGNATION

N

SCALE

0 500

Feet

BASEMAP FROM FOND DU LAC COUNTY PLANNING DIVISION, SPRING 2000.

FF/NN LANDFILL
RIPON, WISCONSIN

SITE LAYOUT

DATE:	10/3/13
DESIGNED:	HJW
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	117-2202040

TETRA TECH

Figure 1

S:\CAD\RIPON\2202.040\SITE LAYOUT.DWG

CHARTS

Chart 50: P-107
Layer 2 Well

370' Down gradient

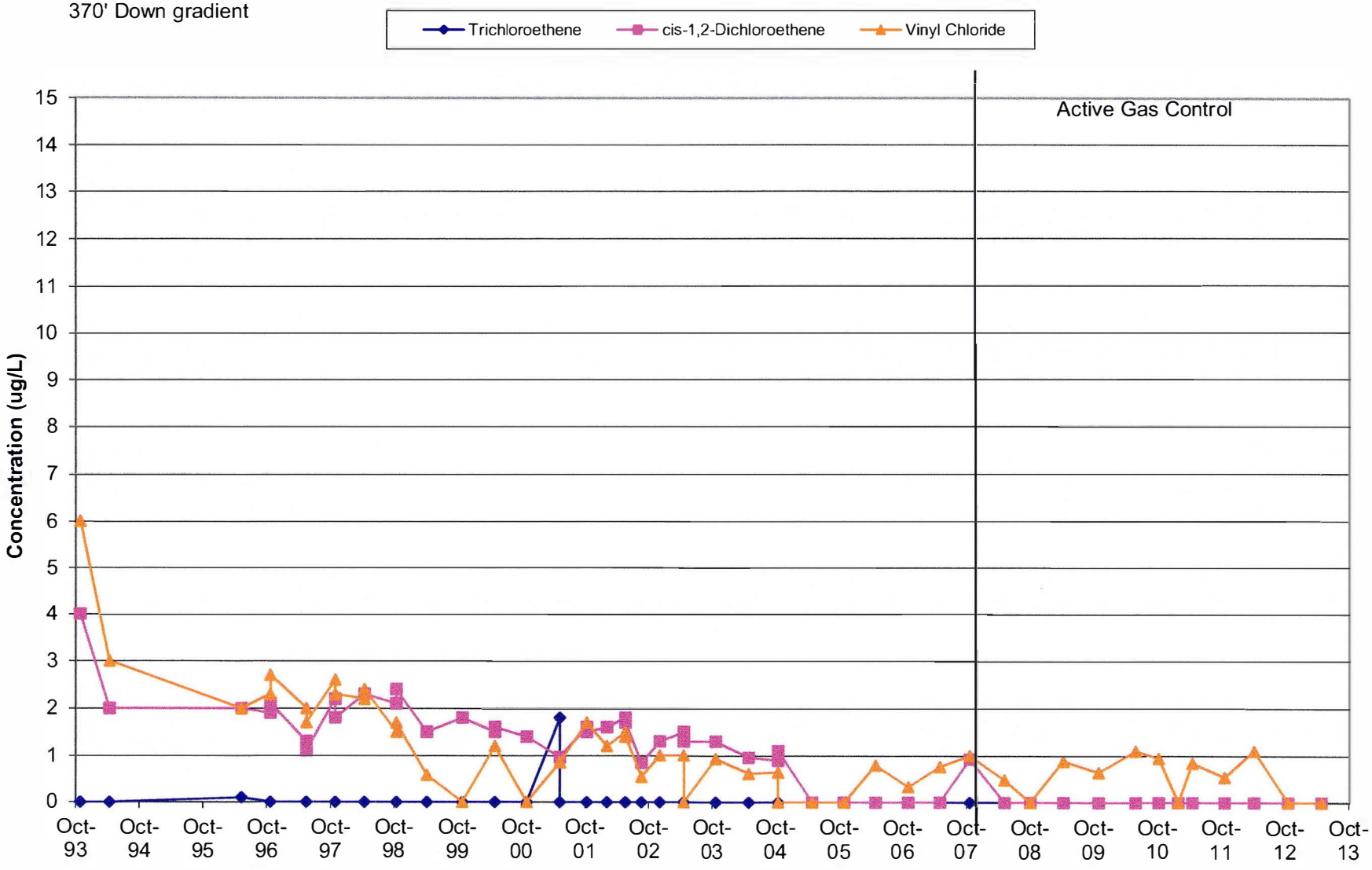


Chart 54: P-111D
Layer 3 Well

900' Down gradient

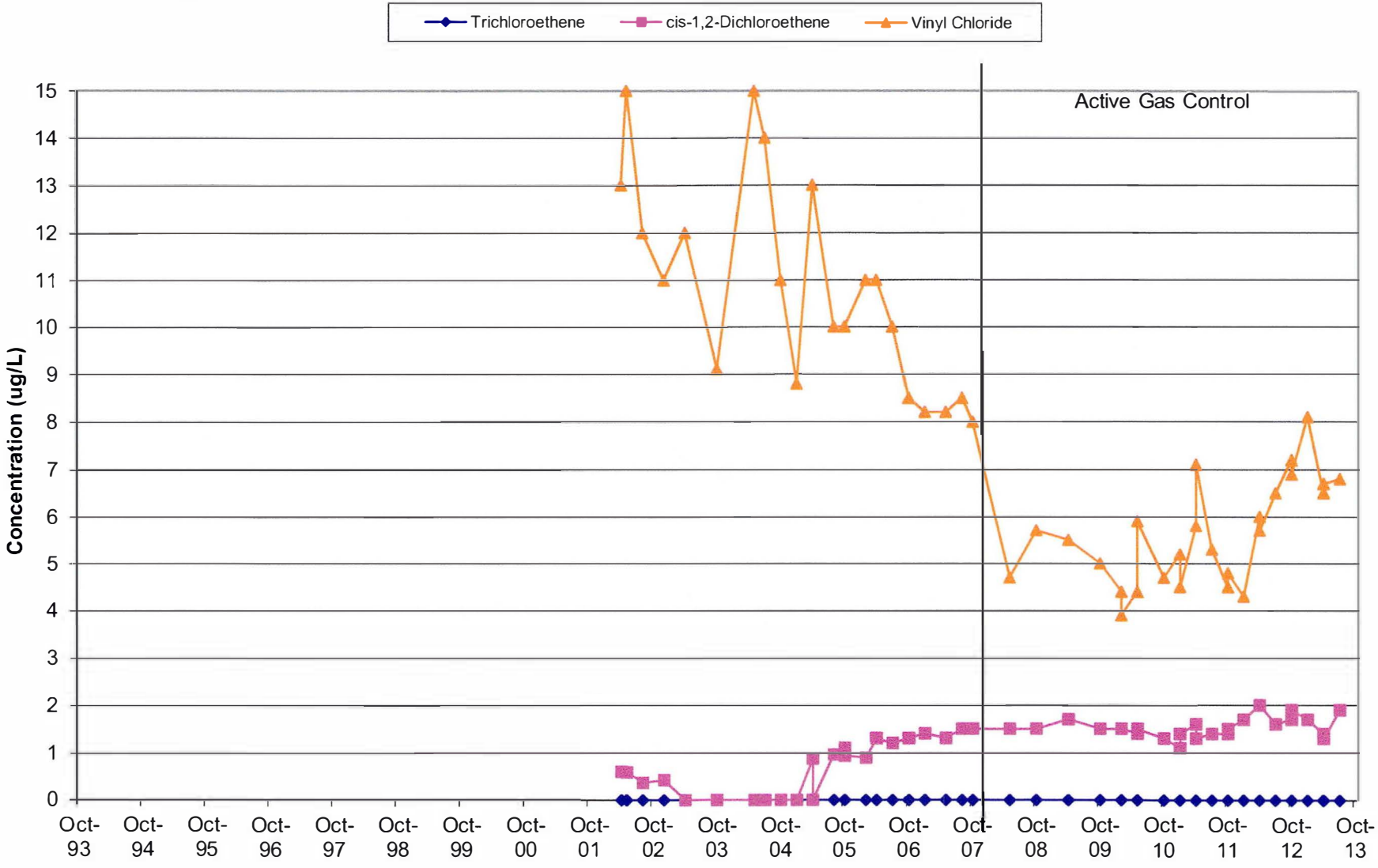


Chart 57: P-114
Layer 3 Well

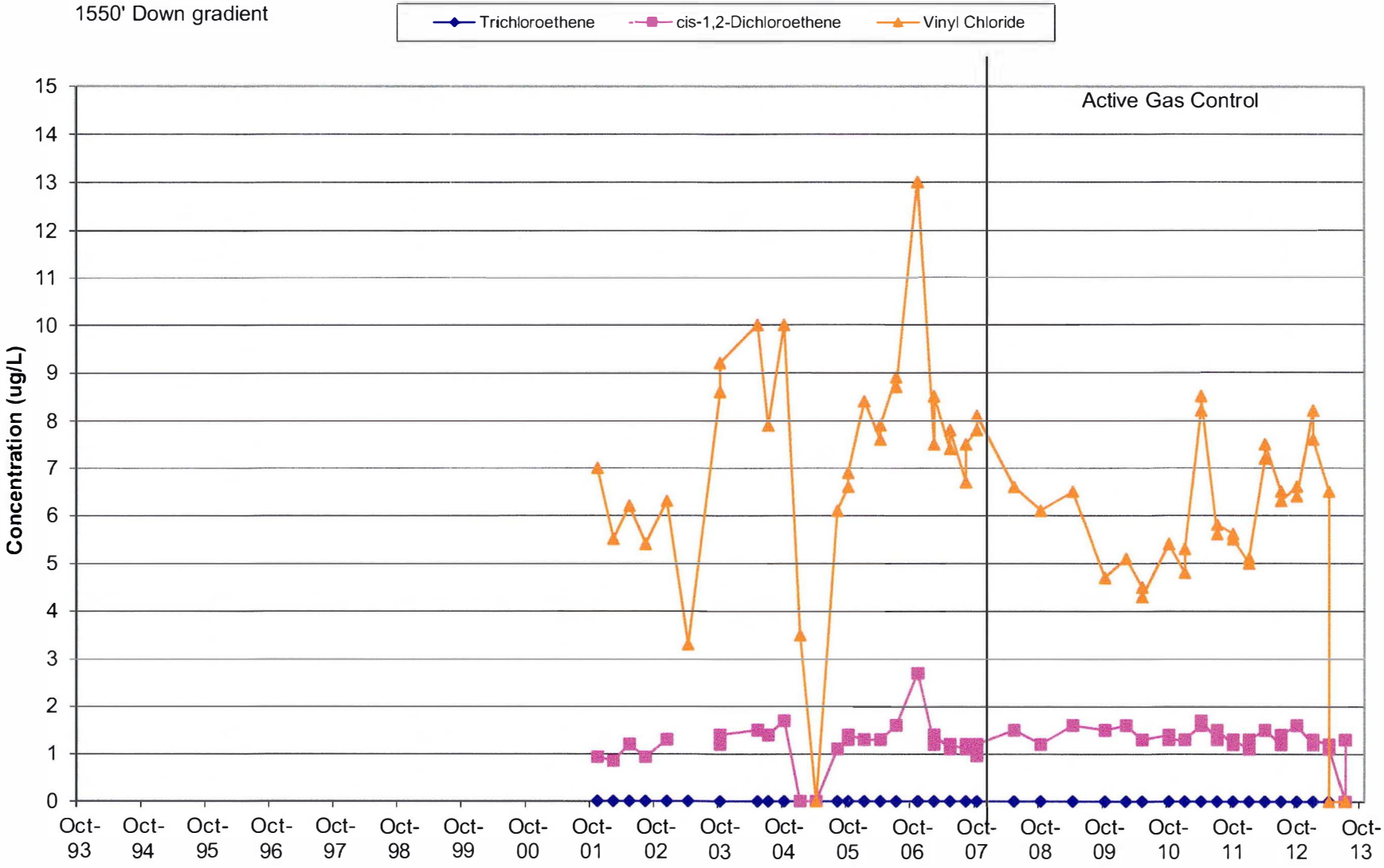


Chart 58: P-115
Layer 3 Well

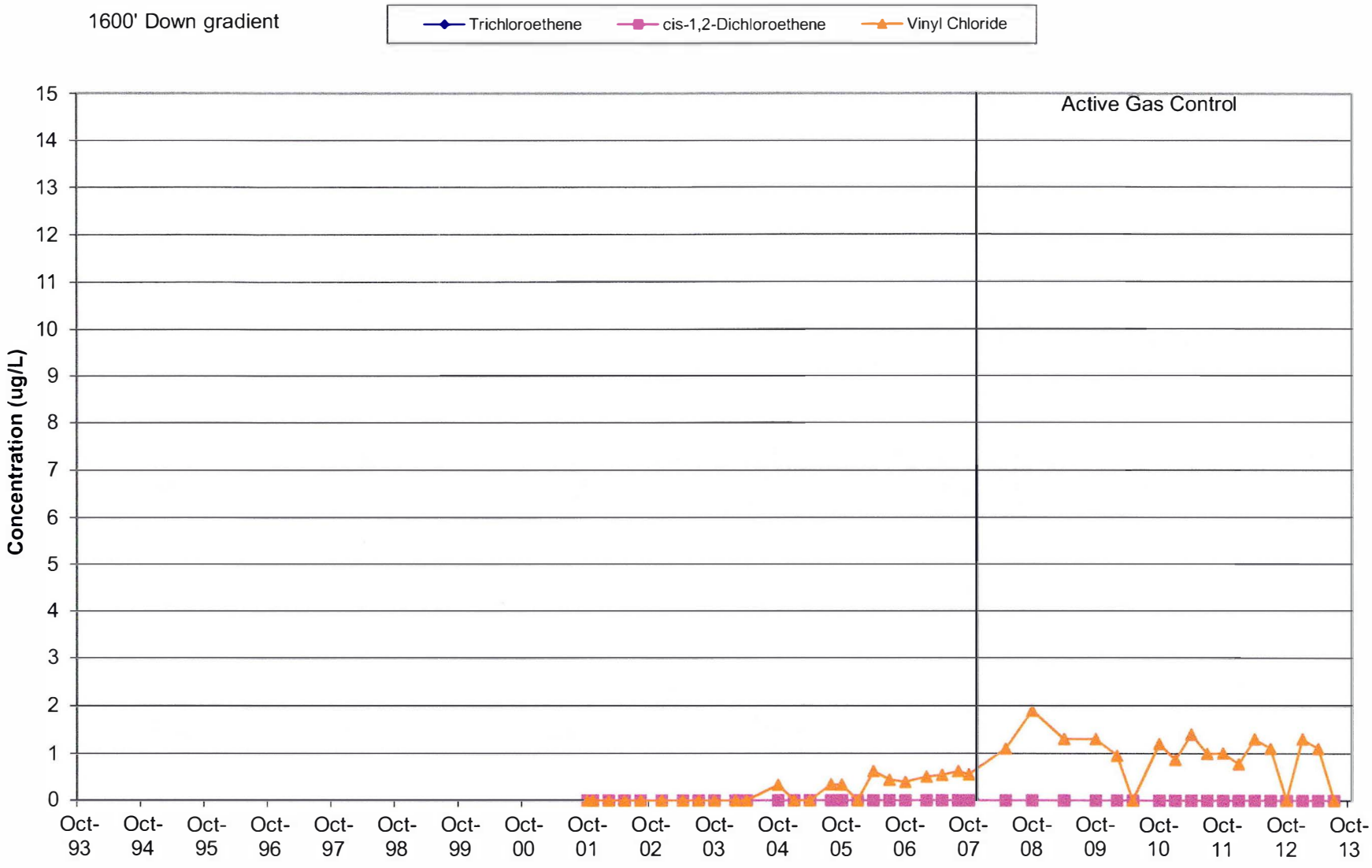
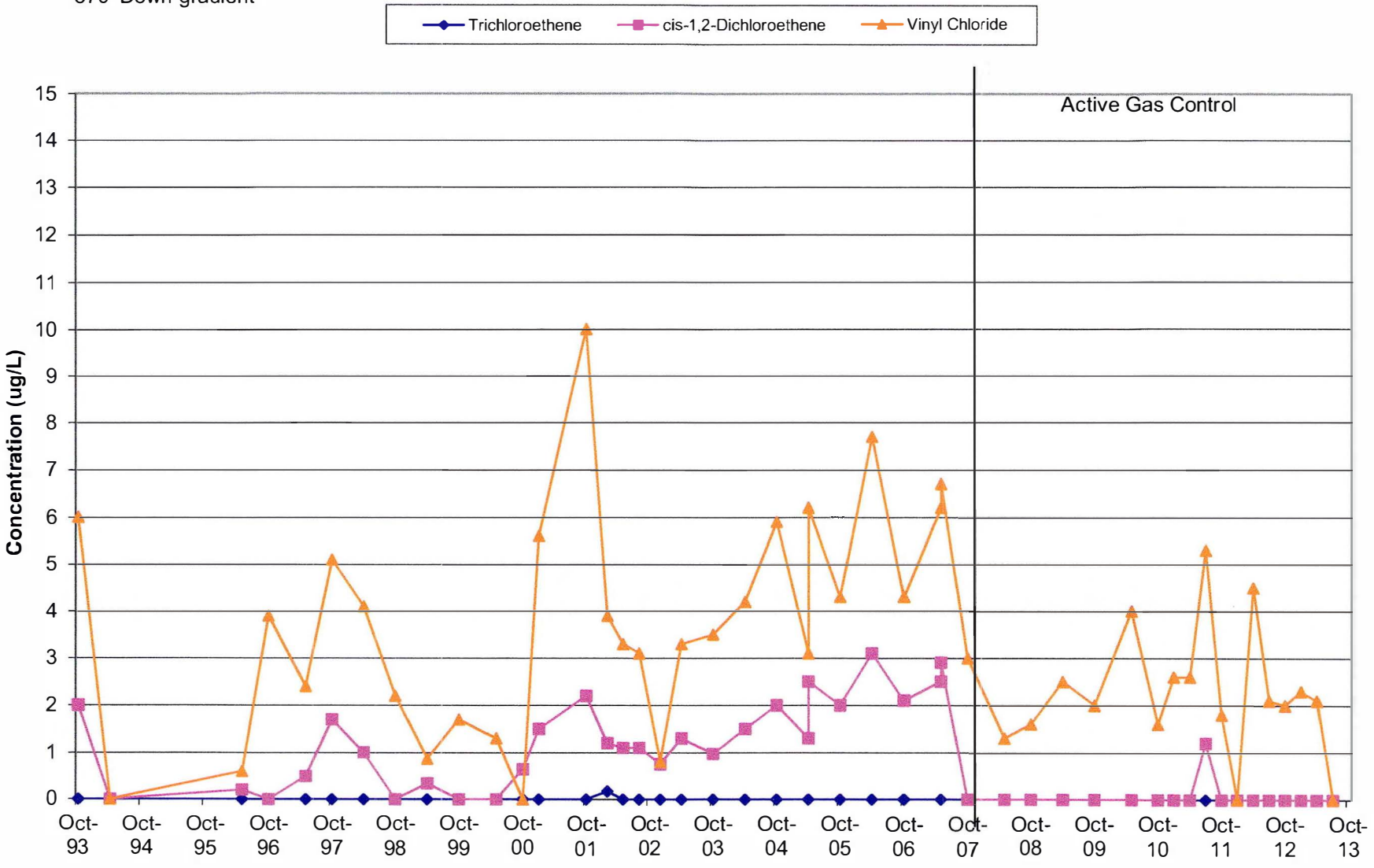


Chart 61: P-107D
Layer 4 Well

370' Down gradient



APPENDICES

APPENDIX B
LABORATORY ANALYTICAL RESULTS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 18, 2013

Mr. Nelson Olavarria
Cooper Industries, LLC
600 Travis Street
Suite 5600
Houston, TX 77002

RE: Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Dear Mr. Olavarria:
Enclosed are the analytical results for sample(s) received by the laboratory on July 03, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette

david.pichette@pacelabs.com
Project Manager

Enclosures

cc: Mr. Michael Noel, Geotrans, Inc.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

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SAMPLE SUMMARY

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3098112001	P-103D	Water	07/02/13 09:45	07/03/13 14:50
3098112002	P-107D	Water	07/02/13 10:25	07/03/13 14:50
3098112003	P-111D	Water	07/02/13 11:10	07/03/13 14:50
3098112004	MW-3A	Water	07/02/13 11:50	07/03/13 14:50
3098112005	MW-3B	Water	07/02/13 12:20	07/03/13 14:50
3098112006	P-113A	Water	07/02/13 13:50	07/03/13 14:50
3098112007	P-113B	Water	07/02/13 14:35	07/03/13 14:50
3098112008	P-116	Water	07/02/13 15:20	07/03/13 14:50
3098112009	P-114	Water	07/02/13 15:50	07/03/13 14:50
3098112010	P-114 DUP	Water	07/02/13 15:55	07/03/13 14:50
3098112011	P-115	Water	07/02/13 16:25	07/03/13 14:50
3098112012	TRIP BLANK	Water	07/02/13 00:01	07/03/13 14:50

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SAMPLE ANALYTE COUNT

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3098112001	P-103D	EPA 8260	HNW	45	PASI-G
3098112002	P-107D	EPA 8260	HNW	45	PASI-G
3098112003	P-111D	EPA 8260	HNW	45	PASI-G
3098112004	MW-3A	EPA 8260	HNW	45	PASI-G
3098112005	MW-3B	EPA 8260	HNW	45	PASI-G
3098112006	P-113A	EPA 8260	HNW	45	PASI-G
3098112007	P-113B	EPA 8260	HNW	45	PASI-G
3098112008	P-116	EPA 8260	SMT	45	PASI-G
3098112009	P-114	EPA 8260	HNW	45	PASI-G
3098112010	P-114 DUP	EPA 8260	HNW	45	PASI-G
3098112011	P-115	EPA 8260	HNW	45	PASI-G
3098112012	TRIP BLANK	EPA 8260	HNW	45	PASI-G

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-103D **Lab ID: 3098112001** Collected: 07/02/13 09:45 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 10:24	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 10:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 10:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 10:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 10:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 10:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 10:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 10:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 10:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 10:24	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 10:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 10:24	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 10:24	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 10:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 10:24	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 10:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 10:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 10:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 10:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 10:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 10:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 10:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 10:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 10:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 10:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 10:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 10:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 10:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 10:24	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 10:24	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 10:24	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 10:24	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 10:24	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 10:24	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 10:24	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 10:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 10:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 10:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 10:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 10:24	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 10:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 10:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	43-137		1		07/08/13 10:24	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/08/13 10:24	1868-53-7	
Toluene-d8 (S)	101	%	55-137		1		07/08/13 10:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-107D **Lab ID: 3098112002** Collected: 07/02/13 10:25 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 10:46	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 10:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 10:46	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 10:46	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 10:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 10:46	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 10:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 10:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 10:46	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 10:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 10:46	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 10:46	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 10:46	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 10:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 10:46	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 10:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 10:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 10:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 10:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 10:46	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 10:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 10:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 10:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 10:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 10:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 10:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 10:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 10:46	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 10:46	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 10:46	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 10:46	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 10:46	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 10:46	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 10:46	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 10:46	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 10:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 10:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 10:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 10:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 10:46	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 10:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 10:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	43-137		1		07/08/13 10:46	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		07/08/13 10:46	1868-53-7	
Toluene-d8 (S)	100	%	55-137		1		07/08/13 10:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-111D **Lab ID: 3098112003** Collected: 07/02/13 11:10 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 11:08	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 11:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 11:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 11:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 11:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 11:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 11:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 11:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 11:08	108-90-7	
Chloroethane	**1.9**	ug/L	1.0	0.44	1		07/08/13 11:08	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 11:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 11:08	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 11:08	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 11:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 11:08	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 11:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 11:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 11:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 11:08	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 11:08	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 11:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 11:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:08	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	0.42	1		07/08/13 11:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 11:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 11:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 11:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 11:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 11:08	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 11:08	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 11:08	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 11:08	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 11:08	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 11:08	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 11:08	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 11:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 11:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 11:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 11:08	75-69-4	
Vinyl chloride	**6.8**	ug/L	1.0	0.18	1		07/08/13 11:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 11:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	43-137		1		07/08/13 11:08	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/08/13 11:08	1868-53-7	
Toluene-d8 (S)	98	%	55-137		1		07/08/13 11:08	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: MW-3A **Lab ID: 3098112004** Collected: 07/02/13 11:50 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 11:30	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 11:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 11:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 11:30	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 11:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 11:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 11:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 11:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 11:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 11:30	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 11:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 11:30	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 11:30	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 11:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 11:30	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 11:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 11:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 11:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 11:30	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 11:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 11:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 11:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 11:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 11:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 11:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 11:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 11:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 11:30	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 11:30	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 11:30	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 11:30	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 11:30	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 11:30	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 11:30	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 11:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 11:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 11:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 11:30	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 11:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 11:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	43-137		1		07/08/13 11:30	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/08/13 11:30	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/08/13 11:30	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: MW-3B **Lab ID: 3098112005** Collected: 07/02/13 12:20 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 11:53	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 11:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 11:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 11:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 11:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 11:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 11:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 11:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 11:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 11:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 11:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 11:53	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 11:53	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 11:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 11:53	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 11:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 11:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 11:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 11:53	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 11:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 11:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 11:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 11:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 11:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 11:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 11:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 11:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 11:53	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 11:53	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 11:53	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 11:53	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 11:53	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 11:53	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 11:53	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 11:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 11:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 11:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 11:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 11:53	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 11:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 11:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	43-137		1		07/08/13 11:53	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		07/08/13 11:53	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/08/13 11:53	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-113A **Lab ID: 3098112006** Collected: 07/02/13 13:50 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 12:15	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 12:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 12:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 12:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 12:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 12:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 12:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 12:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 12:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:15	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 12:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 12:15	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 12:15	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 12:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 12:15	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 12:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 12:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 12:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 12:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 12:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 12:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 12:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 12:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 12:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 12:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 12:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 12:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 12:15	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 12:15	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 12:15	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 12:15	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 12:15	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 12:15	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 12:15	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 12:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 12:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 12:15	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 12:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 12:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	43-137		1		07/08/13 12:15	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/08/13 12:15	1868-53-7	
Toluene-d8 (S)	100	%	55-137		1		07/08/13 12:15	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-113B **Lab ID: 3098112007** Collected: 07/02/13 14:35 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 12:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 12:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 12:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 12:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 12:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 12:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 12:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 12:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 12:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 12:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 12:37	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 12:37	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 12:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 12:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 12:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 12:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 12:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 12:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 12:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 12:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 12:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 12:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 12:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 12:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 12:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 12:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 12:37	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 12:37	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 12:37	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 12:37	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 12:37	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 12:37	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 12:37	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 12:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 12:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 12:37	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 12:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 12:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	43-137		1		07/08/13 12:37	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/08/13 12:37	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/08/13 12:37	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-116 **Lab ID: 3098112008** Collected: 07/02/13 15:20 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/10/13 11:09	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/10/13 11:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/10/13 11:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/10/13 11:09	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/10/13 11:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/10/13 11:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/10/13 11:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/10/13 11:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/10/13 11:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/10/13 11:09	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/10/13 11:09	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/10/13 11:09	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/10/13 11:09	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/10/13 11:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/10/13 11:09	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/10/13 11:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/10/13 11:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/10/13 11:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/10/13 11:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/10/13 11:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/10/13 11:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/10/13 11:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/10/13 11:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/10/13 11:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/10/13 11:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/10/13 11:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/10/13 11:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/10/13 11:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/10/13 11:09	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/10/13 11:09	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/10/13 11:09	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/10/13 11:09	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/10/13 11:09	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/10/13 11:09	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/10/13 11:09	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/10/13 11:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/10/13 11:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/10/13 11:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/10/13 11:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/10/13 11:09	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/10/13 11:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/10/13 11:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	43-137		1		07/10/13 11:09	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/10/13 11:09	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/10/13 11:09	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-114 **Lab ID: 3098112009** Collected: 07/02/13 15:50 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 12:59	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 12:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 12:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 12:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 12:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 12:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 12:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 12:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 12:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:59	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 12:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 12:59	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 12:59	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 12:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 12:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 12:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 12:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 12:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 12:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 12:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 12:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 12:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 12:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 12:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 12:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 12:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 12:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 12:59	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 12:59	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 12:59	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 12:59	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 12:59	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 12:59	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 12:59	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 12:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 12:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 12:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 12:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 12:59	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 12:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 12:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	43-137		1		07/08/13 12:59	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		07/08/13 12:59	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/08/13 12:59	2037-26-5	

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-114 DUP **Lab ID: 3098112010** Collected: 07/02/13 15:55 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 16:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 16:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 16:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 16:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 16:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 16:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 16:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 16:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 16:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 16:18	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 16:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 16:18	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 16:18	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 16:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 16:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 16:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 16:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 16:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 16:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 16:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 16:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 16:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 16:18	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.42	1		07/08/13 16:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 16:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 16:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 16:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 16:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 16:18	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 16:18	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 16:18	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 16:18	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 16:18	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 16:18	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 16:18	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 16:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 16:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 16:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 16:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 16:18	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 16:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 16:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	43-137		1		07/08/13 16:18	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/08/13 16:18	1868-53-7	
Toluene-d8 (S)	101	%	55-137		1		07/08/13 16:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: P-115 **Lab ID: 3098112011** Collected: 07/02/13 16:25 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 13:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 13:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 13:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 13:21	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 13:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 13:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 13:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 13:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 13:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 13:21	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 13:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 13:21	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 13:21	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 13:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 13:21	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 13:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 13:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 13:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 13:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 13:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 13:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 13:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 13:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 13:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 13:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 13:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 13:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 13:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 13:21	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 13:21	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 13:21	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 13:21	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 13:21	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 13:21	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 13:21	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 13:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 13:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 13:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 13:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 13:21	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 13:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 13:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	43-137		1		07/08/13 13:21	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		07/08/13 13:21	1868-53-7	
Toluene-d8 (S)	100	%	55-137		1		07/08/13 13:21	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Sample: TRIP BLANK **Lab ID: 3098112012** Collected: 07/02/13 00:01 Received: 07/03/13 14:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Acetone	ND	ug/L	20.0	2.6	1		07/08/13 13:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		07/08/13 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.45	1		07/08/13 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.23	1		07/08/13 13:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.43	1		07/08/13 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	2.7	1		07/08/13 13:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.71	1		07/08/13 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.37	1		07/08/13 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.36	1		07/08/13 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.44	1		07/08/13 13:43	75-00-3	
Chloroform	ND	ug/L	5.0	0.69	1		07/08/13 13:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		07/08/13 13:43	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1.5	1		07/08/13 13:43	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.9	1		07/08/13 13:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.38	1		07/08/13 13:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.48	1		07/08/13 13:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.44	1		07/08/13 13:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.45	1		07/08/13 13:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.43	1		07/08/13 13:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.40	1		07/08/13 13:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.28	1		07/08/13 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.48	1		07/08/13 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.42	1		07/08/13 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.37	1		07/08/13 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		07/08/13 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.29	1		07/08/13 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/08/13 13:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		07/08/13 13:43	100-41-4	
Methylene Chloride	ND	ug/L	1.0	0.36	1		07/08/13 13:43	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.49	1		07/08/13 13:43	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.5	1		07/08/13 13:43	91-20-3	
Styrene	ND	ug/L	1.0	0.35	1		07/08/13 13:43	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	0.47	1		07/08/13 13:43	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1.5	1		07/08/13 13:43	109-99-9	
Toluene	ND	ug/L	1.0	0.44	1		07/08/13 13:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.44	1		07/08/13 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.39	1		07/08/13 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.43	1		07/08/13 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.48	1		07/08/13 13:43	75-69-4	
Vinyl chloride	ND	ug/L	1.0	0.18	1		07/08/13 13:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.3	1		07/08/13 13:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	43-137		1		07/08/13 13:43	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		07/08/13 13:43	1868-53-7	
Toluene-d8 (S)	99	%	55-137		1		07/08/13 13:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

QC Batch: MSV/20390 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3098112001, 3098112002, 3098112003, 3098112004, 3098112005, 3098112006, 3098112007, 3098112009, 3098112010, 3098112011, 3098112012

METHOD BLANK: 819050 Matrix: Water
Associated Lab Samples: 3098112001, 3098112002, 3098112003, 3098112004, 3098112005, 3098112006, 3098112007, 3098112009, 3098112010, 3098112011, 3098112012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	07/08/13 07:04	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/08/13 07:04	
1,1-Dichloroethane	ug/L	ND	1.0	07/08/13 07:04	
1,1-Dichloroethene	ug/L	ND	1.0	07/08/13 07:04	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	07/08/13 07:04	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/08/13 07:04	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/08/13 07:04	
1,2-Dichloroethane	ug/L	ND	1.0	07/08/13 07:04	
1,2-Dichloropropane	ug/L	ND	1.0	07/08/13 07:04	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/08/13 07:04	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/08/13 07:04	
2-Butanone (MEK)	ug/L	ND	20.0	07/08/13 07:04	
Acetone	ug/L	ND	20.0	07/08/13 07:04	
Benzene	ug/L	ND	1.0	07/08/13 07:04	
Bromodichloromethane	ug/L	ND	1.0	07/08/13 07:04	
Bromoform	ug/L	ND	1.0	07/08/13 07:04	
Bromomethane	ug/L	ND	5.0	07/08/13 07:04	
Carbon disulfide	ug/L	ND	5.0	07/08/13 07:04	
Carbon tetrachloride	ug/L	ND	1.0	07/08/13 07:04	
Chlorobenzene	ug/L	ND	1.0	07/08/13 07:04	
Chloroethane	ug/L	ND	1.0	07/08/13 07:04	
Chloroform	ug/L	ND	5.0	07/08/13 07:04	
Chloromethane	ug/L	ND	1.0	07/08/13 07:04	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/08/13 07:04	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/08/13 07:04	
Dibromochloromethane	ug/L	ND	5.0	07/08/13 07:04	
Dibromomethane	ug/L	ND	1.0	07/08/13 07:04	
Dichlorodifluoromethane	ug/L	ND	1.0	07/08/13 07:04	
Ethylbenzene	ug/L	ND	1.0	07/08/13 07:04	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/08/13 07:04	
Methylene Chloride	ug/L	ND	1.0	07/08/13 07:04	
Naphthalene	ug/L	ND	5.0	07/08/13 07:04	
Styrene	ug/L	ND	1.0	07/08/13 07:04	
Tetrachloroethene	ug/L	ND	1.0	07/08/13 07:04	
Tetrahydrofuran	ug/L	ND	5.0	07/08/13 07:04	
Toluene	ug/L	ND	1.0	07/08/13 07:04	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/08/13 07:04	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/08/13 07:04	
Trichloroethene	ug/L	ND	1.0	07/08/13 07:04	
Trichlorofluoromethane	ug/L	ND	1.0	07/08/13 07:04	
Vinyl chloride	ug/L	ND	1.0	07/08/13 07:04	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

METHOD BLANK: 819050 Matrix: Water

Associated Lab Samples: 3098112001, 3098112002, 3098112003, 3098112004, 3098112005, 3098112006, 3098112007, 3098112009, 3098112010, 3098112011, 3098112012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Xylene (Total)	ug/L	ND	3.0	07/08/13 07:04	
4-Bromofluorobenzene (S)	%	92	43-137	07/08/13 07:04	
Dibromofluoromethane (S)	%	96	70-130	07/08/13 07:04	
Toluene-d8 (S)	%	101	55-137	07/08/13 07:04	

LABORATORY CONTROL SAMPLE & LCSD: 819051 819052

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.3	52.9	107	106	70-136	1	20	
1,1,2-Trichloroethane	ug/L	50	50.0	49.6	100	99	70-130	1	20	
1,1-Dichloroethane	ug/L	50	49.6	50.4	99	101	70-146	2	20	
1,1-Dichloroethene	ug/L	50	50.2	51.9	100	104	70-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	50	44.1	43.9	88	88	46-150	1	20	
1,2-Dibromoethane (EDB)	ug/L	50	51.7	51.1	103	102	70-130	1	20	
1,2-Dichlorobenzene	ug/L	50	49.3	49.0	99	98	70-130	1	20	
1,2-Dichloroethane	ug/L	50	49.5	48.5	99	97	70-144	2	20	
1,2-Dichloropropane	ug/L	50	51.5	50.5	103	101	70-136	2	20	
1,3-Dichlorobenzene	ug/L	50	49.1	47.6	98	95	70-130	3	20	
1,4-Dichlorobenzene	ug/L	50	47.5	47.5	95	95	70-130	0	20	
Benzene	ug/L	50	50.3	51.3	101	103	70-137	2	20	
Bromodichloromethane	ug/L	50	52.7	53.2	105	106	70-133	1	20	
Bromoform	ug/L	50	51.9	51.2	104	102	59-130	1	20	
Bromomethane	ug/L	50	39.2	41.0	78	82	41-148	4	20	
Carbon disulfide	ug/L	50	49.9	52.2	100	104	70-130	4	20	
Carbon tetrachloride	ug/L	50	55.1	54.5	110	109	70-154	1	20	
Chlorobenzene	ug/L	50	51.2	51.4	102	103	70-130	0	20	
Chloroethane	ug/L	50	44.9	47.1	90	94	70-139	5	20	
Chloroform	ug/L	50	49.9	49.8	100	100	70-130	0	20	
Chloromethane	ug/L	50	41.0	42.7	82	85	45-154	4	20	
cis-1,2-Dichloroethene	ug/L	50	48.8	50.7	98	101	70-130	4	20	
cis-1,3-Dichloropropene	ug/L	50	47.0	47.2	94	94	70-136	1	20	
Dibromochloromethane	ug/L	50	52.0	50.8	104	102	70-130	2	20	
Dichlorodifluoromethane	ug/L	50	42.1	43.8	84	88	20-157	4	20	
Ethylbenzene	ug/L	50	53.6	53.1	107	106	70-130	1	20	
Methyl-tert-butyl ether	ug/L	50	47.1	47.1	94	94	59-141	0	20	
Methylene Chloride	ug/L	50	47.7	47.0	95	94	70-130	1	20	
Styrene	ug/L	50	54.3	54.9	109	110	70-130	1	20	
Tetrachloroethene	ug/L	50	52.6	52.1	105	104	70-130	1	20	
Toluene	ug/L	50	53.6	52.2	107	104	70-130	3	20	
trans-1,2-Dichloroethene	ug/L	50	50.0	48.4	100	97	70-130	3	20	
trans-1,3-Dichloropropene	ug/L	50	53.5	55.0	107	110	55-135	3	20	
Trichloroethene	ug/L	50	51.5	52.8	103	106	70-130	3	20	
Trichlorofluoromethane	ug/L	50	49.7	51.6	99	103	50-150	4	20	
Vinyl chloride	ug/L	50	47.9	49.9	96	100	61-143	4	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

LABORATORY CONTROL SAMPLE & LCSD: 819051 819052

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Xylene (Total)	ug/L	150	165	166	110	111	70-130	0	20	
4-Bromofluorobenzene (S)	%				102	100	43-137			
Dibromofluoromethane (S)	%				98	97	70-130			
Toluene-d8 (S)	%				101	99	55-137			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819053 819054

Parameter	Units	4080684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.44	50	50	57.0	60.4	114	121	70-136	6	20	
1,1,2-Trichloroethane	ug/L	<0.39	50	50	53.9	57.5	108	115	70-130	6	20	
1,1-Dichloroethane	ug/L	<0.28	50	50	53.1	57.2	106	114	70-146	7	20	
1,1-Dichloroethene	ug/L	<0.43	50	50	56.9	59.4	114	119	70-130	4	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.5	50	50	45.2	52.7	90	105	46-150	15	20	
1,2-Dibromoethane (EDB)	ug/L	<0.38	50	50	54.4	58.7	109	117	70-130	8	20	
1,2-Dichlorobenzene	ug/L	<0.44	50	50	51.5	56.2	103	112	70-130	9	20	
1,2-Dichloroethane	ug/L	<0.48	50	50	52.8	54.7	106	109	70-146	4	20	
1,2-Dichloropropane	ug/L	<0.50	50	50	52.0	59.2	104	118	70-136	13	20	
1,3-Dichlorobenzene	ug/L	<0.45	50	50	51.0	57.1	101	114	70-130	11	20	
1,4-Dichlorobenzene	ug/L	0.46J	50	50	50.8	56.3	101	112	70-130	10	20	
Benzene	ug/L	<0.50	50	50	53.9	57.7	108	115	70-137	7	20	
Bromodichloromethane	ug/L	<0.45	50	50	56.3	60.6	113	121	70-133	7	20	
Bromoform	ug/L	<0.23	50	50	54.6	58.8	109	118	57-130	7	20	
Bromomethane	ug/L	<0.43	50	50	46.3	51.0	93	102	41-148	10	20	
Carbon disulfide	ug/L	<0.71	50	50	57.9	60.7	114	120	50-152	5	31	
Carbon tetrachloride	ug/L	<0.37	50	50	58.8	62.0	118	124	70-154	5	20	
Chlorobenzene	ug/L	<0.36	50	50	54.1	59.9	108	120	70-130	10	20	
Chloroethane	ug/L	<0.44	50	50	51.6	54.1	103	108	70-140	5	20	
Chloroform	ug/L	<0.69	50	50	53.9	55.8	108	112	70-130	3	20	
Chloromethane	ug/L	<0.39	50	50	51.8	54.7	104	109	45-154	5	20	
cis-1,2-Dichloroethene	ug/L	<0.42	50	50	54.5	57.0	109	114	70-130	5	20	
cis-1,3-Dichloropropene	ug/L	<0.29	50	50	49.5	51.4	99	103	70-136	4	20	
Dibromochloromethane	ug/L	<1.9	50	50	54.1	60.1	108	120	70-130	11	20	
Dichlorodifluoromethane	ug/L	<0.40	50	50	62.1	64.5	124	129	10-157	4	20	
Ethylbenzene	ug/L	<0.50	50	50	56.9	62.0	114	124	70-130	9	20	
Methyl-tert-butyl ether	ug/L	<0.49	50	50	49.5	52.2	99	104	59-141	5	20	
Methylene Chloride	ug/L	<0.36	50	50	52.1	54.2	104	108	70-130	4	20	
Styrene	ug/L	<0.35	50	50	57.6	64.4	115	129	35-164	11	20	
Tetrachloroethene	ug/L	<0.47	50	50	55.6	63.0	111	126	70-130	13	20	
Toluene	ug/L	<0.44	50	50	56.1	62.0	112	124	70-130	10	20	
trans-1,2-Dichloroethene	ug/L	<0.37	50	50	52.9	55.9	106	112	70-130	6	20	
trans-1,3-Dichloropropene	ug/L	<0.26	50	50	58.4	63.9	117	128	55-137	9	20	
Trichloroethene	ug/L	<0.43	50	50	55.4	59.7	111	119	70-130	7	20	
Trichlorofluoromethane	ug/L	<0.48	50	50	56.9	60.8	114	122	50-150	7	20	
Vinyl chloride	ug/L	<0.18	50	50	58.5	61.9	117	124	59-144	6	20	
Xylene (Total)	ug/L	<1.3	150	150	176	192	117	128	70-130	9	20	
4-Bromofluorobenzene (S)	%						100	107	43-137			

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 819053 819054

Parameter	Units	4080684001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%						98	97	70-130			
Toluene-d8 (S)	%						98	103	55-137			

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

QC Batch: MSV/20418 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3098112008

METHOD BLANK: 820192 Matrix: Water
Associated Lab Samples: 3098112008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	07/10/13 07:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/10/13 07:06	
1,1-Dichloroethane	ug/L	ND	1.0	07/10/13 07:06	
1,1-Dichloroethene	ug/L	ND	1.0	07/10/13 07:06	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	07/10/13 07:06	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/10/13 07:06	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/10/13 07:06	
1,2-Dichloroethane	ug/L	ND	1.0	07/10/13 07:06	
1,2-Dichloropropane	ug/L	ND	1.0	07/10/13 07:06	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/10/13 07:06	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/10/13 07:06	
2-Butanone (MEK)	ug/L	ND	20.0	07/10/13 07:06	
Acetone	ug/L	ND	20.0	07/10/13 07:06	
Benzene	ug/L	ND	1.0	07/10/13 07:06	
Bromodichloromethane	ug/L	ND	1.0	07/10/13 07:06	
Bromoform	ug/L	ND	1.0	07/10/13 07:06	
Bromomethane	ug/L	ND	5.0	07/10/13 07:06	
Carbon disulfide	ug/L	ND	5.0	07/10/13 07:06	
Carbon tetrachloride	ug/L	ND	1.0	07/10/13 07:06	
Chlorobenzene	ug/L	ND	1.0	07/10/13 07:06	
Chloroethane	ug/L	ND	1.0	07/10/13 07:06	
Chloroform	ug/L	ND	5.0	07/10/13 07:06	
Chloromethane	ug/L	ND	1.0	07/10/13 07:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/10/13 07:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/10/13 07:06	
Dibromochloromethane	ug/L	ND	5.0	07/10/13 07:06	
Dibromomethane	ug/L	ND	1.0	07/10/13 07:06	
Dichlorodifluoromethane	ug/L	ND	1.0	07/10/13 07:06	
Ethylbenzene	ug/L	ND	1.0	07/10/13 07:06	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/10/13 07:06	
Methylene Chloride	ug/L	ND	1.0	07/10/13 07:06	
Naphthalene	ug/L	ND	5.0	07/10/13 07:06	
Styrene	ug/L	ND	1.0	07/10/13 07:06	
Tetrachloroethene	ug/L	ND	1.0	07/10/13 07:06	
Tetrahydrofuran	ug/L	ND	5.0	07/10/13 07:06	
Toluene	ug/L	ND	1.0	07/10/13 07:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/10/13 07:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/10/13 07:06	
Trichloroethene	ug/L	ND	1.0	07/10/13 07:06	
Trichlorofluoromethane	ug/L	ND	1.0	07/10/13 07:06	
Vinyl chloride	ug/L	ND	1.0	07/10/13 07:06	
Xylene (Total)	ug/L	ND	3.0	07/10/13 07:06	
4-Bromofluorobenzene (S)	%	91	43-137	07/10/13 07:06	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

METHOD BLANK: 820192 Matrix: Water

Associated Lab Samples: 3098112008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromofluoromethane (S)	%	97	70-130	07/10/13 07:06	
Toluene-d8 (S)	%	101	55-137	07/10/13 07:06	

LABORATORY CONTROL SAMPLE & LCSD: 820193 820194

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.0	48.1	100	96	70-136	4	20	
1,1,2-Trichloroethane	ug/L	50	48.4	46.6	97	93	70-130	4	20	
1,1-Dichloroethane	ug/L	50	47.4	45.8	95	92	70-146	3	20	
1,1-Dichloroethene	ug/L	50	49.8	48.4	100	97	70-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	50	39.0	39.6	78	79	46-150	2	20	
1,2-Dibromoethane (EDB)	ug/L	50	50.5	47.5	101	95	70-130	6	20	
1,2-Dichlorobenzene	ug/L	50	46.9	47.0	94	94	70-130	0	20	
1,2-Dichloroethane	ug/L	50	46.1	45.9	92	92	70-144	0	20	
1,2-Dichloropropane	ug/L	50	48.3	47.2	97	94	70-136	2	20	
1,3-Dichlorobenzene	ug/L	50	45.2	45.1	90	90	70-130	0	20	
1,4-Dichlorobenzene	ug/L	50	46.1	46.3	92	93	70-130	0	20	
Benzene	ug/L	50	47.4	46.1	95	92	70-137	3	20	
Bromodichloromethane	ug/L	50	50.2	49.5	100	99	70-133	1	20	
Bromoform	ug/L	50	47.9	46.2	96	92	59-130	4	20	
Bromomethane	ug/L	50	38.5	39.9	77	80	41-148	4	20	
Carbon disulfide	ug/L	50	48.1	48.0	96	96	70-130	0	20	
Carbon tetrachloride	ug/L	50	53.5	52.6	107	105	70-154	2	20	
Chlorobenzene	ug/L	50	50.5	48.8	101	98	70-130	3	20	
Chloroethane	ug/L	50	42.7	45.1	85	90	70-139	5	20	
Chloroform	ug/L	50	46.4	45.6	93	91	70-130	2	20	
Chloromethane	ug/L	50	41.3	44.7	83	89	45-154	8	20	
cis-1,2-Dichloroethene	ug/L	50	47.3	46.9	95	94	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	50	42.9	42.6	86	85	70-136	1	20	
Dibromochloromethane	ug/L	50	50.0	48.6	100	97	70-130	3	20	
Dichlorodifluoromethane	ug/L	50	48.2	49.8	96	100	20-157	3	20	
Ethylbenzene	ug/L	50	51.6	50.4	103	101	70-130	2	20	
Methyl-tert-butyl ether	ug/L	50	41.5	40.2	83	80	59-141	3	20	
Methylene Chloride	ug/L	50	44.2	45.1	88	90	70-130	2	20	
Styrene	ug/L	50	54.1	51.1	108	102	70-130	6	20	
Tetrachloroethene	ug/L	50	53.5	49.6	107	99	70-130	8	20	
Toluene	ug/L	50	51.2	50.4	102	101	70-130	2	20	
trans-1,2-Dichloroethene	ug/L	50	46.4	44.6	93	89	70-130	4	20	
trans-1,3-Dichloropropene	ug/L	50	51.3	51.0	103	102	55-135	1	20	
Trichloroethene	ug/L	50	50.5	48.4	101	97	70-130	4	20	
Trichlorofluoromethane	ug/L	50	50.4	50.2	101	100	50-150	0	20	
Vinyl chloride	ug/L	50	47.5	48.4	95	97	61-143	2	20	
Xylene (Total)	ug/L	150	164	158	109	105	70-130	4	20	
4-Bromofluorobenzene (S)	%				109	102	43-137			
Dibromofluoromethane (S)	%				98	95	70-130			

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

QUALITY CONTROL DATA

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

LABORATORY CONTROL SAMPLE & LCSD: 820193 820194

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Toluene-d8 (S)	%				99	98	55-137			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 820199 820200

Parameter	Units	4080769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.44	50	50	51.1	49.1	102	98	70-136	4	20	
1,1,2-Trichloroethane	ug/L	<0.39	50	50	47.7	47.6	95	95	70-130	0	20	
1,1-Dichloroethane	ug/L	<0.28	50	50	47.8	46.6	96	93	70-146	3	20	
1,1-Dichloroethene	ug/L	<0.43	50	50	51.0	49.5	102	99	70-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.5	50	50	40.6	40.8	81	82	46-150	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.38	50	50	50.4	49.1	101	98	70-130	3	20	
1,2-Dichlorobenzene	ug/L	<0.44	50	50	48.5	47.6	97	95	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.48	50	50	47.6	47.1	95	94	70-146	1	20	
1,2-Dichloropropane	ug/L	<0.50	50	50	48.0	47.3	96	95	70-136	1	20	
1,3-Dichlorobenzene	ug/L	<0.45	50	50	47.3	46.4	95	93	70-130	2	20	
1,4-Dichlorobenzene	ug/L	0.55J	50	50	47.4	47.0	94	93	70-130	1	20	
Benzene	ug/L	<0.50	50	50	48.5	46.9	97	94	70-137	3	20	
Bromodichloromethane	ug/L	1.4	50	50	52.2	52.5	102	102	70-133	0	20	
Bromoform	ug/L	<0.23	50	50	49.0	49.0	98	98	57-130	0	20	
Bromomethane	ug/L	<0.43	50	50	40.4	41.0	80	81	41-148	1	20	
Carbon disulfide	ug/L	<0.71	50	50	49.7	48.8	98	96	50-152	2	31	
Carbon tetrachloride	ug/L	<0.37	50	50	53.4	52.9	107	106	70-154	1	20	
Chlorobenzene	ug/L	<0.36	50	50	50.2	50.7	100	101	70-130	1	20	
Chloroethane	ug/L	<0.44	50	50	45.4	43.1	91	86	70-140	5	20	
Chloroform	ug/L	4.3J	50	50	51.7	51.6	95	95	70-130	0	20	
Chloromethane	ug/L	<0.39	50	50	42.5	43.0	85	86	45-154	1	20	
cis-1,2-Dichloroethene	ug/L	<0.42	50	50	46.9	47.3	94	95	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	<0.29	50	50	43.3	43.9	87	88	70-136	1	20	
Dibromochloromethane	ug/L	<1.9	50	50	50.1	50.4	99	100	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.40	50	50	48.6	47.7	97	95	10-157	2	20	
Ethylbenzene	ug/L	<0.50	50	50	52.4	51.5	105	103	70-130	2	20	
Methyl-tert-butyl ether	ug/L	<0.49	50	50	41.3	40.7	83	81	59-141	2	20	
Methylene Chloride	ug/L	0.36J	50	50	46.2	44.4	92	88	70-130	4	20	
Styrene	ug/L	<0.35	50	50	53.7	52.1	107	104	35-164	3	20	
Tetrachloroethene	ug/L	<0.47	50	50	53.1	52.0	106	104	70-130	2	20	
Toluene	ug/L	<0.44	50	50	50.3	50.9	101	102	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	<0.37	50	50	46.3	46.5	93	93	70-130	0	20	
trans-1,3-Dichloropropene	ug/L	<0.26	50	50	51.1	51.5	102	103	55-137	1	20	
Trichloroethene	ug/L	<0.43	50	50	50.5	50.5	100	100	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.48	50	50	52.2	50.2	104	100	50-150	4	20	
Vinyl chloride	ug/L	<0.18	50	50	47.9	47.7	96	95	59-144	1	20	
Xylene (Total)	ug/L	<1.3	150	150	163	160	108	107	70-130	1	20	
4-Bromofluorobenzene (S)	%						103	105	43-137			
Dibromofluoromethane (S)	%						97	95	70-130			
Toluene-d8 (S)	%						97	100	55-137			

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ripon FF/NN Landfill
Pace Project No.: 3098112

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3098112001	P-103D	EPA 8260	MSV/20390		
3098112002	P-107D	EPA 8260	MSV/20390		
3098112003	P-111D	EPA 8260	MSV/20390		
3098112004	MW-3A	EPA 8260	MSV/20390		
3098112005	MW-3B	EPA 8260	MSV/20390		
3098112006	P-113A	EPA 8260	MSV/20390		
3098112007	P-113B	EPA 8260	MSV/20390		
3098112008	P-116	EPA 8260	MSV/20418		
3098112009	P-114	EPA 8260	MSV/20390		
3098112010	P-114 DUP	EPA 8260	MSV/20390		
3098112011	P-115	EPA 8260	MSV/20390		
3098112012	TRIP BLANK	EPA 8260	MSV/20390		

(Please Print Clearly)

Company Name:	TetraTech
Branch/Location:	Brookfield, WI
Project Contact:	Mike Noel
Phone:	(262)792-1282
Project Number:	117-2202040.20
Project Name:	Ripon FF/NN Landfill
Project State:	WI
Sampled By (Print):	Ashley A. Weimer
Sampled By (Sign):	Ashley A. Weimer
PO #:	
Regulatory Program:	

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4086674

CHAIN OF COUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

FILTERED? (YES/NO) — Y/N: N
PRESERVATION (CODE)* — Pick Letter: B

Quote #:	
Mail To Contact:	Mike Noel
Mail To Company:	Tetra Tech
Mail To Address:	175 N. Corporate Dr. Suite 100 Brookfield, WI 53045
Invoice To Contact:	[illegible]
Invoice To Company:	
Invoice To Address:	3098112
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

Analyses Requested: VOCs 8260B

PACE LAB #	CLIENT FIELD ID 2013	COLLECTION DATE	COLLECTION TIME	MATRIX	VOCs 8260B	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	P-103 D	7-2	09:45	GW	3		3-40mL B	001
002	P-107 D	↓	10:25	↓	3		↓	002
003	P-111 D		11:10		3			003
004	MW-3A		11:50		3			004
005	MW-3B		12:20		3			005
006	P-113 A		13:50		3			006
007	P-113 B		14:35		3			007
008	P-116		15:20		3			008
009	P-114		15:50		3			009
010	P-114 Dup		15:55		3			010
011	P-115	↓	16:25	↓	3		↓	011
012	Trip Blank	—	—	DI	1	Lab prepared		012

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ashley A. Weimer	7-3-13 0800	Mary Fannin	7/3/13 11:31
Mary Fannin	7/3/13 1300	[illegible signature]	7/3/13 1700
[illegible signature]	7/3/13 1450	[illegible signature]	7/3/13 1450

PACE Project No. 4086674

Receipt Temp = 2.0 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Sample Condition Upon Receipt

Client Name: Tetra Tech Project # 410806724

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used NA Type of Ice: ☑ Wet Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 20.1 /Corr: Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 7/3/13
Initials: BK

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☑N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix:	W			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☑N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDRO/W, Phenolics, OTHER:	☑Yes	☐No		Initial when completed / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	14.
Trip Blank Present:	☐Yes	☐No	☑N/A	15.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): 297				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 7-5-13

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 3098112 **Workorder Name:** Ripon FF/NN Landfill **Owner Received Date:** 7/3/2013 **Results Requested By:** 7/18/2013

Report To	Subcontract To
David A. Pichette Pace Analytical Services, Inc. 1638 Roseytown Road Greensburg, PA 15601 Phone (724)850-5600 Fax (999)999-9999	Pace Analytical Green Bay 1241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Requested Analysis: SDG	LAB USE ONLY
1	P-103D	PS	7/2/2013 09:45	3098112001	Water	1	X	
2	P-107D	PS	7/2/2013 10:25	3098112002	Water	1	X	
3	P-111D	PS	7/2/2013 11:10	3098112003	Water	1	X	
4	MW-3A	PS	7/2/2013 11:50	3098112004	Water	1	X	
5	MW-3B	PS	7/2/2013 12:20	3098112005	Water	1	X	
6	P-113A	PS	7/2/2013 13:50	3098112006	Water	1	X	
7	P-113B	PS	7/2/2013 14:35	3098112007	Water	1	X	
8	P-116	PS	7/2/2013 15:20	3098112008	Water	1	X	
9	P-114	PS	7/2/2013 15:50	3098112009	Water	1	X	
10	P-114 DUP	PS	7/2/2013 15:55	3098112010	Water	1	X	
11	P-115	PS	7/2/2013 16:25	3098112011	Water	1	X	
12	TRIP BLANK	PS	7/2/2013 00:01	3098112012	Water	1	X	

Transfers	Released By	Date/Time	Received By	Date/Time
1				
2				
3				

Comments

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

APPENDIX C
GROUNDWATER SAMPLING FIELD FORMS

TETRA TECH MULTI-LEVEL MONITOR WELL WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	FF/NN Landfill	Temp. & pH	MP-20 Flow Cell
PROJECT NO.	117-2202040.20	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Weimer	DO	MP-20 Flow Cell

MONITOR WELL ID	MW-3A			MW-3B			P-113A		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	7-2-13			7-2-13			7-2-13		
STATIC WATER LEVEL (feet)*	30.52			29.56			13.17		
WELL DEPTH (feet)*	280.1			185.72			325.31		
PUMP INLET DEPTH (feet)*	67.5			54.5			73.5		
START PURGE TIME (Military)	11:30			12:00			13:15		
END PURGE TIME (Military)	11:45			12:15			13:45		
PURGE VOLUME (gallons)	1.0			1.0			0.75		
SAMPLE TIME (Military)	11:50			12:20			13:50		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	2 :00	3 :00	4 :00	0 :00	1 :00	2 :00	12 :00	14 :00	16 :00
TEMPERATURE (° C)	10.94	10.91	10.90	9.80	9.89	9.86	14.68	14.72	13.64
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.582	0.582	0.582	0.712	0.710	0.707	0.584	0.578	0.578
DISSOLVED OXYGEN (ppm)	1.40	1.31	1.27	0.39	0.37	0.35	0.99	1.16	1.04
pH	7.28	7.27	7.26	7.37	7.35	7.34	7.49	7.45	7.45
DISSOLVED OXYGEN (% Sat.)	12.7	11.9	11.5	3.5	3.3	3.1	9.8	13.1	10.0
ORP (mV)	-126	-127	-126	-96	-93	-91	-114	-123	-127
COLOR	clear			clear			clear		
ODOR	Rotten eggs			none			none		
CLARITY	clear			clear			clear		

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A=AMBER; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)		
VOCs (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No	3 – 40 ml; G; HCl – L; No	3 – 40 ml; G; HCl – L; No
Vacu-Vials Iron 2- Wait 1, then wait 5 min	0.127	0.804	0.516
NAME OF LABORATORY	Pace Analytical	Pace Analytical	Pace Analytical
DATE SENT TO LAB	7-3-13	7-3-13	7-3-13
SAMPLER=S NAME	Ashley A. Weimer	Ashley A. Weimer	Ashley A. Weimer

*Measured from top of well casing.

TETRA TECH

TETRA TECH MULTI-LEVEL MONITOR WELL WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	FF/NN Landfill	Temp. & pH	MP-20 Flow Cell
PROJECT NO.	117-2202040.20	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Weimer	DO	MP-20 Flow Cell

MONITOR WELL ID	P-113B			P-103D					
WATER TYPE	Groundwater			Groundwater					
DATE (month/day/year)	7-2-13			7-2-13					
STATIC WATER LEVEL (feet)*	13.08			49.84					
WELL DEPTH (feet)*	198.9			192.66					
PUMP INLET DEPTH (feet)*	48.5			87.5					
START PURGE TIME (Military)	13:55			09:20					
END PURGE TIME (Military)	14:30			09:40					
PURGE VOLUME (gallons)	4.0			2.0					
SAMPLE TIME (Military)	14:35			09:45					
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd			
TIME (minutes since initial reading)	25:00	26:00	27:00	0:00	1:00	2:00			
TEMPERATURE (° C)	10.616	10.617	10.618	10.75	10.69	10.616			
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.1680	0.1680	0.1679	0.839	0.840	0.839			
DISSOLVED OXYGEN (ppm)	0.99	0.81	1.01	0.61	0.60	0.57			
pH	7.37	7.39	7.41	6.50	6.53	6.56			
DISSOLVED OXYGEN (% Sat.)	9.0	7.3	9.2	5.6	5.4	5.2			
ORP (mV)	-76	-78	-80	18	12	6			
COLOR	clear			clear					
ODOR	none			none					
CLARITY	clear			clear					

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A=AMBER; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)		
VOCs (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No	3 – 40 ml; G; HCl – L; No	
Vacu-Vials Iron 2- Wait 1, then wait 5 min	1.081	OVER Range.	
NAME OF LABORATORY	Pace Analytical	Pace Analytical	
DATE SENT TO LAB	7-3-13	7-3-13	
SAMPLER=S NAME	Ashley A. Weimer	Ashley A. Weimer	

*Measured from top of well casing.

TETRA TECH

TETRA TECH MULTI-LEVEL MONITOR WELL WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	FF/NN Landfill	Temp. & pH	MP-20 Flow Cell
PROJECT NO.	117-2202040.20	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Weimer	DO	MP-20 Flow Cell

MONITOR WELL ID	P-111D	P-107D	
WATER TYPE	Groundwater	Groundwater	
DATE (month/day/year)	7-2-13	7-2-13	
STATIC WATER LEVEL (feet)*	34.82	51.42	
WELL DEPTH (feet)*	151.0	327.95	
PUMP INLET DEPTH (feet)*	151.0	76.5	
START PURGE TIME (Military)	10:50	10:05	
END PURGE TIME (Military)	11:05	10:25	
PURGE VOLUME (gallons)	1.5	2.0	
SAMPLE TIME (Military)	11:10	10:25	

STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd			
TIME (minutes since initial reading)	0:00	1:00	2:00	13:00	14:00	15:00			
TEMPERATURE (° C)	10.54	10.51	10.50	11.16	11.42	11.60			
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.868	0.869	0.870	0.607	0.605	0.606			
DISSOLVED OXYGEN (ppm)	1.57	1.47	1.38	1.93	2.00	1.92			
pH	7.29	7.28	7.27	7.17	7.15	7.15			
DISSOLVED OXYGEN (% Sat.)	14.2	13.3	12.5	17.8	18.3	17.7			
ORP (mV)	-45	-50	-53	-72	-74	-75			
COLOR	clear			clear					
ODOR	none			none					
CLARITY	clear			clear					

SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A=AMBER; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)		
VOCs (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No	3 – 40 ml; G; HCl – L; No	
Vacu-Vials Iron 2* Wait 1, then wait 5 min	1.505	0.123	
NAME OF LABORATORY	Pace Analytical	Pace Analytical	
DATE SENT TO LAB	7-3-13	7-3-13	
SAMPLER=S NAME	Ashley A. Weimer	Ashley A. Weimer	

*Measured from top of well casing.

TETRA TECH

TETRA TECH MULTI-LEVEL MONITOR WELL WATER QUALITY SAMPLING AND ANALYSIS FORM

PROJECT INFORMATION		INSTRUMENTS	
PROJECT	FF/NN Landfill	Temp. & pH	MP-20 Flow Cell
PROJECT NO.	117-2202040.20	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Weimer	DO	MP-20 Flow Cell

MONITOR WELL ID	P-114/Dup			P-115			P-116		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	7- 2 -13			7- 2 -13			7- 2 -13		
STATIC WATER LEVEL (feet)*	19.30			22.50			26.51		
WELL DEPTH (feet)*	181.72			179.57			163.19		
PUMP INLET DEPTH (feet)*	53.5			53.5			163		
START PURGE TIME (Military)	15:35			16:10			15:00		
END PURGE TIME (Military)	15:50			16:25			15:20		
PURGE VOLUME (gallons)	1.5			1.5			1.0		
SAMPLE TIME (Military)	15:50 / 15:55			16:25			15:20		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	0 :00	1 :00	2 :00	2 :00	3 :00	4 :00	0 :00	2 :00	4 :00
TEMPERATURE (° C)	10.46	10.46	10.52	10.69	10.63	10.59	11.42	11.41	11.40
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.769	0.767	0.766	0.625	0.627	0.626	0.552	0.552	0.552
DISSOLVED OXYGEN (ppm)	0.38	0.36	0.34	0.63	0.53	0.48	0.43	0.40	0.39
pH	7.49	7.47	7.47	7.63	7.59	7.57	7.57	7.56	7.56
DISSOLVED OXYGEN (% Sat.)	3.5	3.3	3.1	5.7	4.8	4.3	4.0	3.7	3.6
ORP (mV)	-96	-92	-88	-94	-91	-89	-13	-14	-14
COLOR	clear			clear			clear		
ODOR	none			none			none		
CLARITY	clear			clear			pinkish		
SAMPLING PARAMETERS	# OF CONTAINERS & VOLUME; CONTAINER TYPE (A=AMBER; G=GLASS; P=PLASTIC); PRESERVATIVE TYPE (L=LAB ADDED; F=FIELD ADDED) OR NEUTRAL; FILTERED (YES or NO)								
VOCs (EPA Method SW 8260B)	3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No		
Vacu-Vials Iron 2- Wait 1, then wait 5 min	0.721			0.911			0.336		
	**TOOK DUP AT 15:55 **								
NAME OF LABORATORY	Pace Analytical			Pace Analytical			Pace Analytical		
DATE SENT TO LAB	7- 3 -13			7- 3 -13			7- 3 -13		
SAMPLER=S NAME	Ashley A. Weimer			Ashley A. Weimer			Ashley A. Weimer		

*Measured from top of well casing.

TETRA TECH

TETRA TECH EQUIPMENT CALIBRATION FORM

Equipment Make	**QED MicroPurge Water Quality Meter**
Equipment Model	**MP20**
Tetra Tech ID Number	**Cooper Meter**

DATE	TIME	CALIBRATION MEDIA	RESULTS	COMMENTS
7-1-13	13:08	1,413 µs/cm conductivity solution	Calibration successful.	Specific conductance sensor calibration.
7-1-13	13:05	pH 7.0 and pH 4.0 solution	Calibration successful.	pH sensor calibration.
7-1-13	13:15	Distilled water up to o-ring on DO sensor for 100% DO saturation calibration.	Calibration successful.	Dissolved oxygen (DO) sensor calibration.
7-1-13	13:12	240 mV ORP solution	Calibration successful.	ORP sensor calibration.

TETRA TECH

APPENDIX D

LANDFILL GAS EXTRACTION SYSTEM MONITORING

TETRA TECH GEO

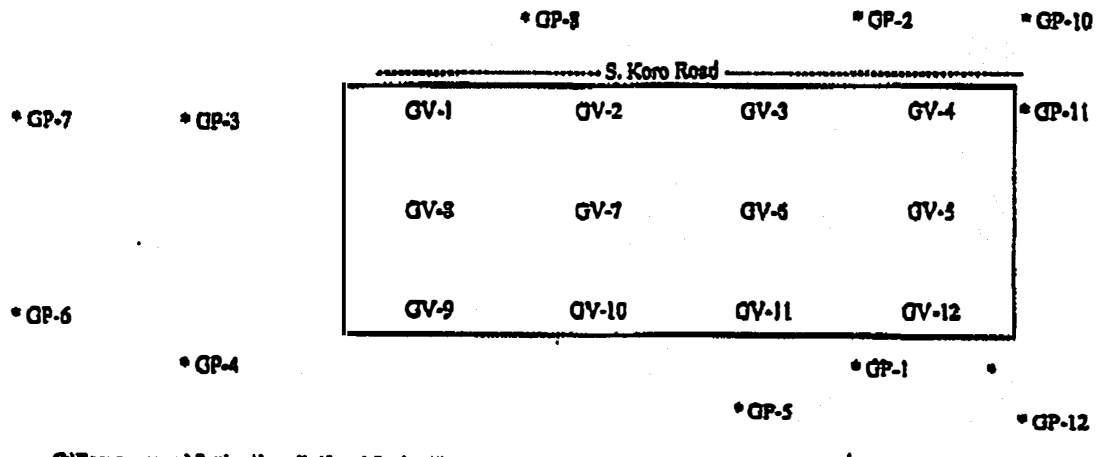
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jack Wendler
Water level in buried knockout tank _____"

Barometric Pressure: 29.1 Hg
Temperature (ambient): 42° F
Measuring Device: Eagle 2
In Trailer Vacuum Gage _____ "Hg.

*LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
5.13.13	0815	Background	0	0.0	20.9	
	0834	LC-1	8.0	20.0	0.7	
	0845	LC-2	38.0	27.4	1.2	
	0837	LC-3	16.5	19.0	4.9	
	0830	GV-6	67*	11.6	7.4	
	0820	GP-1	0*	1.2	18.8	
	0940	GP-1	0	0.0	20.9	2nd Reading
	0822	Exhaust	60+*	4.4	16.6	



TETRA TECH GEO

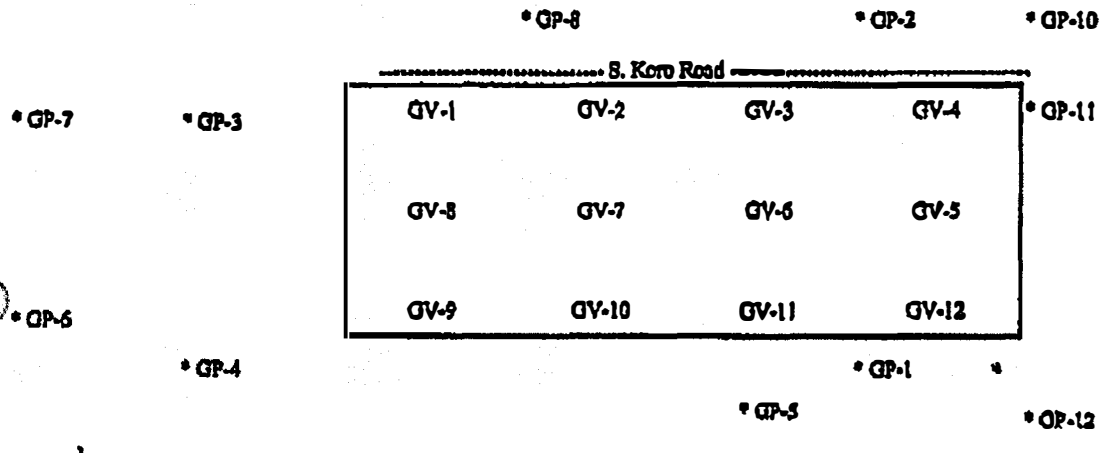
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jack Wendler
Water level in buried knockout tank _____"

Barometric Pressure: 28.9 Hg
Temperature (ambient): _____ F
Measuring Device: Eagle 2
In Trailer Vacuum Gage _____ "Hg.

% LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
5.28.13	1300	Background	0 *	0.0	20.9	
	1340	LC-1	9.5	19.4	0.9	
	1359	LC-2	33.0	26.0	1.6	
	1348	LC-3	16.5	18.8	4.4	
	1336	GV-6	96 *	13.2	5.8	
	1305	GP-1	0 *	2.0	17.9	
	1410	GP-1	0	0.0	20.9	2nd Reading
	1308	Exhaust	78 *	5.6	15.2	



TETRA TECH GEO

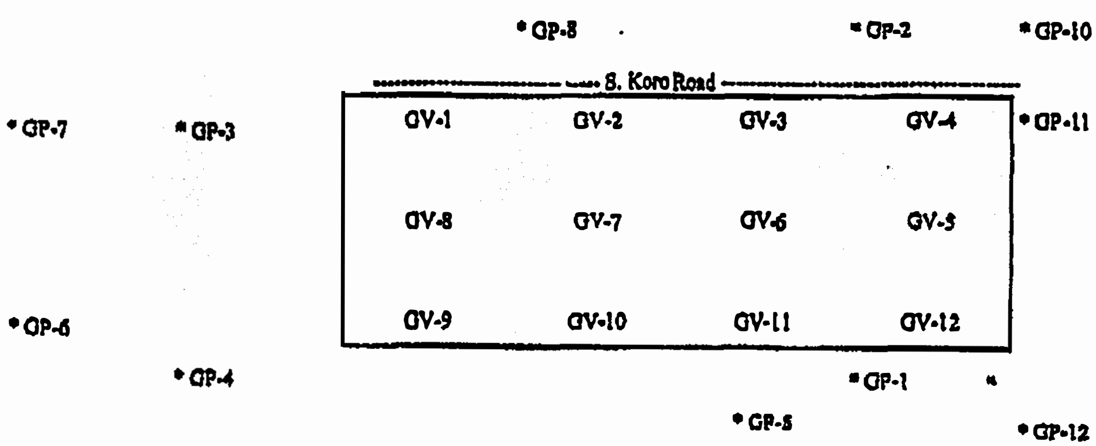
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jack Wendler
Water level in buried knockout tank ________"

Barometric Pressure: 29.0 Hg
Temperature (ambient): 54° F
Measuring Device: Eagle
In Trailer Vacuum Gage 2 "Hg.

%LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
6.7.13	0830	Background	0*	0.0	20.9	
	0850	LC-1	8.5	19.4	1.1	
	0900	LC-2	31.5	25.4	2.1	
	0905	LC-3	17.0	19.0	4.5	
	0845	GV-6	77*	13.0	6.1	
			<—	3.85 <	5 OK	
	0835	GP-1	0*	4.8	11.7	
	0940	GP-1	0*	~~7.6~~	~~17.0~~	2nd Reading
				6.0	9.5	
	0839	Exhaust	90*	6.6	14.3	



TETRA TECH GEO

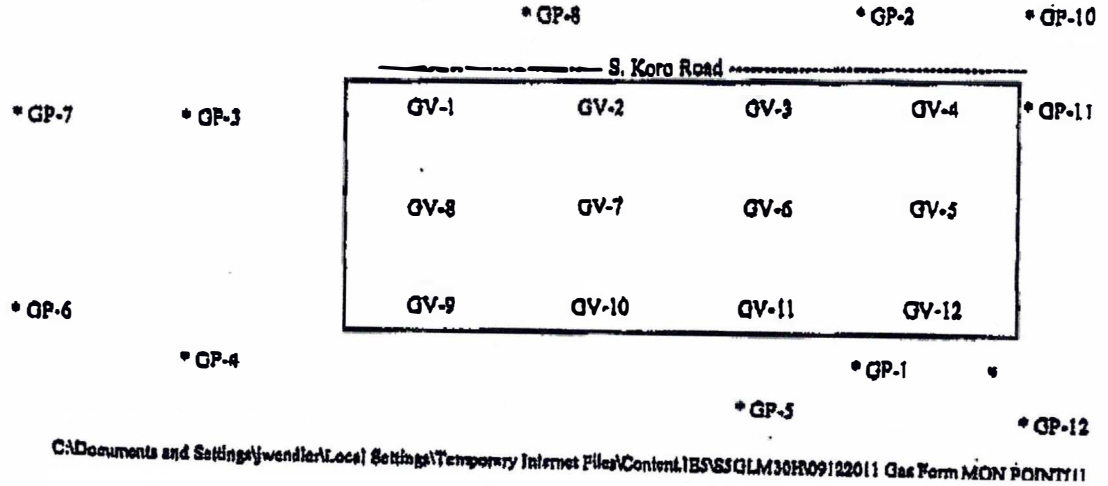
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jake Wendler
Water level in buried knockout tank _____"

Barometric Pressure: 29.1 Hg
Temperature (ambient): 64 F
Measuring Device: Eagle
In Trailer Vacuum Gage 2 "Hg

* LEL

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
6.21.13	0800	Background	0 *	0.0	20.9	
	0817	LC-1	8.0	18.8	1.5	
	0830	LC-2	30.5	25.4	1.7	
	0825	LC-3	16.0	18.4	4.5	
	0812	GV-6	0.5	15.4	4.8	
	0805	GP-1	0 *	6.0	10.7	
		GP-1	0 *	3.8	11.4	2nd Reading
	0809	Exhaust	5.5	8.4	12.7	



TETRA TECH GEO

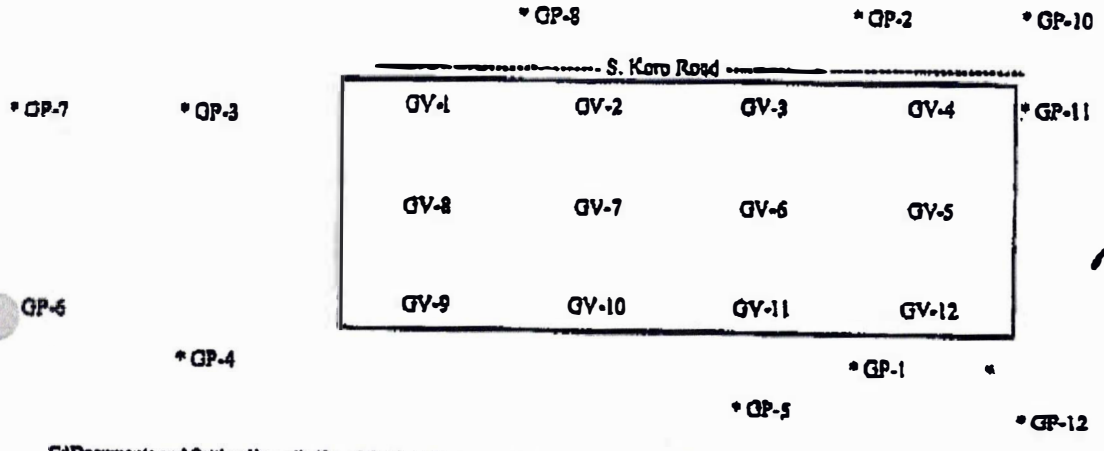
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jack Wendler
Water level in buried knockout tank _____ "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 74 F
Measuring Device: Eagle
In Trailer Vacuum Gage 2 "Hg

* LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
7.6.13	0830	Background	0	0.0	20.9	
	0850	LC-1	7.0	18.8	1.5	
	0900	LC-2	29.5	24.8	1.8	
	0855	LC-3	15.5	18.2	4.5	
				per JW via email		
	0845	GV-6	72*	13.0	6.2	
	0950	GV-6	74*	12.2	7.0	2nd Reading
	0835	GP-1	0*	3.4	9.2	
	0940	GP-1	0*	10.6	2.6	2nd Reading
	0840	Exhaust	95*	~~14.0~~ 7.8	12.9	



Note: A 2nd reading was done on GV-6 also JW

GeoTrans, Inc.

GAS PROBE DATA

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: Jaime Wendler

Barometric Pressure: 28.9 Hg
Temperature (ambient): 62 F
Measuring Device: Eagle gauge 3

%LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
7.22.13	0730	Background	0	0.0	20.9	
	0752	LC-1	8.0	19.4	1.6	
	0805	LC-2	29.5	25.8	1.5	
	0800	LC-3	16.0	19.0	4.3	
	0845	MW-101	0 *	8.0	20.9	
	0811	MW-102	0 *	2.2	14.3	
	0915	MW-103	0 *	0.6	20.7	
	0755	MW-104	0 *	5.0	14.2	
		~~GV-1~~				
	0906	~~GV-4~~ GV-6	5.0	14.8	5.0	2nd Reading
	0748	GV-6	5.0	15.2	4.7	
		~~GV-7~~				
		~~GV-9~~				
	0900	~~GV-12~~ GP-1	31 *	14.4	0.0	2nd Reading
	0740	GP-1	1 *	5.8	11.7	
	0935	GP-2	0 *	2.4	18.0	
	0912	GP-3	0 *	2.0	18.3	
	0920	GP-4	0 *	2.2	17.6	
	0815	GP-5	0 *	9.2	7.4	
	0946	GP-6	0 *	3.0	16.7	
	0952	GP-7	0 *	2.6	17.6	
	0930	GP-8	0 *	3.0	16.5	
	0833	GP-10	0 *	4.8	13.5	
	0840	GP-11	0 *	2.4	18.5	
	0824	GP-12	0 *	3.2	16.8	
	0852	Leg 1	7.5	18.8	1.9	
	0853	Leg 2	8.0	15.8	5.2	
	8854	Leg3	15.5	18.4	4.7	
	0744	Exhaust	5.5	8.6	12.4