STATUS REPORT
FIRST QUARTER 2018 SAMPLING EVENT
FF/NN LANDFILL NPL SITE
Ripon, Wisconsin

Prepared for:

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May 10, 2018

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1. SITE INFORMATION AND CONTACTS

CONTRACT SF-92-01

Contract between the Wisconsin Department of Natural Resources (WDNR) and the FF/NN Landfill Group dated August 7, 1992.

SITE NAME/ACTIVITY:

FF/NN Landfill NPL Site — WDNR File Ref. No.: 02-20-000915
Ripon, Wisconsin
Groundwater Monitoring and Corrective Action

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2. FIELD ACTIVITIES THIS REPORTING PERIOD

- Groundwater elevations were measured at 12 Layer 3 and Layer 4 monitoring wells by Tetra Tech on March 21, 2018. The Layer 3 water levels were collected to evaluate the groundwater flow direction in Layer 3. Water levels in Layer 4 wells were collected to evaluate groundwater flow direction in Layer 4 and evaluate whether the City of Ripon Municipal Well #9 is pumping. The water levels were measured consecutively to minimize effects from municipal pumping.

- A total of 12 monitoring wells were sampled for volatile organic compounds (VOCs) by Tetra Tech during the First Quarter 2018 event. One duplicate sample was collected for quality control. The revised groundwater monitoring program as outlined in the April 18, 2013, conditional approval letter (as amended on June 8, 2017) (Attachment E) from the WDNR was followed for this sampling event (Attachment E). Samples were collected from the wells listed as quarterly and semi-annual in the WDNR conditional approval letter.

- McKala Kiessling, from the City of Ripon conducted biweekly landfill gas monitoring of the extraction system exhaust, vent GV-6, probe GP-1 and wells LC-1, LC-2 and LC-3 for this quarterly report.

3. RESULTS OF FIELD ACTIVITIES

3.1. Groundwater Monitoring Event – Groundwater Elevations

The groundwater monitoring wells located at the FF/NN Landfill are grouped into four layers based on well screen elevations to better evaluate groundwater quality at discrete depth intervals. Attachment A contains a table showing the wells for each of the four layers.

For the First Quarter 2018 sampling event, groundwater elevations were measured in 12 monitoring wells by Ashley Wagner from Tetra Tech on March 21, 2018. The Layer 3 water levels were collected to evaluate the groundwater flow direction. Water levels in Layer 4 wells were collected to evaluate groundwater flow in Layer 4, and the elevations were measured consecutively to limit potential effects from municipal pumping. The elevations are provided in Table 1 and shown on Figures 3 and 4. Each layer is discussed separately below.

Groundwater elevations in all 28 monitoring wells are measured annually during the April sampling event.

3.1.1. Layer 3 Wells – Piezometers in Sandstone Bedrock

Layer 3 contains nine wells with screen elevations ranging from 634 feet to 704 feet MSL. Monitoring wells P-117 and P-118 are grouped within this layer. The groundwater potentiometric surface for this layer is displayed on Figure 3 and the historic data are provided on Chart 3. Compared to the event in First Quarter 2017, the water levels that were measured have decreased in all the wells that have historical data. The water levels decreased an average of 1.62 feet ranging from 0.56 feet in P-117 to 5.96 feet in P-114. While comparing historical data, it was noticed that P-114 was at a historical low. It is not known what caused the significant drop (equipment malfunction or sampler's error), but the measurement was back within a normal range during the Second Quarter sampling event.

Historically, the groundwater flow direction in this layer has been to the southwest and becomes west-southwest further downgradient. The elevation in P-114 was not included in the construction of the Layer 3 potentiometric surface map, Figure 3, as the measurement is thought to be an erroneous measurement. The March 2018 groundwater flow direction is consistent with the historical results. Monitoring well P-118 is the furthest downgradient Layer 3 monitoring well.

3.1.2. Layer 4 Wells – Piezometers in Sandstone or Granitic Bedrock

Layer 4 contains three wells with screen elevations ranging from 508 feet to 570 feet MSL. The three wells in this grouping are located 375 to 2300 feet downgradient of the landfill. The groundwater potentiometric surface for this layer is displayed on Figure 4 and the historic data are provided on Chart 4. Compared to the event in First Quarter 2017, the water levels decreased in all wells; P-107D by 1.41 feet, P-113A by 0.98 feet, and MW-3A by 2.10 feet.

When pumping at the City of Ripon Municipal Well #9 was terminated in May 2007, the flow direction in Layer 4 shifted from the southeast to the west. The City brought Well #9 back on line in April 2010. The groundwater flow direction on March 21, 2018 is to the northwest indicating that Well #9 was likely not pumping at the time of measurements.

3.2. Groundwater Monitoring Event - Monitoring Well Sampling

The revised groundwater monitoring program as outlined in the April 18, 2013 conditional approval letter (as amended on June 8, 2017) from WDNR was followed for this sampling event. Samples designated as quarterly and semi-annual in the April 18, 2013 approval letter, as amended, were collected during the First Quarter sampling event.

The groundwater samples were initially collected in January 2018 and submitted to Pace Analytical to be analyzed for VOCs following Environmental Protection Agency (EPA) Method 8260SIM, to achieve low detection limit of vinyl chloride. However, Pace Analytical did not analyze the samples within the method-specified time. Therefore, samples were re-collected from monitoring wells in February 2018, and submitted to Pace Analytical to be analyzed for VOCs following EPA Method 8260SIM. Again, Pace did not analyze the samples within the method-specified time. The samples collected in January and February 2018 were not analyzed by the laboratory because the data would not be valid.

Samples were re-collected from the monitoring wells again in March 2018. These samples were submitted to Test America to be analyzed for VOCs following EPA Method 8260SIM and Method 8260C because cis-1,2-dichloroethene is not included in the 8260SIM analysis. Analytical results and field forms for the March 2018 sample collection event 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 VOC concentrations in wells sampled during this event are provided in attached charts.

Natural attenuation parameters were measured on water removed from selected wells as identified in the April 18, 2013 conditional approval letter, as amended, from WDNR during the First Quarter sampling event. Dissolved oxygen (DO), oxygen-reduction potential (ORP), temperature, pH and conductivity were measured using a QED MP20 MicroPurge Flow Cell Meter. Iron II was measured in the field using Parachem Reagents (Ferrous Iron Reagent pillow powders, Method 8008) for colorimetry analysis using a Hach DR900 multi-parameter colorimeter. Historic and current natural attenuation parameters are presented in Table 3.

The contaminants of concern (COCs) are trichloroethylene (TCE) and its dechlorination byproducts, cis-1,2-dichlorothene (1,2-DCE) and vinyl chloride (VC). VC is the only contaminant detected at concentrations that exceed the Wisconsin Administrative Code Chapter NR 140 Enforcement Standard (ES). The ES for VC is 0.2 micrograms per liter (ug/L). The following sections present a summary of the First Quarter 2018 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 as presented in Attachment A.

3.2.1. Layer 1 Wells – Water Table Wells in Unconsolidated Sand & Gravel

- No layer 1 wells were sampled during the First Quarter 2018 event.

3.2.2. Layer 2 Wells – Piezometers in Unconsolidated Sand & Silt

- No Layer 2 wells were sampled during the First Quarter 2018 event.

3.2.3. Layer 3 Wells – Piezometers in Sandstone Bedrock

- P-103D (Chart 53):
    - Method 8260C: No detection of any VOC analyzed.
    - Method 8260SIM: TCE was detected at a concentration of 0.062 ug/L, which is below its ES of 5.0 ug/L. VC was detected at a concentration of 0.25, which exceeds its ES of 0.2 ug/L.
    - The VC concentration trend has been decreasing since the startup of the active gas control system in 2006.

- P-111D (Chart 54):
    - Method 8260C: VC was detected at a concentration of 4.7 ug/L, which exceeds its ES. 1,2-DCE was detected at a concentration of 2.6 ug/L, which is below its ES of 7 ug/L. Chloroethane was detected at an estimated concentration of 0.52 J ug/L, which is below its ES of 400 ug/L.
    - Method 8260SIM: VC was detected at a concentration of 4.1 ug/L, which exceeds its ES. 1,2-DCE is not analyzed using this method.
    - The VC concentration trend has been decreasing, while 1,2-DCE concentration trend has been increasing, since the startup of the active gas control system in 2006.

- MW-3B:
    - Method 8260C: No detection of any VOC analyzed.
    - Method 8260SIM: VC was detected at an estimated concentration of 0.035 J ug/L, which is below its ES.
    - No COCs have been detected since the startup of the active gas control system in 2006, except for VC, which was detected at concentrations greater than its ES in 2008 and 2018.

- P-113B:
    - Method 8260C: No detection of any VOC analyzed.
    - Method 8260SIM: No detection of any VOC analyzed.
    - No COCs have ever been detected in this well (installed in 2002).

- P-114 (Chart 57):

- Method 8260C: VC was detected at a concentration of 6.2 ug/L (6.3 ug/L in duplicate sample), which exceeds its ES. 1,2-DCE was detected at a concentration of 1.3 ug/L (1.4 ug/L in duplicate sample), which is below its ES.
- Method 8260SIM: VC was detected at a concentration of 4.7 ug/L (4.7 ug/L in duplicate sample), which exceeds its ES. 1,2-DCE is not analyzed using this method.
- The VC concentration trend has decreased since the startup of the active gas control system in 2006 and has been relatively stable since 2011. The 1,2-DCE concentration trend has been stable since the startup of the active gas control system in 2006.

- P-115 (Chart 58):
  - Method 8260C: VC was detected at an estimated concentration of 0.62 J ug/L, which exceeds its ES.
  - Method 8260SIM: VC was detected at a concentration of 0.85 ug/L, which exceeds its ES.
  - The VC concentration trend has been increasing since the startup of the active gas control in 2006, but has been relatively stable since 2010.

- P-116:
  - Method 8260C: No detection of any VOC analyzed.
  - Method 8260SIM: No detection of any VOC analyzed.
  - No COCs have ever been detected in this well (installed in 2001).

- P-117 (Chart 60):
  - Method 8260C: VC was detected at an estimated concentration of 0.89 J ug/L, which exceeds its ES. 1,2-DCE was detected at an estimated concentration of 0.66 J ug/L, which is below its ES.
  - Method 8260SIM: VC was detected at a concentration of 1.0 ug/L, which exceeds its ES.
  - This well was installed in November 2016, and the First Quarter 2018 results are similar to the previous quarterly results.

- P-118:
  - Method 8260C: No detection of any VOC analyzed.
  - Method 8260SIM: No detection of any VOC analyzed.
  - No COCs have ever been detected in this well. This is the second time this well has been sampled since it was installed in August 2017.

3.2.4. Layer 4 Wells – Piezometers in Sandstone or Granitic Bedrock

- MW-3A:
  - Method 8260C: No detection of any VOC analyzed.
  - Method 8260SIM: No detection of any VOC analyzed.
  - No COCs have ever been detected in this well (installed in 2002).

- P-107D (Chart 63):
    - Method 8260C: VC was detected at a concentration of 3.6 ug/L, which exceeds its ES. 1,2-DCE was detected at a concentration of 1.3 ug/L, which is below its ES. Chloroethane was detected at an estimated concentration of 0.88 J ug/L, which is below its ES.
    - Method 8260SIM: TCE was detected at a concentration of 0.072 ug/L, which is below its ES. VC was detected at a concentration of 3.1 ug/L, which exceeds its ES.
    - The VC concentration trend has been decreasing since the startup of the active gas control in 2006.

- P-113A:
    - Method 8260C: No detection of any VOC analyzed.
    - Method 8260SIM:
    - No detection of any VOC analyzed. No COCs have ever been detected in this well (installed in 2002).

3.2.5. Natural Attenuation Parameters

Both TCE and 1,2-DCE have reductively dechlorinated under anaerobic conditions to the byproduct VC. Because VC is the sole remaining contaminant of concern exceeding the ES and because VC reduction is most commonly an aerobic process via direct oxidation, monitored natural attenuation (MNA) parameters were measured to evaluate whether oxidative conditions exist in the groundwater. Based on EPA guidance (Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater 1998), iron II was measured as indirect evidence of natural attenuation in aerobic environments. The results of the MNA sampling are shown on Table 3 and continue to indicate that the aquifer is marginally aerobic. Where present, VC concentrations show either stable or declining trends confirming that natural attenuation is occurring.

3.3. Groundwater Monitoring Event - Private Drinking Water Well Sampling

Historically, samples have been collected from eight private drinking water wells. The Miller and Altnau private wells were abandoned in November, 2002. The Ehster, Wiese, and Hadel private wells were converted into monitoring wells P-114, P-115, and P-116, respectively, and continue to be sampled as monitoring wells (Section 3.1.3). The Gaastra and Perry wells were disconnected from each home's internal water piping and now just supply the outside faucets. The Rohde private drinking water well is sampled annually during the second quarter.

3.4. Interim LF Gas Extraction System Performance Monitoring

Results of the gas monitoring are presented in Table 6.

Current gas 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%. The following list describes any changes made to the system during this monitoring period based on the oxygen levels observed in the extracted landfill gas:

- 11/6/2017 – No changes made to runtime, 23.5 hours on.
- 11/17/2017-1/11/2018 – No changes made to runtime.
- 1/26/2018 – Decreased runtime from 23.5 hours on, to 20 hours on. System shut down by staff for approximately 1 hour to pump approximately 300 gallons of water out of condensate tank. The water was taken to the Waste Water Treatment Plant for disposal.
- 2/13/2018 –Decreased runtime from 20 hours on, to 12 hours on. System was shut down for approximately 1 hour to replace belt.
- 2/20/2018 – Blower shut down at 17:49 due to high tank level.
- 2/23/2018 – Restarted system at 12:03. Blower shut down at 13:10 due to high tank level.
- 2/26/2018 – Approximately 250 gallons of water was pumped out of tank and was taken to the Waste Water Treatment Plant for disposal. Blower restarted at 15:50.
- 2/27/2018 – No changes made to runtime. Blower was shut down for 4.5 hours during the day to pump approximately 250 gallons of water from tank. Water was taken to the Waste Water Treatment Plant for disposal.
- 3/13/2018-3/28/2018 – No changes made to runtime.

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

Monitoring of the atmosphere in 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. Methane in the gas concentrations in all wells and gas probes beyond the landfill limits have been consistently below the methane lower explosive limit (LEL; 5.0%).

3.5. Handling of Investigation-Derived Waste

An investigation-derived waste (IDW) sample (soil from drill cuttings) was submitted for analysis from P-118 (installed in August 2017) to determine disposal options. The IDW sample was analyzed for polychlorinated byphenols (PCBs), toxicity characteristic leaching procedure (TCLP) Metals, TCLP Mercury, TCLP semivolatile organic compounds (SVOCs), TCLP VOCs, Total VOCs and percent moisture. There were no detections of any of the parameters analyzed, except for barium, which was detected at a concentration of 0.13 milligrams per liter (mg/L) which is below the Toxicity Characteristic of 100 mg/L. Based on these results the containerized IDW will be thin spread at the well location with the owner's permission.

4. UPCOMING ACTIVITIES PLANNED

- Annual groundwater sampling and water level measurements will be conducted in May 2018 in accordance with the monitoring program outlined in the April 18, 2013 conditional approval letter, conditional approval letter (as amended on June 8, 2017) from WDNR. Samples will be collected from wells designated as quarterly and annually.
- McKala Kiessling, from the City of Ripon will conduct biweekly landfill gas monitoring of the extraction system vents and wells.
- Soil IDW generated during installation of P-118 will be thin spread at the well location with the owner's permission.

5. PERSONNEL

Mr. Michael Noel is the Project Manager and Principal Hydrogeologist. Ms. Ashley Wagner is the Senior Project Geologist who oversaw the field activities. The laboratory analyses for the First Quarter 2018 groundwater samples were completed by Test America in Chicago, Illinois.

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	Oct-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	822.66
MW-102	843.05	826.83	825.35	824.29	823.57	824.67	823.26			823.52	823.17	823.19
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	822.60
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	822.64
MW-106	878.90	826.67	824.21	824.24	820.96	824.61	823.23		822.42	823.45	823.10	822.96
P-106	878.91	826.63	824.09	824.07	823.42	824.51	823.16	820.40	822.33	823.38	823.02	822.89
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	818.62
P-107D	871.98			819.13	817.47	819.52	818.29	816.77	817.56	817.78	817.34	818.10
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	820.45
MW-111	856.46			817.58	817.93	818.10	817.29	816.29	817.33	818.30	817.28	817.32
P-111	856.13			817.09	817.43	817.60	816.78	815.75	816.85	817.83	816.79	816.83
P-111D	855.79	(Installed April 2002)										
MW-112	874.55				819.46	819.92	819.02		819.15	820.02	819.20	819.21
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)										
P-117	834.02	(Installed November 2016)										
P-118	826.93	(Installed August 2017)										
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	839.28
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
TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	May-01	Oct-01	Feb-02	May-02	Aug-02	Oct-02	Dec-02	Apr-03	Oct-03	Feb-04	Apr-04
MW-101	884.80	823.13	824.17	823.18	DRY	DRY	NT	DRY	DRY	821.24	NM	822.87
P-101	885.26	823.06	824.16	823.19	800.47	814.42	NT	818.91	820.46	821.16	NM	822.86
MW-102	843.05		824.38	823.53	818.93	DRY	NT	DRY	820.95	821.57	NM	823.34
P-102	842.99	823.39	824.49	823.69	799.84	814.94	NT	819.47	821.08	821.66	NM	823.42
MW-103	872.42		821.63	>51.32	819.28	819.34	NT	DRY	DRY	819.61	NM	821.06
P-103	872.92	823.02	823.87	823.00	801.70	814.74	NT	819.01	820.52	821.12	NM	822.77
P-103D	873.08										820.64	821.89
MW-104	875.15		823.88	>51.28	DRY	DRY	NT	DRY	820.37	820.85	NM	822.75
P-104	875.48	823.10	824.03	823.12	802.51	814.82	NT	819.05	820.50	821.43	NM	822.82
MW-106	878.90	823.34	Dry	823.50	DRY	DRY	NT	DRY	DRY	821.58	NM	823.25
P-106	878.91	823.26	824.25	823.39	800.31	814.52	NT	819.18	820.80	821.49	NM	823.17
MW-107	871.78	819.36	820.12	>52.5	816.72	DRY	DRY	DRY	817.73	818.35	NM	819.63
P-107	871.38	819.35	820.12	818.86	809.86	813.29	NT	816.65	817.74	818.39	NM	819.71
P-107D	871.98	819.04	816.61	817.70	811.80	815.35	816.43	816.68	817.26	816.72	NM	818.68
MW-108	845.25	818.32	818.62	>27.7	815.44	815.45	NT	815.79	816.20	816.68	NM	817.86
P-108	845.61	820.97	822.08	820.66	811.84	815.19	NT	817.83	818.57	819.26	NM	820.52
MW-111	856.46	818.15	818.74	817.51	813.43	813.59	NT	815.42	816.14	816.71	NM	818.03
P-111	856.13	817.68	818.26	817.04	812.54	812.90	NT	814.90	815.68	816.27	NM	817.59
P-111D	855.79				807.70	815.16	816.73	816.22	818.17	817.95	NM	819.55
MW-112	874.55	819.87	820.52	822.87	814.38	814.47	NT	816.75	817.87	818.54	NM	819.89
P-113A	833.09						816.09	816.39	816.93	816.20	NM	817.91
P-113B	833.10						816.68	816.93	817.25	816.58	816.61	818.30
P-114	839.35								817.17	816.93	NM	818.55
P-115	842.71										NM	818.61
P-116	845.34										NM	817.54
P-117	834.02											
P-118	826.93											
MW-3A	850.77			817.24	810.74	815.18	816.11	815.99	816.63	815.67	NM	818.03
MW-3B	851.04			819.32	807.37	815.34	817.07	817.54	818.31	817.92	NM	819.79
LC1	876.15	846.30	Dry	Dry	DRY	DRY	NT	DRY	DRY	NM	NM	846.45
LC2	866.05	839.03	838.92	838.97	838.83	838.98	NT	838.75	839.17	NM	NM	839.27
LC3	877.34	845.80	Dry	Dry	DRY	DRY	NT	DRY	DRY	NM	NM	DRY

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
TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	Jul-04	Oct-04	Jan-05	Apr-05	Jul-05	Oct-05	Jan-06	Mar-06	Apr-06	Jul-06	Oct-06
MW-101	884.80	825.76	823.36	822.85	823.27	821.11	DRY	820.81	NM	821.41	821.29	820.71
P-101	885.26	825.76	823.35	822.84	823.26	821.07	820.23	820.75	NM	821.37	821.22	820.69
MW-102	843.05	826.08	823.71	823.34	823.66	821.70	820.65	821.33	NM	821.91	821.75	821.15
P-102	842.99	826.17	823.79	823.38	823.75	821.48	820.72	821.41	NM	822.06	821.80	821.25
MW-103	872.42	824.54	822.24	820.52	821.60	819.70	819.25	819.24	NM	819.36	819.82	818.82
P-103	872.92	825.58	823.23	822.78	823.14	821.09	820.26	820.92	NM	821.42	821.33	820.70
P-103D	873.08	824.39	822.21	821.89	822.08	820.26	819.23	820.24	NM	820.54	820.43	819.88
MW-104	875.15	825.49	823.27	822.75	823.16	821.09	820.34	820.65	NM	821.35	821.16	820.61
P-104	875.48	825.61	823.36	822.82	823.21	821.20	820.40	820.79	NM	821.45	821.33	820.76
MW-106	878.90	826.07	823.60	823.20	823.61	821.42	DRY	821.24	NM	821.85	821.77	821.10
P-106	878.91	825.99	823.50	823.10	823.54	821.31	820.50	821.16	NM	821.72	821.67	820.99
MW-107	871.78	823.41	821.20	819.89	820.18	818.69	817.85	817.81	NM	818.03	DRY	817.90
P-107	871.38	823.34	821.20	820.91	820.20	818.72	817.84	817.80	NM	818.19	818.59	817.89
P-107D	871.98	819.78	817.72	817.65	818.77	815.90	814.85	816.33	816.45	816.89	816.83	816.24
MW-108	845.25	820.27	819.00	818.17	818.41	816.95	816.27	816.31	NM	816.70	816.88	816.39
P-108	845.61	823.39	821.94	820.84	821.05	819.76	819.13	819.04	NM	819.40	819.65	819.41
MW-111	856.46	821.40	819.60	817.39	818.69	817.32	816.51	816.31	NM	816.74	817.14	816.58
P-111	856.13	821.01	819.16	816.92	818.19	816.82	816.03	815.84	NM	816.24	816.74	816.09
P-111D	855.79	821.82	819.77	819.55	819.55	818.11	817.37	818.40	NM	818.62	818.54	818.26
MW-112	874.55	823.17	821.14	820.15	820.50	818.82	818.14	818.31	NM	818.66	818.88	818.20
P-113A	833.09	818.17	817.32	817.28	818.35	815.50	814.36	816.40	816.04	816.39	816.54	815.81
P-113B	833.10	820.16	818.25	818.13	818.36	816.74	815.47	816.90	NM	817.01	817.57	816.81
P-114	839.35	820.44	818.71	818.50	818.76	817.02	816.34	817.28	NM	817.38	817.36	816.86
P-115	842.71	820.51	818.71	818.55	818.62	817.05	816.05	817.44	NM	817.56	817.50	817.12
P-116	845.34	819.31	817.80	817.47	817.74	816.45	815.48	816.02	NM	816.48	816.34	816.00
P-117	834.02											
P-118	826.93											
MW-3A	850.77	819.73	817.00	817.15	816.84	816.05	814.87	817.98	815.81	816.29	817.51	816.34
MW-3B	851.04	822.01	819.66	819.60	819.45	818.44	817.28	819.15	NM	818.86	819.18	818.27
LC1	876.15	NM	DRY	DRY	846.39	DRY	NM	NM	NM	843.40	847.60	847.66
LC2	866.05	NM	838.89	DRY	839.05	838.89	838.91	839.01	NM	839.47	839.52	838.45
LC3	877.34	NM	DRY	DRY	DRY	DRY	NM	NM	NM	845.89	845.87	844.68

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
TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	Jan-07	May-07	Aug-07	Oct-07	Jan-08	May-08	Jul-08	Sep-08	Oct-08	Jan-09	Apr-09
MW-101	884.80	821.43	822.37	822.22	822.74	822.47	824.5	825.1	822.61	822.63	822.93	824.08
P-101	885.26	821.34	822.32	822.18	822.68	822.43	824.49	825.07	822.56	822.59	822.91	824.05
MW-102	843.05	821.73	822.85	822.55	822.95	822.95	824.9	825.36	822.77	822.83	823.4	824.49
P-102	842.99	821.82	822.90	822.63	823.01	823.03	824.95	825.34	822.74	822.81	823.5	824.57
MW-103	872.42	819.47	820.39	820.45	820.78	820.46	822.13	823.95	822.05	821.92	821.19	821.99
P-103	872.92	821.39	822.31	822.17	822.63	822.86	824.39	825.02	822.57	822.66	822.97	824.06
P-103D	873.08	820.52	821.56	821.495	822.015	821.935	823.885	824.425	822.145	822.265	822.475	823.545
MW-104	875.15	821.11	822.17	822.06	822.56	822.25	824.26	824.9	822.54	822.55	822.82	823.92
P-104	875.48	821.29	822.29	822.27	822.75	822.44	824.45	825.12	822.78	822.74	822.98	824.06
MW-106	878.90	821.78	822.78	822.51	822.76	822.84	824.77	824.98	822.7	822.75	823.31	824.41
P-106	878.91	821.62	822.71	822.44	822.7	822.75	824.7	825.25	822.63	822.64	823.25	824.37
MW-107	871.78	818.29	818.87	818.97	819.12	818.88	820.34	823.81	821.16	821.04	819.71	820.34
P-107	871.38	818.23	818.88	819.01	819.08	818.91	820.27	823.72	821.1	821.09	819.4	820.34
P-107D	871.98	817.05	818.27	818.79	819.93	820.32	822.9	823.25	820.9	820.87	820.81	822.24
MW-108	845.25	816.64	817.39	817.96	817.99	817.5	819.15	820.42	819.28	819.23	818.16	818.87
P-108	845.61	819.40	820.14	821.45	821.33	820.44	822.15	823.57	822.14	822.05	820.87	821.67
MW-111	856.46	816.72	817.40	817.44	817.51	NT	818.85	821.08	819.77	819.75	818.21	818.88
P-111	856.13	816.23	816.92	816.95	817.01	816.85	818.4	820.72	819.35	819.23	817.77	818.41
P-111D	855.79	818.48	819.84	819.44	819.92	820.14	822.09	822.61	820.74	820.79	820.65	821.71
MW-112	874.55	818.52	819.24	819.39	819.73	819.41	820.97	822.76	821.08	820.99	820.08	820.83
P-113A	833.09	817.29	817.78	818.13	819.42	819.91	822.4	822.8	820.45	820.53	820.34	821.81
P-113B	833.10	816.70	818.11	818.26	819.09	819.35	821.36	821.79	820.09	820.1	819.84	820.96
P-114	839.35	817.36	818.48	818.14	818.61	819	820.91	821.45	819.79	819.83	819.5	820.51
P-115	842.71	817.62	818.72	818.375	818.815	819.185	821.095	821.635	819.965	819.975	819.655	820.725
P-116	845.34	816.38	817.47	816.905	817.475	817.755	819.425	820.385	816.805	818.705	818.375	819.155
P-117	834.02											
P-118	826.93											
MW-3A	850.77	817.49	817.68	819.68	820.7	821.15	823.53	823.87	821.57	821.62	821.62	822.96
MW-3B	851.04	818.88	819.62	820.24	820.88	821.08	823.09	823.53	821.48	821.5	821.51	822.66
LC1	876.15	NM	846.41	NM	NM	NM	845.89	NM	NM	NM	NM	NM
LC2	866.05	NM	838.63	NM	NM	NM	837.81	NM	NM	NM	NM	NM
LC3	877.34	NM	846.12	NM	NM	NM	845.28	NM	NM	NM	NM	NM

Notes: Blank cells indicate that the water level was below top of pump; unable to measure.
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TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	Jul-09	Oct-09	Feb-10	May-10	Sep-10	Jan-11	Mar-11	Apr-11	Jul-11	Oct-11	Jan-12
MW-101	884.80	823.61	822.68	822.2	823.43	823.29	822.19	NM	823.66	824.41	822.45	822.93
P-101	885.26	823.6	822.63	822.17	823.37	823.25	822.14	NM	823.6	824.38	822.37	822.87
MW-102	843.05	823.85	822.99	822.65	823.77	823.66	822.66	NM	824.1	824.73	822.67	823.36
P-102	842.99	824.11	823.05	822.76	823.8	823.71	822.74	NM	824.16	824.79	822.67	823.44
MW-103	872.42	821.72	820.83	820.27	821.25	821.32	820.29	NM	821.34	822.45	821.14	820.97
P-103	872.92	823.59	822.62	822.24	823.34	823.19	822.26	NM	823.6	824.28	822.34	822.91
P-103D	873.08	822.905	822.055	821.705	822.575	822.35	821.81	821.96	822.88	823.26	821.64	822.04
MW-104	875.15	823.47	822.53	822.06	823.25	823.12	822.1	NM	823.47	824.19	822.32	822.82
P-104	875.48	823.64	822.68	822.22	823.41	823.3	822.26	NM	823.62	824.37	822.53	822.93
MW-106	878.90	823.94	822.96	822.61	823.72	823.6	822.57	NM	824.02	824.68	822.58	823.33
P-106	878.91	823.9	822.85	822.54	823.64	823.52	822.52	NM	823.94	824.6	822.48	823.24
MW-107	871.78	820.25	819.37	818.81	819.59	819.85	818.83	NM	819.76	821.04	820.04	819.96
P-107	871.38	820.26	819.34	818.48	819.62	819.82	818.98	NM	819.73	821.02	820.02	819.15
P-107D	871.98	820.61	819.98	819.88	819.68	818.85	820.47	819.05	820.29	819.73	818.74	819.38
MW-108	845.25	818.58	817.93	817.28	818.27	818.39	817.44	NM	818.51	819.21	818.48	818.11
P-108	845.61	821.73	821.06	820.08	821.53	821.66	820.25	NM	821.32	822.51	821.45	820.86
MW-111	856.46	818.71	817.87	817.29	818.07	818.3	817.39	NM	818.37	819.45	818.64	818.12
P-111	856.13	818.3	817.43	816.86	817.61	817.88	816.96	NM	817.89	819.01	818.18	817.68
P-111D	855.79	820.85	820.15	819.91	820.41	820.16	817.15	820.05	820.83	820.9	819.92	820.33
MW-112	874.55	820.62	819.76	819.24	820.13	820.24	819.33	NM	820.23	821.36	820.2	819.91
P-113A	833.09	820.1	819.4	819.57	819.09	818.24	820.05	818.53	819.67	818.78	818.34	818.72
P-113B	833.10	819.81	819.24	819.15	819.27	818.88	819.45	818.97	819.64	819.34	819.04	818.87
P-114	839.35	819.6	818.99	818.75	819.12	819	819.09	818.85	819.75	819.67	819	819.16
P-115	842.71	819.805	819.145	818.935	819.205	819.13	819.265	819.005	819.855	819.745	819.145	819.265
P-116	845.34	818.465	817.755	817.565	818.055	817.85	817.895	817.755	818.845	818.605	817.985	818.125
P-117	834.02											
P-118	826.93											
MW-3A	850.77	821.46	820.87	820.85	819.92	818.91	821.26	819	819.85	819.18	819.74	819.6
MW-3B	851.04	821.74	821.06	820.84	821	820.59	821.04	820.35	821.18	821.1	820.65	820.78
LC1	876.15	NM	NM	NM	843.73	NM	NM	NM	843.14	NM	NM	NM
LC2	866.05	NM	NM	NM	838.96	NM	NM	NM	838.4	NM	NM	NM
LC3	877.34	NM	NM	NM	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.
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
TOC Elevation = Top of Casing Elevation

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	Oct-13	Jan-14	Apr-14	Jul-14	Oct-14
MW-101	884.80	823.33	823.56	821.86	821.99	823.89	NM	NM	NM	822.32	NM	NM
P-101	885.26	823.29	823.5	821.82	821.92	823.88	NM	NM	NM	822.29	NM	NM
MW-102	843.05	823.8	823.89	822.3	822.43	824.38	NM	NM	NM	823.12	NM	NM
P-102	842.99	823.86	823.96	822.41	822.52	824.45	NM	NM	NM	823.02	NM	NM
MW-103	872.42	821.24	821.9	820.21	820.09	821.5	NM	819.91	NM	820.12	NM	820.68
P-103	872.92	823.32	823.48	821.9	822.02	823.88	NM	821.35	NM	822.42	NM	822.55
P-103D	873.08	822.47	822.43	821.085	821.275	823.135	823.24	820.63	820.85	821.69	822.45	821.73
MW-104	875.15	823.22	823.4	821.79	821.87	823.76	NM	NM	NM	822.26	NM	NM
P-104	875.48	823.22	823.57	821.96	822.02	823.87	NM	NM	NM	822.32	NM	NM
MW-106	878.90	823.73	823.87	822.27	822.43	824.3	NM	NM	NM	822.84	NM	NM
P-106	878.91	823.64	825.8	822.18	822.33	824.21	NM	NM	NM	822.75	NM	NM
MW-107	871.78	819.77	820.68	818.98	818.73	819.87	NM	NM	NM	818.78	NM	NM
P-107	871.38	819.76	820.7	819	818.71	819.88	NM	NM	NM	818.82	NM	NM
P-107D	871.98	819.42	818.1	817.78	818.02	820.41	820.56	817.57	817.80	818.53	819.74	818.19
MW-108	845.25	818.28	818.74	817.63	817.27	818.74	NM	NM	NM	817.64	NM	NM
P-108	845.61	821.01	822.09	820.82	820.02	821.52	NM	NM	NM	820.12	NM	NM
MW-111	856.46	818.32	819.09	817.61	817.25	818.52	NM	NM	NM	817.49	NM	NM
P-111	856.13	817.87	818.67	817.16	816.81	818.07	NM	NM	NM	817.05	NM	NM
P-111D	855.79	820.28	820	819.01	819.29	821.07	820.97	818.61	818.85	819.88	820.41	819.68
MW-112	874.55	820.15	820.8	819.27	819.15	820.39	NM	819.07	NM	819.18	NM	819.69
P-113A	833.09	818.51	817.23	817.23	817.5	819.83	819.92	816.76	817.32	817.95	819.09	817.68
P-113B	833.10	818.71	818.39	817.96	817.92	820.89	820.02	817.31	817.97	818.87	819.41	818.28
P-114	839.35	819.06	818.46	818.03	818.27	819.94	820.05	816.57	817.93	818.83	819.51	818.46
P-115	842.71	819.075	818.805	818.105	818.335	820.025	820.205	817.635	817.89	818.96	819.63	818.57
P-116	845.34	818.125	817.575	817.115	817.395	818.855	818.825	816.755	816.92	817.77	818.54	817.54
P-117	834.02											
P-118	826.93											
MW-3A	850.77	818.41	818.23	817.6	817.98	820.07	820.25	816.62	817.81	819.50	819.11	818.12
MW-3B	851.04	820.27	820.35	819.28	819.48	821.49	821.48	818.59	819.24	820.69	820.61	819.89
LC1	876.15	843.21	NM	NM	NM	843.36	NM	NM	NM	843.71	NM	NM
LC2	866.05	837.87	NM	NM	NM	838.51	NM	NM	NM	840.02	NM	NM
LC3	877.34	845.63	NM	NM	NM	845.52	NM	NM	NM	846.29	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)
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NT - Not taken, only measured deep wells
NM - Well not measured
TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17	Apr-17	Jul-17
MW-101	884.80	NM	822.43	NM	NM	NM	824.20	NM	NM	NM	823.84	NM
P-101	885.26	NM	822.36	NM	NM	NM	824.16	NM	NM	NM	823.79	NM
MW-102	843.05	NM	822.91	NM	NM	NM	824.71	NM	NM	NM	824.41	NM
P-102	842.99	NM	822.99	NM	NM	NM	824.76	NM	NM	NM	824.42	NM
MW-103	872.42	NM	820.27	NM	819.48	NM	821.86	NM	820.7	NM	821.57	NM
P-103	872.92	NM	822.42	NM	820.15	NM	824.22	NM	822.33	NM	823.83	NM
P-103D	873.08	821.75	821.55	821.04	821.14	821.82	823.45	822.23	821.49	822.19	823.04	823.86
MW-104	875.15	NM	822.36	NM	NM	NM	824.08	NM	NM	NM	823.81	NM
P-104	875.48	NM	822.40	NM	NM	NM	824.18	NM	NM	NM	823.84	NM
MW-106	878.90	NM	822.91	NM	NM	NM	824.69	NM	NM	NM	824.35	NM
P-106	878.91	NM	822.82	NM	NM	NM	824.61	NM	NM	NM	824.23	NM
MW-107	871.78	NM	818.87	NM	NM	NM	820.31	NM	NM	NM	820.06	NM
P-107	871.38	NM	818.84	NM	NM	NM	820.30	NM	NM	NM	820.08	NM
P-107D	871.98	818.35	818.08	818.12	817.46	819.25	820.84	818.81	818.31	819.16	820.38	820.50
MW-108	845.25	NM	817.39	NM	NM	NM	818.86	NM	NM	NM	818.55	NM
P-108	845.61	NM	820.07	NM	NM	NM	821.53	NM	NM	NM	821.2	NM
MW-111	856.46	NM	817.39	NM	NM	NM	818.91	NM	NM	NM	818.66	NM
P-111	856.13	NM	816.95	NM	NM	NM	818.45	NM	NM	NM	818.22	NM
P-111D	855.79	819.51	819.50	819.21	818.51	822.95	821.30	820.11	819.59	820.27	820.86	821.72
MW-112	874.55	NM	819.30	NM	818.77	NM	820.71	NM	819.69	NM	820.42	NM
P-113A	833.09	817.81	817.59	817.48	817.02	818.80	820.23	818.16	817.82	818.89	819.78	820.14
P-113B	833.10	818.17	818.42	818.35	817.73	818.75	820.17	818.66	818.63	819.37	819.76	820.71
P-114	839.35	818.53	818.46	818.41	817.73	818.72	820.18	818.81	818.59	819.28	819.85	820.72
P-115	842.71	818.52	818.60	815.48	817.84	818.90	820.33	818.81	818.58	NM	819.99	821.37
P-116	845.34	817.55	817.41	817.46	816.67	817.57	819.19	817.93	817.67	818.18	818.99	819.58
P-117	834.02									817.90	818.67	819.27
P-118	826.93											
MW-3A	850.77	818.04	818.48	817.86	817.63	819.10	819.93	818.57	818.53	820.09	820.01	821.03
MW-3B	851.04	819.79	819.95	819.50	818.96	820.32	821.43	820.36	820.04	821.01	821.25	822.32
LC1	876.15	NM	843.72	NM	NM	NM	843.65	NM	NM	NM	842.91	NM
LC2	866.05	NM	839.41	NM	NM	NM	838.01	NM	NM	NM	837.42	NM
LC3	877.34	NM	845.62	NM	NM	NM	847.13	NM	NM	NM	846.43	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
TOC Elevation = Top of Casing Elevation

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

Well Name	TOC Elevation	Oct-17	Mar-18
MW-101	884.80	NM	NM
P-101	885.26	NM	NM
MW-102	843.05	NM	NM
P-102	842.99	NM	NM
MW-103	872.42	821.77	NM
P-103	872.92	823.57	NM
P-103D	873.08	822.62	821.60
MW-104	875.15	NM	NM
P-104	875.48	NM	NM
MW-106	878.90	NM	NM
P-106	878.91	NM	NM
MW-107	871.78	NM	NM
P-107	871.38	NM	NM
P-107D	871.98	818.90	817.75
MW-108	845.25	NM	NM
P-108	845.61	NM	NM
MW-111	856.46	NM	NM
P-111	856.13	NM	NM
P-111D	855.79	820.21	819.17
MW-112	874.55	820.66	NM
P-113A	833.09	817.95	817.91
P-113B	833.10	818.94	818.19
P-114	839.35	819.02	813.32
P-115	842.71	819.04	818.36
P-116	845.34	818.10	817.41
P-117	834.02	818.07	817.34
P-118	826.93	818.09	817.30
MW-3A	850.77	818.35	817.99
MW-3B	851.04	820.39	819.81
LC1	876.15	NM	NM
LC2	866.05	NM	NM
LC3	877.34	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
TOC Elevation = Top of Casing Elevation

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-3A	04/04/2002	NR				NA																														
MW-3A	05/22/2002	NR				NA																														
MW-3A	08/20/02	NR																																		
MW-3A	12/05/02	NR																																		
MW-3A	04/22/03																																			
MW-3A	10/22/03																																			
MW-3A	05/11/04																																			
MW-3A	10/14/04																																			
MW-3A	01/27/05																																			
MW-3A	04/26/2005																																			
MW-3A	08/02/05																																			
MW-3A	10/26/05																																			
MW-3A	01/31/2006																																			
MW-3A	04/24/06																																			
MW-3A	07/27/06											0.35 J																								
MW-3A	10/31/06																																			
MW-3A	01/31/07																																			
MW-3A	5/1/2007																																			
MW-3A	8/8/2007																																			
MW-3A	10/19/2007																																			
MW-3A	5/6/2008																																			
MW-3A	10/1/2008																																			
MW-3A	4/7/2009																							0.56J												
MW-3A	10/28/2009																																			
MW-3A	5/24/2010																																			
MW-3A	10/5/2010																							0.49J												
MW-3A	1/24/2011																																			
MW-3A	4/13/2011																																			
MW-3A	7/12/2011																							0.63J												
MW-3A	10/19/2011											0.66J																								
MW-3A	1/23/2012																																			
MW-3A	4/4/2012																																			
MW-3A	7/25/2012																																			
MW-3A	10/16/2012																																			
MW-3A	1/15/2013																																			
MW-3A	4/26/2013																																			
MW-3A	7/2/2013																																			
MW-3A	10/24/2013																																			
MW-3A	1/9/2014																																			
MW-3A	4/17/2014																																			
MW-3A	7/17/2014																																			
MW-3A	10/24/2014																																			
MW-3A	1/15/2015	3.1 J																																		
MW-3A	4/28/2015																																			

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-3A	7/1/2015																																			
MW-3A	10/27/2015																																			
MW-3A	1/14/2016																																			
MW-3A	4/13/2016																																			
MW-3A	7/28/2016																																			
MW-3A	10/27/2016																																			
MW-3A	1/20/2017																																			
MW-3A	4/6/2017																																			
MW-3A	7/14/2017																																			
MW-3A	10/18/2017																																			
MW-3A	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
MW-3A	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR		NR

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
NR140	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-3B	04/04/2002	NR				NA																						0.38							**0.31**	
MW-3B	05/22/2002	NR				NA																					NA								
MW-3B	8/20/2002	NR																									NA								
MW-3B	12/5/2002	NR																																	
MW-3B	4/22/2003																																		
MW-3B	10/22/2003																																		
MW-3B	5/11/2004																																	**0.2 J**	
MW-3B	07/22/2004																																		
MW-3B	10/14/2004																																		
MW-3B	1/27/2005																																		
MW-3B	4/26/2005																																		
MW-3B	8/2/2005																																	**0.30 J**	
MW-3B	10/26/2005																																	**0.39 J**	
MW-3B	01/31/2006																																		
MW-3B	4/24/2006																																		
MW-3B	7/27/2006											0.45 J																							
MW-3B	10/31/2006																																		
MW-3B	1/31/2007																																		
MW-3B	5/1/2007																																		
MW-3B	8/8/2007																																		
MW-3B	10/19/2007																																		
MW-3B	5/6/2008																		1.3															**5.4**	
MW-3B	10/1/2008																																		
MW-3B	4/7/2009																																		
MW-3B	10/28/2009											0.42J																							
MW-3B	5/24/2010																																		
MW-3B	10/5/2010																																		
MW-3B	1/24/2011																																		
MW-3B	4/13/2011																																		
MW-3B	7/12/2011																							0.81J											
MW-3B	10/19/2011																																		
MW-3B	1/23/2012																																		
MW-3B	4/4/2012																																		
MW-3B	7/25/2012																																		
MW-3B	10/16/2012																																		
MW-3B	1/15/2013																																		
MW-3B	4/26/2013																																		
MW-3B	7/2/2013																																		
MW-3B	10/24/2013																																		
MW-3B	1/9/2014																																		
MW-3B	4/17/2014																																		
MW-3B	7/17/2014																																		
MW-3B	10/24/2014																																		
MW-3B	1/15/2015																																		

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-3B	4/28/2015																																			
MW-3B	7/1/2015																																			
MW-3B	10/27/2015																																			
MW-3B	1/14/2016																																			
MW-3B	4/13/2016																																			
MW-3B	7/28/2016																																			
MW-3B	10/27/2016																																			
MW-3B	1/20/2017																																			
MW-3B	4/6/2017																																			
MW-3B	7/14/2017																																			
MW-3B	10/18/2017																																			
MW-3B	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
MW-3B	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR	0.035 J	NR

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-101	10/1/1993	NR																								0.7 J										
MW-101	04/1/1994	NR																								0.6J										
MW-101	05/01/1996	NR																								0.6J										
MW-101	10/01/1996	NR										0.89 J														0.72 J										
MW-101	05/01/1997	NR																																		
MW-101	10/01/1997	NR																								0.7										
MW-101	04/98*	NR																																		
MW-101	10/01/1998	NR																																		
MW-101	04/01/1999	NR																																		
MW-101	10/01/1999	NR																								0.7										
MW-101	05/01/2000	NR																								0.32										
MW-101	10/01/2000	NR																								0.38										
MW-101	05/01/2002	NR																								0.28										
MW-101	10/11/2001	NR																																		
MW-101	02/05/2002	NR				NA									0.19											0.32	NA				0.16					
MW-101	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	NA	NA	NA
MW-101	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	NA	NA	NA
MW-101	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	NA	NA	NA	NA
MW-101	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	NA	NA	NA	NA
MW-101	10/23/2003																																			
MW-101	4/28/2004																																			
MW-101	10/13/2004	11																																		
MW-101	4/27/2005																																			
MW-101	4/28/2006	18																																		
MW-101	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	NA	NA	NA	NA
MW-101	2/1/2007																																			
MW-101	5/1/2007	2.4																																		
MW-101	5/6/2008																																			
MW-101	4/8/2009																																			
MW-101	10/29/2009																																			
MW-101	5/25/2010																																			
MW-101	10/4/2010																							0.44J												
MW-101	1/26/2011																																			
MW-101	4/11/2011																																			
MW-101	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-101	10/01/1993	NR																																	
P-101	04/01/94	NR																									0.5J								
P-101	020/5/02	NR				NA																				NA									
P-101	05/22/2002	NR				NA																				NA									
P-101	10/13/2004																																		
P-101	4/27/2005																																		
P-101	10/25/2005																																		
P-101	4/28/2006																																		
P-101	11/1/2006																																		
P-101	5/1/2007																																		
P-101	5/6/2008																																		
P-101	4/8/2009																																		
P-101	11/4/2009											0.75J																							
P-101	5/25/2010																																		
P-101	10/4/2010																							0.44J											
P-101	1/26/2011																																		
P-101	4/11/2011																																		
P-101	4/3/2012																																		
MW-102	10/26/1993	NR																																	
MW-102	04/11/1994	NR																									3								
MW-102	05/08/1996	NR																									0.4J								
MW-102	10/30/1996	NR										0.99 J														0.30 J									
MW-102	05/12/1997	NR																																	
MW-102	10/26/1997	NR																																	
MW-102	04/13/1998	NR																	0.46																
MW-102	10/11/2001	NR																																	
MW-102	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	NA	NA	NA	NA
MW-102	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	NA	NA	NA	NA
MW-102	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	NA	NA	NA	NA
MW-102	07/23/2004																																		
MW-102	10/14/2004																																		
MW-102	4/27/2005																																		
MW-102	10/25/2005																																		
MW-102	4/25/2006																																		
MW-102	11/1/2006																																		
MW-102	5/2/2007																																		
MW-102	4/30/2008																																		
MW-102	10/2/2008																																		
MW-102	4/8/2009																																		
MW-102	5/20/2010																																		
MW-102	4/11/2011																																		
MW-102	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-102	10/26/1993	NR																																		
P-102	04/11/1994	NR																																		
P-102	10/11/2001	NR																																		
P-102	05/21/2002	NR				NA																					NA							**0.33J**	
P-102	08/20/2002	NR																									NA							**0.62**	
P-102	12/04/2002	NR																																**0.68**	
P-102	04/21/2003																							0.48 J&										**0.83**	
P-102	10/22/2003																																	**0.96**	
P-102	04/27/2004																																	**2.1**	
P-102	10/14/2004											0.5 J																						**0.32**	
P-102	1/27/2005																																			
P-102	4/27/2005																																			
P-102	8/3/2005																																			
P-102	8/3/2005 dup																																			
P-102	10/25/2005																																			
P-102	2/1/2006																																			
P-102	4/27/2006																																			
P-102	4/27/2006 dup																																			
P-102	7/27/2006											0.66 J																								
P-102	11/1/2006																																			
P-102	2/15/2007																																			
P-102	5/2/2007																																			
P-102	8/14/2007																																			
P-102	10/16/2007	2.9 J																																		
P-102	5/6/2008																																			
P-102	10/2/2008																																			
P-102	4/8/2009																																			
P-102	11/4/2009																																			
P-102	11/4/2009 Dup																																			
P-102	5/20/2010																																			
P-102	4/11/2011																																			
P-102	4/3/2012	9.1 J																																		

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-103	10/27/1993	NR																	**410**															**75**	
MW-103	04/11/1994	NR																	**1100**															**440**	
MW-103	04/01/94 Dup	NR																	**970**															**410**	
MW-103	05/01/1996	NR							7J										**740**	9J											**10J**			**170**	
MW-103	05/01/96 Dup	NR							8J			**9 J**							**840**	10J											**11J**			**180**	
MW-103	10/01/1996	NR	3.3						8.1 J	1.9		1.1	0.76 J			0.99 J		0.30 J	**520 E**	5	1.9										4.7			**98 E**	
MW-103	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**	
MW-103 [2]	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**	
MW-103	04/98*	NR																																	
MW-103	10/01/1998	NR	2						5.7										**260**	3.3											**5.8**			**45**	
MW-103	04/01/1999	NR	1.4						4.7										**150**	2.4											3.9			**47**	
MW-103	10/01/1999	NR							5.2										**170**	2.6											2.4			**48**	
MW-103	05/01/2000	NR	1.8						6.5										**170**	3.4											4.1			**60**	
MW-103	10/01/2000	NR	1.6						6.9	3.1			0.84			0.33			**130**	4.5	0.75										**6.6**			**78**	
MW-103	05/01/2001	NR	1.2						5.7	1.5			0.92						**94**	3.4	0.54			2.6L			1.1				4.5			**46**	
MW-103	10/11/2001	NR	1.1			80			2.6	0.62			0.54						25	2.7				6.4L				0.8						**15**	
MW-103 [2]	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**	
MW-103	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	NA	NA	NA	NA
MW-103	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	NA	NA	NA	NA
MW-103	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	NA	NA	NA	NA
MW-103	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	NA	NA	NA	NA
MW-103	10/21/2003		0.8						1.3										58	1.9											1.7			**21**	
MW-103	04/28/2004	27	0.61 J			26			0.53 J										16												1.9			**6.7**	
MW-103	10/13/2004	56	1.4						1.7			0.52							12	2.5								0.89			0.78			**7.9**	
MW-103	4/26/2005		1.2						2.8										1.9	3.0								0.71						**1.8**	
MW-103	4/25/2006	31				8.0 J			0.62 J										5.2												0.48 J			**1.8**	
MW-103	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	NA	NA	NA	NA
MW-103	2/1/2007					6.1J		2.2 J											10												0.82J			**0.34**	
MW-103	5/2/2007								1.7										14												1.7			**0.75**	
MW-103	10/18/2007																		26												2.8			**2.2**	
MW-103	5/5/2008								0.63J										15.7												3.4				
MW-103	10/2/2008								0.43J										12.3												3.8				
MW-103	4/7/2009																		7.7												3.1				
MW-103	10/28/2009																		4.6												2.4				
MW-103	2/25/2010																		2.9												2.1				
MW-103	5/24/2010																		4												2.1				
MW-103	10/4/2010																		3.5					0.73J							2.4				
MW-103	1/26/2011																		2.9												2.7				
MW-103	4/11/2011																		2.7												2.1				
MW-103	7/11/2011																		4.2					0.74J							2.3				
MW-103	10/19/2011																		4.3												3				
MW-103	1/24/2012																		3.2												2.6				
MW-103	4/3/2012																		2.9												2.3				
MW-103	4/3/2012 Dup																		3.3												2.4				

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-103	7/25/2012																		2												2.2					
MW-103	10/17/2012																		2.1												1.7					
MW-103	1/16/2013																		1.7												2.3					
MW-103	4/24/2013																		1.1												1.7					
MW-103	10/24/2013																		2												1.6					
MW-103	4/16/2014																		0.77J												1.5					
MW-103	10/24/2014																		1.1												2					
MW-103	4/28/2015																		0.45 J												1.6					
MW-103	4/12/2016																		0.35 J												1.4					
MW-103	10/27/2016																		0.28 J												1.5					
MW-103	4/5/2017																		0.30 J												1.5					
MW-103	10/18/2017																		0.33 J												1.7					

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-103	10/27/1993	NR																																	
P-103	04/12/1994	NR																																	
P-103	05/9/1996	NR																	0.1J									0.1J						0.1J	
P-103	10/31/1996	NR										0.84 J																							
P-103	05/13/1997	NR																																	
P-103	10/27/1997	NR																																	
P-103	04/13/1998	NR																																	
P-103	2/4/2002	NR				NA																					NA								
P-103	05/21/2002	NR				NA													[0.54]								NA								
P-103	10/13/2004											0.52 J																							**1.7**	
P-103	1/26/2005																																			
P-103	1/26/2005 dup																																			
P-103	4/26/2005																																		**2.4**	
P-103	8/3/2005																																		**3.2**	
P-103	10/26/2005																																		**3.2**	
P-103	02/01/2006																																		**3.6**	
P-103	4/25/2006																																		**2.9**	
P-103	7/28/2006											0.49 J																							**1.6**	
P-103	11/1/2006																																		**1.4**	
P-103	2/1/2007																																		**1.5**	
P-103	5/2/2007																																		**1.6**	
P-103	8/14/2007																																		**1.4**	
P-103	10/18/2007																																		**1.2**	
P-103	5/5/2008																																		**0.74**	
P-103	5/5/2008 Dup																																		**0.81**	
P-103	10/2/2008																																		**0.81J**	
P-103	10/2/2008 Dup																																		**0.89J**	
P-103	4/7/2009																																		**0.75J**	
P-103	10/28/2009											0.43J																							**0.58J**	
P-103	2/25/2010											0.52J																							**0.49J**	
P-103	5/24/2010																																			
P-103	10/5/2010																							0.53J											**0.41J**	
P-103	1/25/2011																																		**0.34J**	
P-103	4/12/2011																																		**0.39J**	
P-103	7/11/2011																																			
P-103	10/18/2011																																		**0.29J**	
P-103	1/24/2012																																		**0.28J**	
P-103	4/4/2012																																		**0.28 J**	
P-103	7/25/2012																																			
P-103	10/17/2012																																			
P-103	1/16/2013																																			
P-103	4/26/2013																																			
P-103	10/24/2013																																			
P-103	4/16/2014																																			

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-103	10/24/2014																																			
P-103	4/28/2015																																			
P-103	10/27/2015																																			
P-103	4/13/2016																																			
P-103	10/27/2016																																			
P-103	4/6/2017																																			
P-103	10/18/2017																																			

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-103D	02/4/2004					NA																		0.55J			NA							**1.1**	
P-103D	05/11/2004																																		**1.5**	
P-103D	05/11/04 dup																																		**1.5**	
P-103D	07/23/2004																																		**1.3**	
P-103D	07/23/04 dup																																		**1.5**	
P-103D	10/13/2004											0.43 J							0.86 J																
P-103D	04/26/2005																		0.84 J																**3.0**	
P-103D	10/26/2005																		0.98 J																**2.7**	
P-103D	10/26/2005 dup																		0.95 J																**2.8**	
P-103D	4/25/2006																																		**2.6**	
P-103D	11/1/2006																																		**1.9**	
P-103D	5/2/2007																																		**1.4**	
P-103D	10/18/2007																																		**1.2**	
P-103D	5/5/2008																																		**0.69**	
P-103D	5/5/2008 Dup																																		**0.66**	
P-103D	10/2/2008																																		**1.1**	
P-103D	10/2/2008 Dup																																		**1.5**	
P-103D	4/7/2009																																		**0.77J**	
P-103D	4/7/2009 Dup																																		**0.74J**	
P-103D	10/28/2009											1.1																							**0.75J**	
P-103D	2/25/2010																																		**0.64J**	
P-103D	5/24/2010																																			
P-103D	10/5/2010																							0.86J											**0.71J**	
P-103D	1/25/2011																																			
P-103D	4/11/2011																																		**0.69J**	
P-103D	7/11/2011																																		**0.78J**	
P-103D	10/18/2011																																		**0.54J**	
P-103D	1/24/2012																																		**0.73J**	
P-103D	4/4/2012	10.7 J																																	**0.98J**	
P-103D	7/25/2012																																			
P-103D	10/17/2012																																			
P-103D	1/16/2013																																			
P-103D	4/26/2013																																			
P-103D	7/2/2013																																			
P-103D	10/24/2013																																			
P-103D	1/9/2014																																		**0.67J**	
P-103D	4/16/2014																		0.26J																**0.43J**	
P-103D	7/17/2014																		0.49 J																**0.54 J**	
P-103D	10/24/2014											0.71 J							0.46 J																**0.68 J**	
P-103D	1/15/2015	3.0 J																	0.37 J																**0.40 J**	
P-103D	4/28/2015																		0.42 J																**0.46 J**	
P-103D	7/1/2015																																			
P-103D	10/27/2015																		0.33 J																**0.26 J**	
P-103D	1/14/2016																																		**0.36 J**	

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-103D	4/13/2016																		0.27 J																**0.39 J**	
P-103D	7/28/2016																		0.44 J																	
P-103D	10/27/2016																		0.30 J																**0.28 J**	
P-103D	1/20/2017																																		**0.28 J**	
P-103D	4/6/2017																																		**0.26 J**	
P-103D	7/14/2017																		0.32 J																	
P-103D	10/18/2017																		0.30 J																**0.35 J**	
P-103D	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
P-103D	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR	0.062	NR	NR	NR	**0.25**	NR

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-104	10/27/1993	NR	2						2				2						1 JB									31							
MW-104	4/19/1994	NR	1						1				1						10												0.8J				**6.0**	
MW-104	05/9/1996	NR	**6**						5	1		0.3 J				0.2 J			6	0.3 J		0.1J						0.2 J			0.5J				**10**	
MW-104	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
MW-104	05/12/1997	NR	4.8						4.5	1.5			0.91						1.1						0.32										**4.5**	
MW-104	10/27/1997	NR	0.63						1.3				0.85						7.3																**18**	
MW-104	04/13/1998	NR	1.2																**74**	0.67								0.46			3.5				**17**	
MW-104	10/13/1998	NR	1.7										0.76						3.3																**15**	4.1
MW-104	04/07/1999	NR	3.2						1.4										6.6												0.71				**6.1**	
MW-104	10/27/1999	NR	3.5						5.4				0.92						4.5																**2.8**	
MW-104	05/2/2000	NR	3						5.7				1.5						0.7									0.13							**1.1**	
MW-104	10/30/2000	NR	2						6.2				1.6						2.6									0.12			0.33				**29**	
MW-104	05/1/2001	NR	2.5						5.6				2		0.47				7					0.51L			0.81	0.13			0.66				**8.6**	
MW-104	10/11/2001	NR	3.1						9.5				2.3					0.85	2					0.39L				0.1					0.14		**2.2**	
MW-104	02/5/2002	NR	2.7			NA	0.16		8				2		0.19				5.1								NA	0.17			0.73				**13**	
MW-104	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	NA	NA	NA	NA
MW-104	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	NA	NA	NA	NA
MW-104	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	NA	NA	NA	NA
MW-104	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	NA	NA	NA	NA
MW-104	04/22/2003		1.8			6.9J			3.1										4.6																**6.5**	
MW-104	10/23/2003	3.2	4						7.8				1.8						3.3																**8.6**	
MW-104	04/28/2004		2.4						6				2.2 J						6.4																**8.7**	
MW-104	10/13/2004		2.5						6.5				2.2 J						10																**20**	
MW-104	4/27/2005		1.7						5.4				2.1 J																						**0.64**	
MW-104	10/25/2005		1.4						6.9				2.5 J						3.9																**13**	
MW-104	4/25/2006		1.4			4.6 J			4.9				2.2 J						1.0 J																**1.1**	
MW-104	11/2/2006		1.2 J						4.8				1.7 J																							
MW-104	11/2/2006 dup		1.3 J						5																											
MW-104	5/2/2007		0.8J						4				2.0J																							
MW-104	10/18/2007		0.75 J						6				2.0 J																							
MW-104	5/6/2008		0.62J						3.3				1.8																							
MW-104	10/1/2008		0.52J						3.7				1.9																							
MW-104	4/7/2009		0.68J						3.5				2.3																							
MW-104	11/4/2009								3.9				1.9																							
MW-104	5/20/2010								3.5				2.4																							
MW-104	4/11/2011								3.1				1.9																							
MW-104	10/19/2011								3.6				2																							
MW-104	4/3/2012		0.41J						3.5				1.9																							
MW-104	10/17/2012								2.8				1.8																							
MW-104	4/24/2013								3				1.8																							
MW-104	4/16/2014								2.4				1.8																							
MW-104	4/15/2015								2.8				1.7																							
MW-104	4/12/2016								2.6				1.5																							
MW-104	4/5/2017								3				1.3																							

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-104	10/27/1994	NR																																		
P-104	04/19/1994	NR																																		
P-104	05/09/1996	NR																																		
P-104	10/30/1996	NR										0.20 J																								
P-104	05/12/1997	NR																																		
P-104	10/27/1997	NR																																		
P-104	04/13/1998	NR																																		
P-104	10/11/2001	NR																						0.52L												
P-104	02/5/2002	NR	0.18			NA						0.85															NA									
P-104	5/21/2002	NR				NA																					NA									
P-104	08/20/2002	NR																									NA									
P-104	10/13/2004											0.45 J																								
P-104	10/13/04 Dup																																			
P-104	8/3/2005																																			
P-104	8/3/05 Dup																																			
P-104	7/28/2006																																			
P-104	8/14/2007																																			
P-104	5/5/2008																																			
P-104	4/7/2009																																			
P-104	5/26/2010																																			
P-104	4/12/2011																																			
P-104	4/3/2012																																			
MW-106	10/1/1993	NR																																		
MW-106	04/01/1994	NR																										11								
MW-106	02/04/02	NR				NA																					NA	0.25								
MW-106	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	NA	NA	NA	NA
MW-106	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	NA	NA	NA	NA
MW-106	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	NA	NA	NA	NA
MW-106	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	NA	NA	NA	NA
MW-106	07/23/2004																																			
MW-106	4/27/2005																																			
MW-106	4/27/05 Dup																																			
MW-106	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	NA	NA	NA	NA
MW-106	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	NA	NA	NA	NA
MW-106	2/15/2007																																			
MW-106	8/14/2007																																			
MW-106	4/30/2008																																			
MW-106	4/8/2009																																			
MW-106	5/20/2010																																			
MW-106	4/11/2011																																			
MW-106	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-106	10/01/1993	NR																													0.6J					
P-106	04/01/1994	NR																													0.8J					
P-106	05/01/1996	NR																	0.2 J												0.8J					
P-106	10/01/1996	NR										0.62J																			0.22 J					
P-106	05/01/1997	NR																													0.65					
P-106	10/01/1997	NR																													0.67					
P-106	04/01/1998	NR																													0.61					
P-106	10/01/1998	NR																													0.71					
P-106	04/01/1999	NR																													0.58					
P-106	10/1/1999	NR																													0.61					
P-106	05/01/2000	NR																													0.56					
P-106	10/01/2000	NR																													0.6					
P-106	05/01/2001	NR																													0.56					
P-106	10/11/2001	NR																													0.39					
P-106	2/5/2002	NR				NA																					NA				0.6					
P-106	02/05/02 Dup	NR				NA																					NA				0.6					
P-106	05/22/2002	NR				NA																					NA				0.49					
P-106	05/22/02Dup	NR				NA																					NA				0.47 J					
P-106	08/20/2002	NR																									NA				0.43 J					
P-106	12/4/2002	NR																													0.53					
P-106	04/22/2003																														0.55 J					
P-106	10/21/2003																														0.56					
P-106	10/21/03 Dup																																			
P-106	4/27/2004																																			
P-106	10/13/2004											0.9																			0.84 J					
P-106	4/27/2005																																			
P-106	10/25/2005																																			
P-106	4/28/2006																																			
P-106	11/1/2006																																			
P-106	5/1/2007																																			
P-106	10/22/2007																																			
P-106	4/30/2008																																			
P-106	10/1/2008																																			
P-106	4/8/2009																																			
P-106	4/8/2009 Dup																																			
P-106	11/4/2009																																			
P-106	5/26/2010																																			
P-106	4/12/2011																																			
P-106	4/3/2012																																			
P-106	4/24/2013																																			
P-106	4/16/2014																																			
P-106	4/15/2015																																			
P-106	4/12/2016																																			
P-106	4/5/2017																																			

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-107	10/27/1993	NR																													2					
MW-107	4/12/1994	NR																													2					
MW-107	5/9/1996	NR																													2					
MW-107	10/21/1996	NR										0.80 J																			2.2					
MW-107	5/13/1997	NR													0.9																2.6					
MW-107	10/27/1997	NR													0.7																2					
MW-107	4/14/1998	NR																													2.1					
MW-107	10/13/98*	NR																													NA					
MW-107	4/6/1999	NR																													1.8					
MW-107	10/27/1999	NR																													1.1					
MW-107	5/2/2000	NR																													1.6					
MW-107	10/31/2000	NR																													1.2					
MW-107	5/31/2001	NR													0.47									0.57L							1.8					
MW-107	10/11/2001	NR																													0.87					
MW-107	2/4/2002	NR				NA									0.35												NA				1.4					
MW-107	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	NA	NA	NA	NA
MW-107	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	NA	NA	NA	NA
MW-107	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	NA	NA	NA	NA
MW-107	4/21/2003																							0.52 J							1.2					
MW-107	10/21/2003																														2.2					
MW-107	4/27/2004																														1.9					
MW-107	10/13/2004											0.63 J																			0.65 J					
MW-107	4/27/2005																														1.1					
MW-107	10/27/2005																														0.79 J					
MW-107	4/25/2006																							0.49 J							0.55 J					
MW-107	10/31/2006																																			
MW-107	5/1/2007																														0.86					
MW-107	10/17/2007																														0.53 J					
MW-107	5/5/2008																																			
MW-107	10/1/2008																																			
MW-107	4/7/2009																																			
MW-107	10/28/2009											1.6																			0.51J					
MW-107	5/24/2010																																			
MW-107	10/4/2010																							0.70J												
MW-107	1/26/2011																																			
MW-107	4/11/2011																																			
MW-107	10/18/2011																																			
MW-107	4/3/2012																																			
MW-107	10/17/2012																																			
MW-107	4/24/2013																																			
MW-107	4/16/2014																																			
MW-107	4/15/2015																																			
MW-107	4/12/2016																																			
MW-107	4/6/2017																																			

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-107	10/27/1993	NR																	4															**6**	
P-107	4/12/1994	NR																	2									0.7J						**3**	
P-107	4/12/94 Dup	NR																	2									0.7J						**3**	
P-107	5/9/1996	NR	0.1 J							0.2 J									2									0.1 J			0.1 J			**2**	
P-107	10/23/1996	NR								0.19		0.79 J							1.9															**2.3**	
P-107	10/23/96 Dup	NR								0.21		0.49 J							2.1															**2.7**	
P-107	5/14/1997	NR																	1.3															**2**	
P-107	5/14/97 Dup	NR																	1.1															**1.7**	
P-107	10/27/1997	NR																	2.2															**2.6**	
P-107	10/27/97 DUP	NR																	1.8															**2.3**	
P-107	4/14/1998	NR																	2.3															**2.2**	
P-107	4/14/98 Dup	NR																	2.3															**2.4**	
P-107	10/14/1998	NR																	2.1									0.2						**1.5**	
P-107	10/14/98 DUP	NR																	2.4															**1.7**	
P-107	4/6/1999	NR																	1.5															**0.58**	
P-107	10/27/1999	NR																	1.8																
P-107	10/27/99 Dup	NR																	1.8																
P-107	5/2/2000	NR																	1.5															**1.2**	
P-107	5/02/00 Dup	NR																	1.6															**1.2**	
P-107	10/31/2000	NR																	1.4																
P-107	10/31/00 Dup	NR																	1.4																
P-107	5/9/2001	NR																	0.96					0.52L			0.72			1.8				**0.85**	
P-107	5/9/2001 Dup	NR																	0.97					0.49L			0.79							**0.86**	
P-107	10/11/2001	NR																	1.6															**1.7**	
P-107	10/11/01 Dup	NR																	1.5															**1.7**	
P-107	2/4/2002	NR				NA													1.6								NA							**1.2**	
P-107	5/21/2002	NR				NA													1.8								NA							**1.5**	
P-107	5/21/02 Dup	NR				NA													1.7								NA							**1.4**	
P-107	8/20/2002	NR																	0.84								NA							**0.54J**	
P-107	12/4/2002	NR																	1.3															**1**	
P-107	4/21/2003																		1.5 J															**1**	
P-107	04/21/2003 Dup																		1.3 J																
P-107	10/21/2003																		1.3															**0.93**	
P-107	4/27/2004																		0.96 J															**0.61**	
P-107	10/13/2004																		0.89 J															**0.64**	
P-107	10/13/04 Dup																		1.1 J																
P-107	4/27/2005																																		
P-107	10/27/2005																																		
P-107	4/25/2006																																	**0.79**	
P-107	10/31/2006																																	**0.33J**	
P-107	5/1/2007																																	**0.76**	
P-107	10/19/2007																		0.92 J															**1**	
P-107	5/5/2008																																	**0.48J**	
P-107	10/1/2008																																		

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-107	4/7/2009											0.24J																						**0.88J**	
P-107	10/28/2009											1.6																						**0.64J**	
P-107	5/24/2010																																	**1.1**	
P-107	10/5/2010																																	**0.94J**	
P-107	1/24/2011																																		
P-107	4/12/2011																																	**0.84J**	
P-107	10/18/2011																																	**0.54J**	
P-107	4/4/2012	10.7 J																																**1.1**	
P-107	10/17/2012																																		
P-107	4/26/2013																																		
P-107	4/16/2014																		0.51J															**0.89J**	
P-107	4/15/2015																		0.48J															**0.57J**	
P-107	4/13/2016																		0.52 J															**0.72 J**	
P-107	4/6/2017																																	**0.79 J**	

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
NR140	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-107D	10/27/1993	NR																	2B																**6**	
P-107D	4/13/1994	NR																																		
P-107D	5/9/1996	NR	0.1J									0.3J							0.2J									0.3J							**0.6J**	
P-107D	10/23/1996	NR										0.44 J																							**3.9**	
P-107D	5/14/1997	NR																	0.49																**2.4**	
P-107D	10/27/1997	NR																	1.7																**5.1**	
P-107D	4/14/1998	NR																	1																**4.1**	
P-107D	10/14/1998	NR																																	**2.2**	
P-107D	4/6/1999	NR																	0.34																**0.87**	
P-107D	10/27/1999	NR																																	**1.7**	
P-107D	5/2/2000	NR																																	**1.3**	
P-107D	10/31/2000	NR																	0.64																	
P-107D	01/05/2001	NR			0.33														1.5					0.44L			0.72B							**5.6**	
P-107D	10/11/2001	NR																	2.2																**10**	
P-107D	2/4/2002	NR				NA													1.2								NA				0.17				**3.9**	
P-107D	02/04/02 Dup	NR																	1.2																**3.9**	
P-107D	5/21/2002	NR				NA													1.1								NA								**3.3**	
P-107D	8/20/2002	NR																	1.1								NA								**3.1**	
P-107D	12/4/2002	NR																	0.75																**0.81**	
P-107D	4/21/2003																		1.3 J																**3.3**	
P-107D	10/21/2003																		0.97																**3.5**	
P-107D	4/27/2004																		1.5 J																**4.2**	
P-107D	10/13/2004									1.2 J		0.93							2.0 J																**5.9**	
P-107D	4/27/2005																		1.3 J																**3.1**	
P-107D	4/27/05 Dup									1.9 J									2.5																**6.2**	
P-107D	10/27/2005									1.2 J									2.0 J																**4.3**	
P-107D	4/25/2006									2.3 J									3.1					0.68 L											**7.7**	
P-107D	10/31/2006									2.0 J									2.1 J																**4.3**	
P-107D	5/1/2007									1.6J									2.5J																**6.2**	
P-107D	5/1/2007 Dup									1.6J									2.9																**6.7**	
P-107D	10/19/2007																																		**3**	
P-107D	5/5/2008																																		**1.3**	
P-107D	10/1/2008																																		**1.6**	
P-107D	4/7/2009											0.96J																							**2.5**	
P-107D	10/28/2009																																		**2**	
P-107D	2/25/2010											0.25J																							**1.8**	
P-107D	5/24/2010																																		**4**	
P-107D	10/5/2010																																		**1.6**	
P-107D	1/24/2011																																		**2.6**	
P-107D	4/12/2011																																		**2.6**	
P-107D	7/11/2011																		1.2																**5.3**	
P-107D	10/18/2011																																		**1.8**	
P-107D	1/23/2012																																			
P-107D	4/4/2012																																		**4.5**	

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-107D	7/25/2012																																		**2.1**	
P-107D	10/17/2012																																		**2**	
P-107D	1/16/2013																																		**2.3**	
P-107D	4/26/2013																																		**2.1**	
P-107D	7/2/2013																																			
P-107D	10/24/2013																																		**2.6**	
P-107D	1/9/2014																		0.57 J																**2.9**	
P-107D	4/16/2014									0.60J									1.1																**5.6**	
P-107D	7/17/2014									0.75 J									1.2																**4.8**	
P-107D	10/24/2014									0.78 J		0.54 J							0.77 J					0.32 J											**3.1**	
P-107D	1/15/2015									0.87 J									1.4																**4.7**	
P-107D	4/28/2015									1.2									0.79 J																**2.1**	
P-107D	7/1/2015																		0.59 J																**2.1**	
P-107D	10/27/2015																		1.2																**3.1**	
P-107D	1/14/2016									1.3									0.77 J																**2.6**	
P-107D	4/13/2016																		1.5																**4.8**	
P-107D	7/28/2016																		1.0 J																**1.9**	
P-107D	10/27/2016																		0.45 J																**2**	
P-107D	1/20/2017									2.4									1.6																**4.3**	
P-107D	4/6/2017									0.77 J									0.99 J																**2.2**	
P-107D	7/14/2017									1.4									1.7																**3.8**	
P-107D	10/18/2017									0.76 J									0.52 J																**1.9**	
P-107D	3/21/2018 [5]			NR			NR			0.88 J									1.3				NR						NR				NR	NR	**3.6**	NR
P-107D	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR	0.072	NR	NR	NR	**3.2**	NR

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-108	10/18/1993	NR																										11								
MW-108	4/13/1994	NR																										2								
MW-108	5/8/1996	NR																	0.2 J									0.2 J								
MW-108	10/23/1996	NR										0.85 J																								
MW-108	5/12/1997	NR																																		
MW-108	10/27/1997	NR																																		
MW-108	4/14/1998	NR																																		
MW-108	10/11/2001	NR																						0.34L												
MW-108	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	NA	NA	NA	NA
MW-108	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	NA	NA	NA	NA
MW-108	12/5/2002	NR																																		
MW-108	10/14/2004																		1.2 J												1.3 J				**0.67**	
MW-108	4/27/2005																		1.0												0.7				**0.3**	
MW-108	8/3/2005																														0.70 J					
MW-108	10/25/2005																																			
MW-108	02/01/2006																																			
MW-108	4/28/2006																																			
MW-108	7/27/2006											0.36 J																								
MW-108	11/2/2006																																			
MW-108	2/1/2007																																			
MW-108	5/2/2007																																			
MW-108	8/14/2007																																			
MW-108	10/16/2007																																			
MW-108	5/6/2008	2.7J																																		
MW-108	10/2/2008																																			
MW-108	4/8/2009																																			
MW-108	11/4/2009																																			
MW-108	11/4/2009 Dup																																			
MW-108	5/20/2010																																			
MW-108	5/20/2010 Dup																																			
MW-108	4/11/2011																																			
MW-108	4/11/2011 Dup																																			
MW-108	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-108	10/25/1993	NR																																		
P-108	10/25/93 Dup	NR																																		
P-108	4/13/1994	NR																																		
P-108	4/13/94 Dup	NR																																		
P-108	10/11/2001	NR																						0.32L												
P-108	2/5/2002	NR				NA																					NA									
P-108	5/21/2002	NR				NA																					NA									
P-108	10/14/2004											0.45 J																								
P-108	1/28/2005																																			
P-108	10/25/2005																																			
P-108	7/27/2006											0.75 J																								
P-108	8/14/2007														2.7 J																					
P-108	5/6/2008																																			
P-108	4/8/2009																																			
P-108	5/20/2010																																			
P-108	4/11/2011																																			
P-108	4/2/2012																																			
MW-111	4/19/1994	NR																																		
MW-111	10/11/2001	NR																						0.30L												
MW-111	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	NA	NA	NA	NA
MW-111	8/19/2002	NR																									NA									
MW-111	12/5/2002	NR																																		
MW-111	10/13/2004																																			
MW-111	10/26/2005																																			
MW-111	4/24/2006																																			
MW-111	8/8/2007																																			
MW-111	5/5/2008																																			
MW-111	4/7/2009																							0.44J												
MW-111	10/28/2009																																			
MW-111	5/24/2010																																			
MW-111	10/4/2010																							0.80J												
MW-111	1/26/2011																																			
MW-111	4/11/2011																																			
MW-111	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-111	4/19/1994	NR																										2								
P-111	10/11/2001	NR																																		
P-111	2/5/2002	NR				NA																					NA								
P-111	5/22/2002	NR				NA																					NA								
P-111	8/19/2002	NR																									NA								
P-111	08/19/02 Dup	NR																									NA								
P-111	12/5/2002	NR																																	
P-111	12/05/02 Dup	NR																																	
P-111	4/22/2003																																			
P-111	10/22/2003																																			
P-111	4/28/2004																																			
P-111	8/3/2005																																			
P-111	7/27/2006																																			
P-111	8/8/2007																																			
P-111	5/5/2008																																			
P-111	4/7/2009																																			
P-111	10/28/2009																																			
P-111	5/24/2010																																			
P-111	10/5/2010																																			
P-111	1/24/2011																																			
P-111	4/13/2011																																			
P-111	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-111D	4/4/2002	NR																	0.6									0.3							**13**	
P-111D	5/22/2002	NR				NA													0.59 J								NA								**15**	
P-111D	8/19/2002	NR																	0.37 J								NA								**12**	
P-111D	12/5/2002	NR																	0.42 J																**11**	
P-111D	4/23/2003																																		**12**	
P-111D	10/23/2003																																		**9.1**	
P-111D	5/11/2004									1.4																									**15**	
P-111D	07/23/2004																																		**14**	
P-111D	10/13/2004									1.9 J																		1.6 J							**11**	
P-111D	1/27/2005																																		**8.8**	
P-111D	4/26/2005									3.7									0.87 J																**13**	
P-111D	4/26/05 Dup									3.5																									**13**	
P-111D	8/3/2005											2.9 J							0.96 J																**10**	
P-111D	10/26/2005									3.1 J									1.1 J																**10**	
P-111D	10/26/2005 dup									2.7 J									0.93 J																**10**	
P-111D	02/01/2006									4.2									0.89 J																**11**	
P-111D	4/24/2006									2.8 J									1.3 J																**11**	
P-111D	7/27/2006											0.30 J							1.2 J																**10**	
P-111D	10/31/2006									1.4 J									1.3 J																**8.5**	
P-111D	1/31/2007									3.0J									1.4J																**8.2**	
P-111D	5/1/2007									3.1J									1.3J																**8.2**	
P-111D	8/8/2007									2.9 J									1.5 J																**8.5**	
P-111D	10/17/2007									2.7 J									1.5 J																**8**	
P-111D	5/5/2008																		1.5																**4.7**	
P-111D	10/2/2008									1.8									1.5																**5.7**	
P-111D	4/7/2009									1.4									1.7																**5.5**	
P-111D	10/28/2009									1.8									1.5																**5**	
P-111D	2/25/2010									1.8									1.5																**4.4**	
P-111D	2/25/2010 Dup									1.5									1.5																**3.9**	
P-111D	5/24/2010									1.9									1.5																**5.9**	
P-111D	5/24/2010 Dup									1.8									1.4																**4.4**	
P-111D	10/5/2010									1.5									1.3					0.55J												**4.7**	
P-111D	10/5/10 Dup									1.6									1.3					1.2												**4.7**	
P-111D	1/24/2011									1.9									1.1																**5.2**	
P-111D	1/24/11 Dup									1.7									1.4																**4.5**	
P-111D	4/13/2011									2.3									1.6																**5.8**	
P-111D	4/13/2011 Dup									2.8									1.3																**7.1**	
P-111D	7/11/2011																		1.4					0.88J												**5.3**	
P-111D	10/18/2011									1.5									1.4																**4.5**	
P-111D	10/18/2011 Dup									1.4									1.5																**4.8**	
P-111D	1/23/2012									2									1.7																**4.3**	
P-111D	4/4/2012	8.0 J								2.1									2																**6**	
P-111D	4/4/2012 Dup	8.3 J								2									2																**5.7**	
P-111D	7/25/2012																		1.6																**6.5**	

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-111D	10/17/2012									1.3									1.7																**7.2**	
P-111D	10/17/2012 Dup									1.8									1.9																**6.9**	
P-111D	1/16/2013									2.2									1.7																**8.1**	
P-111D	4/26/2013									2.3									1.4																**6.5**	
P-111D	4/26/2013 Dup									2.2									1.3																**6.7**	
P-111D	7/2/2013									1.9									1.9																**6.8**	
P-111D	10/24/2013									1.5									1.6																**6.7**	
P-111D	1/9/2014									2.1									1.5																**6.9**	
P-111D	4/16/2014									2									1.7																**7.9**	
P-111D	4/16/2014 Dup									1.8									1.7																**8**	
P-111D	7/17/2014									1.9									1.9																**7.7**	
P-111D	10/24/2014									3									2.1																**12.2**	
P-111D	1/15/2015	3.3 J								1.9									2.1																**6.9**	
P-111D	1/15/2015 Dup	4.3 J								1.7									1.9																**6.7**	
P-111D	4/28/2015									1.7									2.2																**7.8**	
P-111D	4/28/2015 Dup									2.5									2.1																**7**	
P-111D	7/1/2015	11.2 J								1.7									1.7																**8**	
P-111D	10/27/2015																		2.4																**6.5**	
P-111D	10/27/2015 Dup																		2.2																**6.5**	
P-111D	1/14/2016									1.6									2.1																**5.8**	
P-111D	4/13/2016									2.2									2.1																**5.1**	
P-111D	4/13/2016 Dup									2.2									2																**5.2**	
P-111D	7/28/2016																		2.3																**7.4**	
P-111D	10/27/2016									1.3									2.1																**6.9**	
P-111D	1/20/2017									1.6									2.4																**6.4**	
P-111D	4/6/2017									1.7									2.7																**5.9**	
P-111D	4/6/2017 Dup									1.3									2.5																**4.9**	
P-111D	7/14/2017									1.6									3																**6.2**	
P-111D	10/18/2017									1.4									2.3																**6.2**	
P-111D	3/21/2018 [5]			NR			NR			0.52 J									2.6				NR						NR				NR	NR	**4.7**	NR
P-111D	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR	**4.1**	NR

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-112	11/27/1996	NR	0.6J							2 J									59	1 J											3J				**15**	
MW-112	11/27/96 Dup	NR	0.7J							2 J									58	1 J											4J				**16**	
MW-112	5/12/1997	NR	0.59						0.27										5.4																**2.2**	
MW-112	10/26/1997	NR	0.5						0.29										1.3																	
MW-112	4/13/1998	NR	0.69							1.4									57	1.3											1.9				**12**	
MW-112	10/13/1998	NR	0.76																**80**												1.2				**25**	
MW-112	4/6/1999	NR	0.72							1.4									40	0.56											1.7				**7.9**	
MW-112	10/27/1999	NR																	7.6												1					
MW-112	5/2/2000	NR	0.46																3.4												0.39					
MW-112	10/30/2000	NR							0.37										5.6												0.37					
MW-112	5/9/2001	NR	0.42						0.42										3.5																**0.98**	
MW-112	10/11/2001	NR	0.36						0.39	0.53									27												0.83				**3.7**	
MW-112	2/4/2002	NR	0.23			NA			0.48										0.49								NA									
MW-112	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	NA	NA	NA	NA
MW-112	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	NA	NA	NA	NA
MW-112	12/4/2002																		**150**												2.7 J				**56**	
MW-112	4/22/2003		1.2 J							7.4 &									**220**	4.5 J											**5.9**				**45**	
MW-112	10/22/2003	2.5	0.88							5.9									60	1.4											1.6				**51**	
MW-112	4/28/2004		0.53 J						0.45 J	4									18												1.1 J				**9.9**	
MW-112	4/28/04 dup	6.5	0.61 J						0.48 J	4.7									22												1.1 J				**9.3**	
MW-112	07/23/2004	110	1.1							23									**140**	2.6	0.58					1					**7.4**				**31**	
MW-112	10/13/2004		1.0 J						0.42	14									**110**	2.4 J											2.9				**25**	
MW-112	10/13/04 Dup		0.87 J							15		0.56 J							**94**	2.1 J						0.60 J					2.9				**29**	
MW-112	1/26/2005		0.76 J							20									**85**	2.3 J															**27**	
MW-112	4/26/2005		0.6 J							13									64	1.2 J											1.8				**17**	
MW-112	8/3/2005								0.48 J										4.6																**1.5**	
MW-112	10/25/2005																		2.5 J																**1.4**	
MW-112	02/01/2006		0.41 J						0.45 J	3.2 J									11												0.76 J				**4.9**	
MW-112	4/25/2006								0.48 J	0.97 J									5.4																**2.8**	
MW-112	7/27/2006								0.43 J			0.24 J							2.9																**1.7**	
MW-112	7/27/2006 dup											0.52 J																								**1.5**	
MW-112	11/2/2006																		2.3 J																**1.7**	
MW-112	2/1/2007								0.46J	1.4J									3.8																**2.5**	
MW-112	5/2/2007								0.53J	1.3J									6.1																**2.6**	
MW-112	8/14/2007								0.51 J										4.4																**1.8**	
MW-112	8/14/2007 dup								0.51 J										4.9																**1.6**	
MW-112	10/18/2007								0.49 J										4																**1.2**	
MW-112	5/5/2008																		33.3												1.8				**1.3**	
MW-112	10/2/2008																		13.3												0.60J				**0.79J**	
MW-112	4/7/2009																		5.1												0.57J				**0.56J**	
MW-112	11/4/2009																																			
MW-112	5/20/2010																		2.7																**0.33J**	
MW-112	4/11/2011																		1.8																	
MW-112	7/11/2011																		5.3					0.60J							1.5				**0.27J**	

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
MW-112	10/19/2011																		1.4																	
MW-112	1/24/2012																														0.76J					
MW-112	4/3/2012																																			
MW-112	7/25/2012																		1.5																	
MW-112	10/17/2012																																			
MW-112	1/16/2013																																			
MW-112	4/24/2013																																			
MW-112	10/24/2013																																			
MW-112	4/16/2014																																			
MW-112	10/24/2014																																			
MW-112	4/28/2015																																			
MW-112	10/28/2015																																			
MW-112	4/12/2016																																			
MW-112	10/27/2016																																			
MW-112	4/5/2017																																			
MW-112	10/18/2017																																			

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-113A	9/12/2002	NR									0.37J																	1.0J								
P-113A	12/3/2002	NR																																		
P-113A	4/23/2003																											2.2								
P-113A	10/22/2003																																			
P-113A	5/11/2004																																			
P-113A	8/2/2005																																			
P-113A	7/27/2006											0.84																								
P-113A	8/8/2007																																			
P-113A	5/6/2008																																			
P-113A	4/6/2009																																			
P-113A	10/29/2009											0.42J																								
P-113A	5/25/2010																																			
P-113A	10/6/2010																																			
P-113A	1/25/2011																																			
P-113A	4/13/2011																																			
P-113A	7/12/2011																							1.3												
P-113A	10/19/2011																																			
P-113A	1/23/2012																																			
P-113A	4/4/2012	7.5 J																																		
P-113A	7/25/2012																																			
P-113A	10/16/2012																																			
P-113A	1/15/2013																																			
P-113A	4/26/2013																																			
P-113A	7/2/2013																																			
P-113A	10/24/2013																																			
P-113A	1/9/2014																																			
P-113A	4/17/2014																																			
P-113A	7/17/2014																																			
P-113A	10/24/2014																							0.24 J												
P-113A	1/15/2015																																			
P-113A	4/28/2015																																			
P-113A	7/1/2015																																			
P-113A	10/27/2015																																			
P-113A	1/14/2016																																			
P-113A	4/13/2016																																			
P-113A	7/28/2016																																			
P-113A	10/27/2016																																			
P-113A	1/20/2017																																			
P-113A	4/6/2017																																			
P-113A	7/14/2017																																			
P-113A	10/18/2017																																			
P-113A	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
P-113A	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR		NR

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
NR140	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-113B	9/11/2002	NR		0.59							1			0.35								0.41J						6.6								2.6
P-113B	12/3/2002	NR																																		
P-113B	4/23/2003																																			
P-113B	7/30/2003																																			
P-113B	10/22/2003																																			
P-113B	2/4/2004																																			
P-113B	5/11/2004																																			
P-113B	07/22/2004																																			
P-113B	10/14/2004											0.49 J																								
P-113B	1/27/2005																																			
P-113B	4/27/2005																																			
P-113B	8/2/2005																																			
P-113B	10/26/2005											0.42 J																								
P-113B	02/01/2006																																			
P-113B	4/24/2006																																			
P-113B	7/27/2006											0.49 J																								
P-113B	10/31/2006																																			
P-113B	1/31/2007																																			
P-113B	5/1/2007																																			
P-113B	8/8/2007																																			
P-113B	10/19/2007																																			
P-113B	5/6/2008																																			
P-113B	10/1/2008											0.29J																								
P-113B	4/6/2009																																			
P-113B	4/6/2009 Dup																																			
P-113B	10/29/2009																																			
P-113B	5/25/2010																																			
P-113B	10/6/2010																							0.51J												
P-113B	1/25/2011																							1.6												
P-113B	4/13/2011																																			
P-113B	7/12/2011																							1.3												
P-113B	10/19/2011											0.43J																								
P-113B	1/23/2012																																			
P-113B	4/4/2012																																			
P-113B	7/25/2012																																			
P-113B	10/16/2012																																			
P-113B	1/15/2013																																			
P-113B	4/26/2013																																			
P-113B	7/2/2013																																			
P-113B	10/24/2013																																			
P-113B	1/9/2014																																			
P-113B	4/17/2014																																			
P-113B	7/17/2014	4.0 J																																		
P-113B	10/24/2014	3.2 J																																		

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-113B	1/15/2015																																			
P-113B	4/28/2015																																			
P-113B	7/1/2015																																			
P-113B	10/27/2015																																			
P-113B	1/14/2016																																			
P-113B	4/13/2016																																			
P-113B	7/28/2016																																			
P-113B	10/27/2016																																			
P-113B	1/20/2017																																			
P-113B	4/6/2017																																			
P-113B	7/14/2017																																			
P-113B	10/18/2017																																			
P-113B	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
P-113B	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR		NR

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-114	11/19/2001	NR																	0.93															**7**	
P-114	2/5/2002	NR																	0.85															**5.5**	
P-114	5/22/2002	NR																	1.2															**6.2**	
P-114	8/21/2002	NR																	0.93															**5.4**	
P-114	12/3/2002	NR																	1.3									0.40J						**6.3**	
P-114	4/23/2003																																	**3.3**	
P-114	10/23/2003																		1.2															**8.6**	
P-114	10/23/03 Dup																		1.4															**9.2**	
P-114	5/11/2004																		1.5 J															**10**	
P-114	07/22/2004																		1.4 J															**7.9**	
P-114	10/13/2004											0.39 J							1.7 J															**10**	
P-114	1/27/2005																																	**3.5**	
P-114	4/26/2005																																	**3.0**	
P-114	8/2/2005																		1.1 J															**6.1**	
P-114	10/26/2005											0.84							1.3 J															**6.6**	
P-114	10/26/2005 dup											0.49							1.4 J															**6.9**	
P-114	01/31/2006																		1.3 J															**8.4**	
P-114	4/24/2006																		1.3 J															**7.6**	
P-114	4/24/2006 dup																		1.3 J															**7.9**	
P-114	7/27/2006											0.48 J							1.6 J															**8.9**	
P-114	7/27/2006 dup											0.38 J							1.6 J															**8.7**	
P-114	11/2/2006																		2.7 J															**13**	
P-114	11/02/2006 dup																		2.7 J															**13**	
P-114	2/1/2007																		1.2J					0.46J										**7.5**	
P-114	2/1/2007 dup																		1.4J															**8.5**	
P-114	5/1/2007																		1.1J															**7.4**	
P-114	5/1/2007 dup																		1.2J															**7.8**	
P-114	8/8/2007																		1.1 J															**6.7**	
P-114	8/8/2007 dup																		1.2 J															**7.5**	
P-114	10/22/2007																		0.95 J															**7.8**	
P-114	10/22/2007 Dup																		1.2 J															**8.1**	
P-114	5/6/2008																		1.5															**6.6**	
P-114	10/2/2008																		1.2															**6.1**	
P-114	4/6/2009																		1.6					0.47J										**6.5**	
P-114	10/29/2009											1.5							1.5															**4.7**	
P-114	2/26/2010																		1.6															**5.1**	
P-114	5/26/2010																		1.3															**4.5**	
P-114	5/26/2010 Dup																		1.3															**4.3**	
P-114	10/6/2010																		1.4															**5.4**	
P-114	10/6/10 Dup																		1.3															**5.4**	
P-114	1/25/2011																		1.3															**4.8**	
P-114	1/25/11 Dup																		1.3															**5.3**	
P-114	4/13/2011																		1.6															**8.2**	
P-114	4/13/2011 Dup																		1.7															**8.5**	

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-114	7/12/2011																		1.3					0.80J											**5.6**	
P-114	7/12/2011 Dup																		1.5					0.67J											**5.8**	
P-114	10/19/2011																		1.2																**5.6**	
P-114	10/19/2011 Dup																		1.3																**5.5**	
P-114	1/23/2012																		1.1																**5**	
P-114	1/23/2012 Dup																		1.3																**5.1**	
P-114	4/4/2012																		1.5																**7.2**	
P-114	4/4/2012 Dup																		1.5																**7.5**	
P-114	7/25/2012																		1.2																**6.5**	
P-114	7/25/2012 Dup																		1.4																**6.3**	
P-114	10/17/2012																		1.6																**6.6**	
P-114	10/17/2012 Dup																		1.6																**6.4**	
P-114	1/16/2013																		1.2																**8.2**	
P-114	1/16/13 Dup																		1.3																**7.6**	
P-114	4/26/2013																		1.2																**6.5**	
P-114	4/26/2013 Dup																		1.1																	
P-114	7/2/2013																																			
P-114	7/2/2013 Dup																		1.3																	
P-114	10/24/2013																		1.3																**7.2**	
P-114	10/24/2013 Dup																		1.4																**7**	
P-114	1/9/2014																		1.3																**8.2**	
P-114	1/9/2014 Dup																		1.3																**8.8**	
P-114	4/17/2014																		1.4																**6.5**	
P-114	4/17/2014 Dup																		1.4																**6.4**	
P-114	7/17/2014																		1.5																**6.4**	
P-114	7/17/2014 Dup																		1.5																**6.6**	
P-114	10/24/2014																		1.5																**10**	
P-114	10/24/2014 Dup																		1.4																**10**	
P-114	1/15/2015																		1.3																**6.2**	
P-114	4/28/2015																		1.3																**6.5**	
P-114	4/28/2015 Dup																		1.4																**6.5**	
P-114	7/1/2015																		1.3																**7**	
P-114	7/1/2015 Dup																		1.2																**6.5**	
P-114	10/27/2015																		1.4																**6.5**	
P-114	1/14/2016																		1.5																**6.1**	
P-114	1/14/2016 Dup																		1.3																**5.9**	
P-114	4/13/2016																		1.4																**7**	
P-114	4/13/2016 Dup																		1.5																**7.5**	
P-114	7/28/2016																		1.6																**7.8**	
P-114	7/28/2016 Dup																		1.4																**8.4**	
P-114	10/27/2016									0.72 J									1.5																**6.4**	
P-114	10/27/2016 Dup									0.72 J									1.6																**7.3**	
P-114	1/20/2017																		1.5																**6.7**	
P-114	1/20/2017 Dup																		1.6																**6.9**	

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-114	4/6/2017																		1.5																**7**	
P-114	4/6/2017 Dup																		1.5																**6.7**	
P-114	7/14/2017																		1.5																**7**	
P-114	7/14/2017 Dup																		1.7																**7.4**	
P-114	10/18/2017																		1.1																**7.6**	
P-114	10/18/2017 Dup																		1.3																**8.8**	
P-114	3/21/2018 [5]			NR			NR												1.3				NR						NR				NR	NR	**6.2**	NR
P-114	3/21/2018 Dup [5]			NR			NR												1.4				NR						NR				NR	NR	**6.3**	NR
P-114	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR	**4.7**	NR
P-114	21/2018 SIM Dup [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR	**4.7**	NR

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

		Parameters																																	
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-115	10/9/2001	NR																																	
P-115	10/09/01 Dup	NR																																	
P-115	11/19/2001	NR																																	
P-115	2/5/2002	NR																																	
P-115	5/22/2002	NR																																	
P-115	8/19/2002	NR										0.20J																							
P-115	12/3/2002	NR																																	
P-115	4/22/2003																																		
P-115	7/30/2003																																		
P-115	10/22/2003																																		
P-115	2/4/2004																																		
P-115	4/27/2004																																		
P-115	10/14/2004																																	**0.33 J**	
P-115	1/27/2005																																		
P-115	4/26/2005																																		
P-115	8/2/2005																																	**0.34 J**	
P-115	10/26/2005											0.24 J																						**0.33 J**	
P-115	1/31/2006																																		
P-115	4/24/2006																																	**0.62**	
P-115	7/27/2006																																	**0.44 J**	
P-115	10/31/2006																																	**0.39J**	
P-115	2/1/2007																																	**0.50J**	
P-115	5/1/2007																																	**0.54J**	
P-115	8/14/2007																																	**0.62**	
P-115	10/22/2007																																	**0.49 J**	
P-115	10/22/2007																																	**0.55 J**	
P-115	5/6/2008																																	**1.1**	
P-115	10/2/2008																																	**1.9**	
P-115	4/6/2009																																	**1.3**	
P-115	10/29/2009											1.6																						**1.3**	
P-115	2/26/2010											0.30J																						**0.95J**	
P-115	5/26/2010																																		
P-115	10/6/2010																																	**1.2**	
P-115	1/25/2011																																	**0.86J**	
P-115	4/13/2011																																	**1.4**	
P-115	7/12/2011																							0.69J										**0.99J**	
P-115	10/19/2011																																	**1**	
P-115	1/23/2012																																	**0.77J**	
P-115	4/4/2012	7.2 J																																**1.3**	
P-115	7/25/2012																																	**1.1**	
P-115	10/17/2012																																		
P-115	1/16/2013																																	**1.3**	
P-115	4/26/2013																																	**1.1**	
P-115	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	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-115	10/24/2013																																		**1.1**	
P-115	1/9/2014																																		**1.5**	
P-115	4/17/2014																																		**1**	
P-115	7/17/2014																																		**1.1**	
P-115	10/24/2014																																		**1.7**	
P-115	1/15/2015																																		**1.1**	
P-115	4/28/2015																																		**1.1**	
P-115	7/1/2015																																		**1.2**	
P-115	10/27/2015																																		**1.1**	
P-115	1/14/2016																																		**0.95 J**	
P-115	4/13/2016																																		**1**	
P-115	7/28/2016																																		**1.1**	
P-115	10/27/2016																																		**0.81 J**	
P-115	4/6/2017																																		**1.1**	
P-115	7/14/2017																																		**1**	
P-115	10/18/2017																																		**1.4**	
P-115	3/21/2018 [5]			NR			NR																NR						NR				NR	NR	**0.62 J**	NR
P-115	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR	**0.85**	NR

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-116	10/9/2001	NR																																		
P-116	11/19/2001	NR																												0.18						
P-116	2/5/2002	NR																																		
P-116	5/22/2002	NR																																		
P-116	8/19/2002	NR																																		
P-116	08/19/02 Dup	NR																																		
P-116	12/3/2002	NR																																		
P-116	12/03/02 Dup	NR																																		
P-116	4/22/2003																																			
P-116	7/30/2003																																			
P-116	10/22/2003																																			
P-116	2/4/2004																																			
P-116	5/11/2004																																			
P-116	7/22/2004																																			
P-116	10/14/2004																																			
P-116	1/27/2005																																			
P-116	4/26/2005																																			
P-116	8/2/2005																																			
P-116	10/26/2005																																			
P-116	1/31/2006																																			
P-116	01/31/06 Dup																																			
P-116	4/24/2006																																			
P-116	7/27/2006											0.35 J																								
P-116	10/31/2006																																			
P-116	2/1/2007																																			
P-116	5/1/2007																																			
P-116	8/8/2007																																			
P-116	10/22/2007																																			
P-116	5/6/2008																																			
P-116	10/2/2008																																			
P-116	4/6/2009																																			
P-116	10/29/2009																																			
P-116	2/26/2010																								1.1											
P-116	5/25/2010																																			
P-116	10/6/2010																								0.44J											
P-116	1/25/2011																																			
P-116	4/13/2011																																			
P-116	7/12/2011																								0.46J											
P-116	10/19/2011																																			
P-116	1/23/2012																																			
P-116	4/4/2012																																			
P-116	7/25/2012																																			
P-116	10/17/2012																																			
P-116	1/15/2013																																			

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

		Parameters																																		
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000
P-116	4/26/2013																																			
P-116	7/2/2013																																			
P-116	10/24/2013																																			
P-116	1/9/2014																																			
P-116	4/17/2014																																			
P-116	7/17/2014																																			
P-116	10/24/2014																																			
P-116	1/15/2015	4.2 J																																		
P-116	4/28/2015																																			
P-116	7/1/2015																																			
P-116	10/27/2015																																			
P-116	1/14/2016																																			
P-116	4/13/2016																																			
P-116	7/28/2016																																			
P-116	10/27/2016																																			
P-116	1/20/2017																																			
P-116	4/6/2017																																			
P-116	7/14/2017																																			
P-116	10/18/2017																																			
P-116	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
P-116	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR		NR
P-117	1/20/2017																		0.89 J																**1.4**	
P-117	4/6/2017																		0.98 J																**1.5**	
P-117	7/14/2017																		1.1																**1.4**	
P-117	10/18/2017																		0.79 J																**1.4**	
P-117	3/21/2018 [5]			NR			NR												0.66 J				NR						NR				NR	NR	**0.89 J**	NR
P-117	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR	0.057	NR	NR	NR	**1.0**	NR
P-118	10/18/2017																																			
P-118	3/21/2018 [5]			NR			NR																NR						NR				NR	NR		NR
P-118	3/21/2018 SIM [5]			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		NR	NR		NR	NR	NR		NR	NR	NR	NR	NR	NR	NR		NR		NR	NR	NR		NR
Gaastra [3]	1/14/2016																																			
Gaastra [3]	4/12/2016																																			
Gaastra [3]	7/28/2016																																		**1.1**	
Gaastra [3]	10/27/2016																																		**1**	
Gaastra [3]	1/20/2017																																		**0.76 J**	
Gaastra [3]	4/5/2017																																			
Perry [4]	1/14/2016							0.73 J																												
Perry [4]	4/12/2016							1.2 J																												
Perry [4]	7/28/2016																																			
Perry [4]	10/27/2016																																			
Perry [4]	1/20/2017											0.71 J																								
Perry [4]	4/5/2017																																			

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

		Parameters																																
Sampling Point	Collection Date	Acetone [1]	Benzene	Bromodichloromethane	Bromomethane	2-Butanone (MEK)	sec-Butylbenzene	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	1,4-dichlorobenzene	Dibromochloromethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-dichloroethane	1,1-Dichloroethene	cis-1,2-dichloroethene	trans-1,2-Dichloroethene	1,2-dichloropropane	Ethylbenzene	Isopropyl Ether	Methylene chloride	MTBE	Tetrachloroethene	Tetrahydrofuran	Toluene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
WDNR NR140	PAL	200	0.5	0.06	1	90	NE	200	NE	80	0.6	0.3	15	6	200	85	0.5	0.7	7	20	0.5	140	NE	0.5	12	0.5	10	200	14		0.5	NE	96		0.02	1000
	ES	1000	5	0.6	10	460	NE	1000	NE	400	6	3	75	60	1000	850	5	7	70	100	5	700	NE	5	60	5	50	1000	70		5	NE	480		0.2	10000

Results in µg/L (microgram per liter)

B = analyte found in method blank as well as sample
E = exceeds calibration range
J = estimated value between LOD and LOQ
LOD= Limit of Detection adjusted for dilution factor and percent moisture
LOQ= Limit of Quantitation adjusted for dilution factor and percent moisture
L = Lab Artifact
& = Laboratory control spike recovery not within control limits
NE = None Established
NA= Not Analyzed; no sample collected for analysis
NR = Value not reported by lab or not recorded during initial evaluation by Tetra Tech

PAL = Preventive Action Limit
ES = Enforcement Standard
Underline indicates exceeds NR 140 PAL
Bolding indicates exceeds NR 140 ES
Blank = Sample analyzed but No VOCs detected
Historical data for abandoned wells MW-105, P-105, P-109 and MW-110 can be found in reports prior to October 2004

* Not sampled due to insufficient water for sample collection.

[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 2003.

[2] MW-103 had low concentrations of isopropyl ether detected in October 1997 and February 2002.

[3] Gaastra residence connected to city's water supply July 13, 2015. Outside faucet connected to original well for sampling purposes.

[4] Perry residence connected to city's water supply September 7, 2015. Outside faucet connected to original well for sampling purposes.

[5] Test America began analyzing samples in March 2018. Both standard 8260C and 8260SIM analysis were performed, and reported.

P-114 (former Ehster well)

P-115 (former Wiese well)

P-116 (former Hadel well)

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	^oC
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
	10/24/2013			0.207				33	5.26	1356	7.10	7.9
	4/16/2014			0.177				85	4.35	1210	7.30	8.3
	10/23/2014			0.25				65	5.3	1387	7.28	10.1
	4/28/2015			0.274				47	4.16	1425	7.41	11.7
	4/12/2016			0.361				44	4.77	1392	7.14	11.9
	10/27/2016			0.295				NM	NM	1358	6.86	9.0
	4/5/2017			0.558				91	5.94	1371	7.00	9.3
	10/18/2017			0.06				17	4.65	1259	7.09	13.6
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
	4/16/2014									1138	7.20	10.4
	4/15/2015									1205	6.92	14.2
	4/12/2016									1130	7.15	12.0
	4/5/2017[1]									1108	6.53	10.4

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	^oC
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
	4/16/2014									877	7.61	10.9
	4/15/2015									1078	7.33	12.4
	4/12/2016									1067	7.85	11.8
	4/5/2017[1]									996	7.12	9.2
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
	10/24/2013			>2.5				42	1.92	982	7.43	8.6
	4/16/2014			>2.5				-76	0.91	949	7.36	9.9
	10/23/2014			>2.5				52	1.87	874	7.42	9.9
	4/28/2015			2.296				61	1.33	1018	7.36	13.0
	10/28/2015			>2.5				59	1.79	905	6.61	10.8
	4/12/2016			>2.5				-39	1.39	904	6.97	11.5
	10/27/2016			>2.5				NM	NM	907	6.97	9.7
	4/5/2017			>2.5				-19	1.57	937	7.18	8.8
	10/18/2017			>2.5				-74	1.20	1019	7.09	13.3

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	^oC
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
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
	10/24/2013			>2.5				0	1.43	815	6.29	10.0
	4/16/2014			>2.5				-78	1.71	767	7.56	9.5
	10/23/2014			>2.5				40	0.96	687	7.16	10.2
	4/28/2015			>2.5				75	0.53	802	7.03	9.9
	10/27/2015			>2.5				33	1.37	731	7.61	10.2
	4/13/2016			>2.5				-29	1.37	722	6.81	9.3
	10/27/2016			>2.5				-2	1.50	719	6.70	10.1
	4/6/2017[1]			NM				90	1.13	730	6.28	9.5
	10/18/2017			>2.5				-76	0.85	789	7.16	10.4
P-106	4/24/2013							-6	3.17	764	7.26	9.8
	4/16/2014							-74	1.40	730	7.67	9.5
	4/15/2015							63	0.57	770	7.25	10.0
	4/12/2016							-46	0.83	681	6.79	9.8
	4/5/2017[1]							-104	1.11	682	7.47	9.7

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	^oC
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
	4/16/2014							-69	1.77	847	7.58	8.9
	4/15/2015							72	1.31	900	7.26	11.0
	4/13/2016							-51	0.95	805	7.32	7.7
	4/6/2017[1]							-70	1.57	813	7.37	9.5
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

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	^oC
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
	10/24/2013			0.774				-18	0.59	684	7.60	9.4
	1/9/2014			0.911				10	1.82	640	7.53	8.4
	4/17/2014			0.784				-142	1.01	679	7.91	9.2
	7/17/2014			0.811				-22	0.38	708	7.65	9.9
	10/23/2014			1.219				-189	0.29	622	8.00	9.4
	1/15/2015			0.874				-196	0.48	669	7.96	8.6
	4/28/2015			<0.1				-127	0.84	736	7.30	9.5
	7/1/2015			0.991				-144	0.42	694	7.66	9.6
	10/27/2015			0.997				-114	0.48	667	8.26	9.7
	1/14/2016			0.923				-59	0.28	633	7.21	8.8
	4/13/2016			1.095				-140	0.31	666	7.81	8.8
	7/28/2016			1.19				-234	0.29	584	7.89	10.1
	10/27/2016			1.137				-203	0.44	684	7.50	9.5
	1/20/2017			1.335				-136	0.42	722	7.50	8.9
	4/6/2017[1]			NM				-184	0.31	683	7.67	9.2
	7/14/2017			1.04				-128	0.39	648	7.39	9.8
	10/18/2017			1.02				-124	0.29	775	7.45	10.1
	3/21/2018			1.00				-133	0.45	621	7.90	8.9

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 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	^oC
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
	10/24/2013			>2.5				74	0.40	835	6.67	9.9
	1/9/2014			>2.5				62	2.03	754	6.91	8.9
	4/16/2014			>2.5				-103	0.74	784	7.69	9.8
	7/17/2014			0.754				97	0.82	822	6.61	10.8
	10/23/2014			>2.5				68	0.69	701	6.86	10.2
	1/15/2015			>2.5				-42	1.48	754	6.92	9.1
	4/28/2015			>2.5				-38	0.58	823	6.75	10.3
	7/1/2015			>2.5				-20	0.87	782	6.63	10.5
	10/27/2015			>2.5				44	0.39	758	6.48	10.3
	1/14/2016			>2.5				23	0.76	713	6.47	9.2
	4/13/2016			>2.5				-49	0.41	794	9.03	9.3
	7/28/2016			>2.5				-29	0.76	748	6.85	10.8
	10/27/2016			>2.5				29	0.91	744	6.40	10.1
	1/20/2017			>2.5				61	1.05	752	6.44	9.5
	4/6/2017[1]			NM				-41	1.54	751	7.27	9.7
	7/14/2017			>2.5				-61	0.41	711	7.02	10.4
	10/18/2017			>2.5				-55	0.59	810	7.13	10.4
	3/21/2018			>2.5				-127	0.57	685	7.46	9.3

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	^oC
P-111D	12/5/2002				62			-75.60	-0.02	910	7.32	9.75
	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
	10/24/2013			1.302				31	0.53	853	7.46	9.8
	1/9/2014			1.451				88	2.90	790	6.54	9.0
	4/17/2014			1.495				-106	0.53	839	7.86	9.6
	7/17/2014			<0.1				62	0.37	879	7.51	10.6
	10/23/2014			1.419				-93	0.43	753	7.99	9.9
	1/15/2015			1.227				-179	0.49	814	7.81	9.2
	4/28/2015			0.231				3	0.27	886	7.94	10.0
	7/1/2015			1.157				-103	0.44	842	7.44	10.2
	10/27/2015			1.241				-49	1.37	817	7.72	10.2
	1/14/2016			1.31				-37	0.50	794	7.12	9.1
	4/13/2016			1.493				-97	0.40	827	7.54	9.2
	7/28/2016			1.073				-157	0.43	823	7.60	10.8
	10/27/2016			1.102				-94	0.78	828	7.26	9.9
	1/20/2017			1.309				13	0.59	837	7.19	9.4
	4/6/2017[1]			NM				31	0.54	849	7.24	9.7
	7/14/2017			1.03				-126	0.40	790	7.37	10.2
	10/18/2017			0.75				-93	0.50	920	7.46	10.5
	3/21/2018			0.9				-120	0.60	752	7.83	9.2

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	^oC
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
	10/24/2013			0.879				-96	1.29	675	7.20	10.6
	1/9/2014			0.955				-25	1.93	614	7.50	9.4
	4/17/2014			<0.1				-94	0.99	642	7.85	9.4
	7/17/2014			<0.1				-18	0.32	675	7.78	10.7
	10/23/2014			0.668				-154	0.43	582	7.84	10.4
	1/15/2015			1.048				-213	0.90	630	7.70	9.7
	4/28/2015			<0.1				-123	1.34	685	7.30	10.1
	7/1/2015			1.058				-120	0.79	647	7.68	10.2
	10/27/2015			1.071				-98	0.27	633	7.35	10.5
	1/14/2016			1.018				-227	0.54	639	8.70	9.4
	4/13/2016			1.098				-135	0.35	626	7.81	9.4
	7/28/2016			0.968				-229	0.46	633	7.79	10.7
	10/27/2016			0.922				-88	0.92	632	7.43	10.1
	1/20/2017			1.341				-118	0.56	668	7.57	9.7
	4/6/2017[1]			NM				-138	0.52	638	7.64	9.8
	7/14/2017			1.04				-154	0.82	605	7.46	10.6
	10/18/2017			0.99				-117	0.48	721	7.53	11.3
	3/21/2018			1.06				-132	0.59	579	7.92	9.5

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	^oC
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	0.285	-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
	10/24/2013			0.726				-89	0.37	772	7.29	9.9
	1/9/2014			0.64				-21	1.18	694	7.58	9.2
	4/17/2014			0.755				-120	0.63	730	7.95	9.7
	7/17/2014			<0.1				-17	0.33	774	7.86	10.1
	10/23/2014			1.027				-110	0.27	667	7.91	10.0
	1/15/2015			0.747				-194	0.37	720	7.93	9.3
	4/28/2015			<0.1				-38	0.23	775	8.20	9.7
	7/1/2015			0.806				-113	0.41	744	7.67	10.2
	10/27/2015			1.863				-119	0.30	731	7.57	10.1
	1/14/2016			0.691				-72	0.43	697	7.76	9.3
	4/13/2016			0.811				-137	0.30	719	7.86	9.4
	7/28/2016			0.81				-228	0.33	731	7.83	10.5
	10/27/2016			0.749				-167	0.28	732	7.49	10.0
	1/20/2017			1.148				-122	0.26	780	7.56	9.4
	4/6/2017[1]			NM				-134	0.39	745	7.70	9.7
	7/14/2017			0.79				-166	0.27	700	7.48	10.3
	10/18/2017			0.77				-137	0.51	824	7.63	10.7
	3/21/2018			0.82				-137	0.28	678	7.94	9.5

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	^oC
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
	10/24/2013			0.843				-80	0.51	631	7.48	10.2
	1/9/2014			<0.1				-15	1.69	567	7.71	9.7
	4/17/2014			<0.1				-127	0.92	594	7.99	9.8
	7/17/2014			<0.1				-22	0.33	626	7.93	10.7
	10/23/2014			0.879				-95	0.34	542	8.01	10.2
	1/15/2015			0.988				-176	0.39	589	7.99	9.7
	4/28/2015			0.139				-22	0.28	639	8.29	10.3
	7/1/2015			1.254				-121	0.37	608	7.83	10.6
	10/27/2015			2.015				-99	0.26	594	7.62	10.4
	1/14/2016			0.828				-60	0.34	569	7.61	9.8
	4/13/2016			1.151				-124	0.33	589	7.93	9.8
	7/28/2016			1.116				-193	0.44	597	7.91	10.7
	10/27/2016			0.748				-127	0.29	596	7.56	10.4
	4/6/2017[1]			NM				-137	1.16	608	7.72	10.2
	7/14/2017			0.84				-143	0.28	575	7.54	10.6
	10/18/2017			0.80				-130	0.81	703	7.60	11.0
	3/21/2018			0.72				-143	0.63	554	8.02	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 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	^oC
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
	10/24/2013			0.65				-14	0.46	542	7.95	10.3
	1/9/2014			<0.1				-9	1.19	495	7.88	8.9
	4/17/2014			<0.1				-71	0.58	501	7.99	9.8
	7/17/2014			<0.1				-26	0.35	547	7.86	12.0
	10/23/2014			1.703				-166	0.40	470	7.96	10.4
	1/15/2015			1.155				-226	0.48	512	7.98	9.0
	4/28/2015			1.308				-18	0.27	560	8.29	10.3
	7/1/2015			>2.5				-117	0.40	530	7.74	11.8
	10/27/2015			>2.5				-74	0.35	513	7.52	11.0
	1/14/2016			0.447				-43	0.38	489	7.50	9.1
	4/13/2016			0.433				-59	0.56	503	7.91	9.6
	7/28/2016			0.665				-151	0.39	507	7.79	12.2
	10/27/2016			0.544				-117	0.40	507	7.53	10.6
	1/20/2017			0.563				17	0.43	522	7.70	9.1
	4/6/2017[1]			NM				18	0.49	516	7.55	10.2
	7/14/2017			0.08				-146	0.32	483	7.54	11.3
	10/18/2017			0.07				-80	0.40	584	7.61	11.9
	3/21/2018			0.00				-113	0.46	447	8.03	10.0
P-117	1/20/2017			1.249				16	0.75	748	7.26	9.9
	4/6/2017[1]			NM				-105	0.29	742	7.48	10.1
	7/14/2017			1.29				-112	0.22	701	7.29	10.4
	10/18/2017			1.31				-101	0.27	844	7.34	11.0
	3/21/2018			1.34				-116	0.32	684	7.70	9.5
P-118	10/18/2017			0.17				-117	0.59	629	7.71	11.4
	3/21/2018			0.23				-101	0.29	524	7.93	9.2

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	^oC
MW-3A	12/5/2002				20			-312	0.03	589	7.30	
	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
	10/24/2013			0.124				-140	1.27	582	7.07	9.3
	1/9/2014			<0.1				10	0.81	524	7.46	7.5
	4/17/2014			0.126				-114	1.80	551	7.73	9.2
	7/17/2014			<0.1				-8	0.67	577	7.66	10.4
	10/23/2014			0.938				-174	1.06	498	7.37	9.6
	1/15/2015			0.188				-238	1.07	541	7.84	7.7
	4/28/2015			<0.1				-30	0.46	586	8.15	9.8
	7/1/2015			<0.1				-128	1.28	548	7.61	10.0
	10/27/2015			0.166				-138	0.68	536	7.21	11.0
	1/14/2016			<0.1				-43	1.03	514	7.22	8.1
	4/13/2016			0.149				-149	0.61	530	7.70	8.4
	7/28/2016			0.154				-267	0.88	531	7.60	12.2
	10/27/2016			0.159				-171	0.62	533	7.35	9.5
	1/20/2017			0.441				-10	0.55	544	7.39	8.6
	4/6/2017[1]			NM				5	0.51	542	7.34	9.6
	7/14/2017			0.04				-116	0.52	505	7.24	10.4
	10/18/2017			0.10				-130	0.74	600	7.48	11.9
	3/21/2018			0.03				-105	1.07	488	7.86	8.8

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	^oC
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
	10/24/2013			0.205				-60	2.51	610	6.89	9.8
	1/9/2014			<0.1				55	2.60	561	7.24	8.0
	4/16/2014			0.236				-68	1.33	603	7.76	9.4
	7/17/2014			<0.1				61	0.46	610	7.37	10.8
	10/23/2014			0.217				-127	0.98	536	8.23	9.9
	1/15/2015			<0.1				-207	0.81	571	7.84	9.0
	4/28/2015			<0.1				-116	1.84	639	7.23	10.2
	7/1/2015			0.132				-76	1.71	581	7.29	10.9
	10/27/2015			0.128				-23	0.84	565	8.03	10.5
	1/14/2016			<0.1				-25	0.61	537	7.03	8.6
	4/13/2016			0.158				-64	0.86	624	9.12	8.9
	7/28/2016			0.157				-150	5.32	581	7.31	17.7
	10/27/2016			0.165				-124	0.66	557	7.16	9.9
	1/20/2017			0.451				9	1.84	562	7.03	9.1
	4/6/2017[1]			NM				42	2.51	593	7.15	9.5
	7/14/2017			0.08				-139	0.80	539	7.26	10.3
	10/18/2017			0.10				-61	2.35	596	7.33	10.8
	3/21/2018			0.10				-66	3.88	530	7.82	9.3

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	^oC
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
	10/24/2013			0.654				-43	0.91	567	7.66	11.6
	1/9/2014			0.582				0	1.72	521	7.49	6.4
	4/14/2014			<0.1				-139	1.55	544	7.81	8.9
	7/17/2014			0.831				-10	1.15	577	7.71	17.5
	10/23/2014			0.707				-164	0.80	498	7.79	10.9
	1/15/2015			1				-201	1.81	548	7.66	7.6
	4/28/2015			0.204				-18	0.63	580	8.14	10.9
	7/1/2015			1.795				-133	1.06	547	7.57	12.9
	10/27/2015			0.583				-116	0.94	526	8.67	11.3
	1/14/2016			0.316				-73	0.96	506	7.45	6.8
	4/13/2016			0.815				-158	1.07	525	7.82	8.7
	7/28/2016			0.831				-260	0.94	529	7.70	13.3
	10/27/2016			1.036				-204	0.80	531	7.42	10.5
	1/20/2017			1.253				-21	0.67	542	7.48	8.7
	4/6/2017[1]			NM				7	0.82	539	7.45	10.0
	7/14/2017			0.47				-206	0.68	500	7.40	13.3
	10/18/2017			0.56				-118	0.49	595	7.42	13.3
	3/21/2018			0.45				-98	2.28	486	7.93	7.9
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
	4/15/2014									578	7.59	10.8
	4/15/2015									595	7.18	11.9
	1/14/2016									526	8.22	9.1
	4/12/2016									625	7.85	14.0
	7/28/2016									538	8.07	13.5
	10/27/2016									524	6.74	10.6
	1/20/2017									598	7.04	8.8
	4/5/2017									446	7.72	10.2

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	^oC
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
	4/15/2014									528	7.69	13
	7/17/2014									519	8.41	14.3
	1/14/2016									667	7.94	8.6
	4/12/2016									588	8.05	11
	7/28/2016									550	8.19	13.7
	10/27/2016									593	6.86	10.3
	1/20/2017									564	6.81	8
	4/5/2017									547	7.63	9.3
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
	4/15/2014									546	7.80	10.7
	4/15/2015									565	7.38	12.8
	4/12/2016									632	7.98	11.5
	4/5/2017									532	7.46	9.5

indicates that sample was not analyzed for that parameter
mg/L: milligrams per liter
uS/cm: microsiemens per centimeter
mV: millivolts
ORP: Oxidation-Reduction Potential
^oC: Degrees Celsius
* 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

1: April 2017 equipment malfunction, in-field iron test not able to be performed.

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-1	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	
	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-1	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	8/13/2007	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	
	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	
	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

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-1	9:25	9/8/2009	10.0	21.6	0.6	67.8	
	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-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	
	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	
	8:55	8/5/2013	9.5	20.0	1.7	68.8	
	8:24	8/19/2013	11.0	20.2	1.7	67.1	
	8:35	9/5/2013	4.4	8.6	12.6	74.5	
	8:48	9/16/2013	5.0	7.6	14.0	73.4	
	7:40	9/30/2013	14.0	13.4	9.5	63.1	
	7:38	10/14/2013	21.5	17.8	7.5	53.2	
	7:42	10/28/2013	23.5	16.2	9.0	51.3	
	8:10	11/19/2013	34.0	22.2	6.1	37.7	
	7:35	12/2/2013	38.0	23.8	5.0	33.2	
	7:15	12/16/2013	19.0	12.6	12.2	56.2	
	7:06	12/27/2013	48.5	28.0	2.9	20.6	
	7:08	1/13/2014	54.5	28.6	0.7	16.2	
	7:20	1/30/2014	50.0	28.6	0.9	20.5	
	7:35	2/12/2014	51.5	28.2	0.9	19.4	
	7:50	2/24/2014	35.0	25.0	1.2	38.8	
	8:25	3/10/2014	36.0	27.0	1.0	36.0	
	8:15	3/24/2014	14.5	18.8	4.8	61.9	
	7:30	4/7/2014	18.0	21.4	1.6	59.0	
	10:44	4/22/2014	15.0	20.8	1.6	62.6	
	7:45	5/7/2014	18.5	21.8	0.8	58.9	
	7:45	5/19/2014	16.0	21.8	0.5	61.7	
	7:15	5/30/2014	17.5	22.4	0.3	59.8	
	7:36	6/16/2014	8.5	20.4	0.6	70.5	
	7:55	6/30/2014	6.0	18.4	1.7	73.9	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-1	8:05	7/14/2014	5.0	17.4	2.8	74.8	
	8:05	7/28/2014	3.9	17.0	3.9	75.2	
	8:21	8/11/2014	4.6	16.2	4.4	74.8	
	7:25	8/25/2014	4.3	16.4	4.2	75.2	
	7:45	9/8/2014	4.1	16.0	4.9	75.0	
	7:30	9/22/2014	4.3	16.8	4.5	74.5	
	7:55	10/7/2014	6.0	17.2	3.4	73.4	
	7:50	10/20/2014	7.5	18.4	2.7	71.4	
	7:40	11/3/2014	12.5	20.2	2.3	65.0	
	7:30	11/17/2014	16.5	21.2	2.9	59.4	
	7:35	12/2/2014	19.5	21.2	2.2	57.1	
	7:15	12/15/2014	33.0	25.4	0.0	41.6	blower off
	7:19	12/18/2014	28.0	23.2	2.0	46.8	
	7:31	1/2/2015	28.0	23.4	2.4	46.2	
	7:22	1/16/2015	32.0	22.6	1.6	43.8	
	7:30	1/26/2015	36.0	23.2	1.2	39.6	
	7:35	2/9/2015	33.5	24.6	1.2	40.7	
	8:02	2/24/2015	39.5	24.0	1.4	35.1	
	8:28	3/9/2015	24.5	21.2	1.5	52.8	
	7:25	3/23/2015	9.0	18.2	2.0	70.8	
	7:35	4/6/2015	8.5	18.0	1.7	71.8	
	8:27	4/22/2015	7.6	17.4	2.0	73.0	
	7:21	5/4/2015	8.5	17.0	1.9	72.6	
	7:20	5/18/2015	10.5	18.8	1.5	69.2	
	7:25	6/1/2015	7.5	18.2	2.4	71.9	
	7:30	6/15/2015	7.0	15.0	4.9	73.1	
	7:35	6/29/2015	4.3	8.4	11.8	75.5	
	7:28	7/14/2015	9.0	19.0	1.8	70.2	
	7:24	7/27/2015	7.0	19.2	1.8	72.0	
	7:30	8/10/2015	7.5	18.6	2.2	71.7	
	7:25	8/24/2015	6.5	18.6	2.2	72.7	
	7:40	9/8/2015	7.0	18.2	2.7	72.1	
	7:49	9/21/2015	6.0	19.0	2.6	72.4	
	7:30	10/5/2015	7.5	19.4	2.0	71.1	
	7:35	10/19/2015	8.5	19.8	1.9	69.8	
	7:50	11/2/2015	7.5	19.6	1.8	71.1	
	7:30	11/16/2015	9.5	20.4	1.4	68.7	
	11:00	11/30/2015	10.5	20.6	1.9	67.0	
	7:25	12/15/2015	15.0	21.0	1.1	62.9	
	7:35	12/28/2015	15.0	22.4	0.8	61.8	
	8:16	1/9/2016	17.5	20.8	1.4	60.3	
	7:50	1/25/2016	22.0	23.6	0.6	53.8	
	7:50	2/8/2016	23.0	23.2	1.1	52.7	
	7:35	2/22/2016	23.0	21.0	1.0	55.0	
	7:47	3/7/2016	23.0	20.4	1.0	55.6	
	8:30	3/21/2016	19.5	21.8	0.6	58.1	
	7:50	4/4/2016	14.5	21.2	0.6	63.7	
	8:25	4/18/2016	18.5	21.6	0.6	59.3	
	9:45	5/3/2016	26.5	23.2	0.2	50.1	
	7:50	5/16/2016	28.0	24.0	0.3	47.7	
	7:45	6/2/2016	29.0	24.2	0.1	46.7	
	7:50	6/14/2016	27.0	24.0	0.2	48.8	
	7:50	6/27/2016	22.0	21.6	0.2	56.2	
	10:20	7/14/2016	18.5	22.8	0.2	58.5	
	7:55	7/25/2016	17.5	23.4	0.2	58.9	
	7:45	8/8/2016	17.5	23.8	0.2	58.5	
	8:33	8/25/2016	16.0	24.4	0.0	59.6	
	7:25	9/6/2016	15.5	24.0	0.2	60.3	
	10:00	10/3/2016	10.5	22.6	0.4	66.5	
	8:12	10/19/2016	8.5	21.4	0.7	69.4	
	8:43	10/31/2016	9.5	21.2	1.8	67.5	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-1	8:04	11/14/2016	13.5	22.0	1.0	63.5	
	8:54	11/28/2016	18.5	22.0	1.8	57.7	
	9:08	12/9/2016	17.0	23.2	1.1	58.7	
	7:55	12/22/2016	22.5	23.2	1.2	53.1	
	8:00	1/4/2017	23.0	21.6	2.3	53.1	
	7:30	1/13/2017	22.9	21.2	2.4	53.5	
	7:25	1/27/2017	37.0	24.8	1.5	36.7	
	7:56	2/13/2017	35.5	21.4	1.9	41.2	
	7:55	2/27/2017	39.5	22.4	2.5	35.6	
	8:20	3/13/2017	44.5	23.6	2.0	29.9	
	7:25	3/28/2017	41.0	24.0	1.8	33.2	
	8:08	4/12/2017	43.5	24.0	1.8	30.7	
	7:45	4/18/2017	40.0	24.2	1.7	34.1	
	7:12	4/25/2017	43.0	25.6	1.5	29.9	
	7:20	5/8/2017	38.0	25.0	1.8	35.2	
	7:30	5/22/2017	32.5	24.4	1.5	41.6	
	7:46	6/5/2017	26.0	24.6	1.4	48.0	
	7:35	6/19/2017	14.5	23.0	1.3	61.2	
	8:27	7/4/2017	14.0	24.0	0.3	61.7	
	7:45	7/18/2017	18.5	25.4	0.0	56.1	
	7:47	8/1/2017	21.0	26.0	0.0	53.0	
	7:54	8/14/2017	23.0	26.4	0.0	50.6	
	8:08	8/29/2017	23.0	26.8	0.1	50.1	
	7:56	9/12/2017	26.0	27.6	0.0	46.4	
	8:08	9/25/2017	25.0	27.4	0.1	47.5	
	8:11	10/10/2017	22.0	27.2	0.3	50.5	
	7:49	10/23/2017	25.0	26.8	0.1	48.1	
	7:57	11/6/2017	23.5	26.8	0.1	49.6	
	8:04	11/17/2017	26.5	27.0	0.1	46.4	
	8:01	12/1/2017	25.0	26.2	0.2	48.6	
	8:11	12/18/2017	27.5	26.4	0.2	45.9	
	8:47	1/3/2018	31.5	25.4	0.4	42.7	
	7:57	1/11/2018	36.5	26.2	0.2	37.1	
	7:50	1/26/2018	8.5	17.8	4.2	69.5	
	8:10	2/13/2018	NM	NM	NM	NM	Not measured. Unable to thaw to get readings
	7:42	2/27/2018	7.5	17.8	1.8	72.9	
	7:42	3/13/2018	4.2	11.8	7.7	76.4	
	8:04	3/28/2018	7.0	18.0	1.2	73.8	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	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	
	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
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	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	
	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	
	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	
	9:00	8/24/2009	27.5	29.0	0.0	43.5	decrease to 6 on 18 off

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	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	
	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	
	9:05	8/5/2013	29.5	25.4	2.6	42.5	
	8:35	8/19/2013	31.0	25.8	2.0	41.2	
	8:45	9/5/2013	13.5	11.6	12.5	62.4	
	9:00	9/16/2013	12.5	10.4	13.4	63.7	
	7:50	9/30/2013	19.5	15.2	10.4	54.9	
	7:50	10/14/2013	26.5	20.0	7.7	45.8	
	7:50	10/28/2013	23.0	16.6	9.8	50.6	
	8:25	11/19/2013	32.5	22.8	5.9	38.8	
	7:50	12/2/2013	37.5	24.8	5.0	32.7	
	7:25	12/16/2013	22.0	15.6	11.3	51.1	
	7:13	12/27/2013	44.5	29.2	1.9	24.4	
	7:16	1/13/2014	48.5	29.0	1.0	21.5	
	7:40	1/30/2014	49.5	30.0	1.3	19.2	
	7:45	2/12/2014	51.0	30.6	1.8	16.6	
	8:08	2/24/2014	49.0	28.0	2.1	20.9	
	8:20	3/10/2014	53.0	29.6	1.6	15.8	
	8:30	3/24/2014	43.5	23.4	5.4	27.7	
	7:40	4/7/2014	49.5	26.2	2.5	21.8	
	10:53	4/22/2014	45.5	25.4	2.6	26.5	
	8:05	5/7/2014	48.0	27.8	1.1	23.1	
	8:00	5/19/2014	49.0	27.8	1.1	22.1	
	7:25	5/30/2014	47.5	27.8	1.3	23.4	
	7:50	6/16/2014	42.5	27.2	1.3	29.0	
	8:15	6/30/2014	32.5	26.2	1.2	40.1	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	8:16	7/14/2014	25.0	25.2	1.3	48.5	
	8:19	7/28/2014	22.0	25.6	1.9	50.5	
	8:32	8/11/2014	18.5	24.0	1.9	55.6	
	13:00	8/25/2014	29.5	24.2	1.7	44.6	
	8:00	9/8/2014	18.0	23.6	2.6	55.8	
	7:40	9/22/2014	20.0	24.4	2.5	53.1	
	8:10	10/7/2014	20.5	24.0	2.6	52.9	
	8:05	10/20/2014	24.5	24.6	2.7	48.2	
	7:58	11/3/2014	27.5	25.2	2.7	44.6	
	7:40	11/17/2014	30.0	25.8	2.6	41.6	
	7:46	12/2/2014	35.0	26.6	2.3	36.1	
	7:25	12/15/2014	27.5	22.0	1.5	49.0	Blower Off
	7:32	12/18/2014	37.5	27.8	2.5	32.2	
	7:48	1/2/2015	39.5	28.4	2.8	29.3	
	7:40	1/16/2015	43.0	26.6	2.1	28.3	
	7:45	1/26/2015	44.5	27.2	1.4	26.9	
	7:58	2/9/2015	43.5	28.6	2.1	25.8	
	8:10	2/24/2015	45.5	27.0	1.7	25.8	
	8:45	3/9/2015	47.0	25.4	1.9	25.7	
	7:40	3/23/2015	43.0	24.0	2.9	30.1	
	7:48	4/6/2015	40.0	24.0	2.0	34.0	
	8:19	4/22/2015	32.7	22.8	2.5	42.0	
	7:40	5/4/2015	33.0	22.2	2.3	42.5	
	7:30	5/18/2015	33.0	23.6	1.9	41.5	
	7:40	6/1/2015	32.5	23.4	2.4	41.7	
	7:43	6/15/2015	32.0	23.0	2.0	43.0	
	7:40	6/29/2015	32.0	24.2	1.9	41.9	
	7:40	7/14/2015	30.5	23.8	2.1	43.6	
	7:45	7/27/2015	30.5	24.8	1.5	43.2	
	7:40	8/10/2015	28.5	24.2	1.8	45.5	
	7:40	8/24/2015	28.0	24.6	1.9	45.5	
	7:55	9/8/2015	27.0	24.2	2.4	46.4	
	8:05	9/21/2015	27.0	25.4	2.2	45.4	
	7:40	10/5/2015	27.5	25.4	2.1	45.0	
	7:45	10/19/2015	28.0	25.6	2.1	44.3	
	8:00	11/2/2015	27.5	26.0	2.8	43.7	
	7:40	11/16/2015	30.0	25.8	2.0	42.2	
	11:00	11/30/2015	29.5	26.0	2.7	41.8	
	7:35	12/15/2015	35.0	26.8	2.1	36.1	
	7:45	12/28/2015	37.5	28.0	1.4	33.1	
	8:30	1/9/2016	36.5	25.6	2.2	35.7	
	8:00	1/25/2016	41.0	28.8	1.5	28.7	
	8:05	2/8/2016	37.5	26.2	1.9	34.4	
	7:47	2/22/2016	42.5	25.8	1.7	30.0	
	8:02	3/7/2016	41.0	24.4	1.4	33.2	
	8:45	3/21/2016	43.5	27.0	1.0	28.5	
	8:04	4/4/2016	41.5	28.4	1.1	29.0	
	8:18	4/18/2016	41.5	25.6	1.3	31.6	
	9:26	5/3/2016	41.5	25.8	0.7	32.0	
	8:00	5/16/2016	42.9	26.2	0.7	30.2	
	7:55	6/2/2016	43.5	26.4	0.3	29.8	
	8:00	6/14/2016	45.5	27.0	0.3	27.2	
	8:00	6/27/2016	47.0	26.6	0.2	26.2	
	10:25	7/14/2016	46.5	27.2	0.2	26.1	
	8:00	7/25/2016	45.5	28.8	0.2	25.5	
	7:55	8/8/2016	44.0	28.2	0.4	27.4	
	7:50	8/25/2016	42.0	28.6	0.3	29.1	
	7:35	9/6/2016	39.5	28.2	0.8	31.5	
	10:15	10/3/2016	36.0	28.6	0.7	34.7	
	8:25	10/19/2016	33.5	27.8	1.2	37.5	
	8:58	10/31/2016	33.0	27.6	1.7	37.7	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-2	8:13	11/14/2016	33.5	27.2	2.6	36.7	
	9:04	11/28/2016	33.0	26.4	2.5	38.1	
	9:16	12/9/2016	38.5	29.2	3.1	29.2	
	8:05	12/22/2016	36.5	27.8	2.4	33.3	
	8:05	1/4/2017	31.0	23.8	5.1	40.1	
	7:50	1/13/2017	36.2	26.7	2.6	34.5	
	7:45	1/27/2017	41.5	28.6	2.6	27.3	
	8:16	2/13/2017	43.0	25.8	2.7	28.5	
	8:15	2/27/2017	42.5	24.4	3.5	29.6	
	8:25	3/13/2017	46.0	26.4	2.8	24.8	
	7:45	3/28/2017	44.5	25.8	3.2	26.5	
	8:12	4/12/2017	47.5	26.0	2.5	24.0	
	7:35	4/18/2017	46.0	25.8	2.6	25.6	
	7:25	4/25/2017	48.0	27.2	2.2	22.6	
	7:38	5/8/2017	50.0	27.0	2.4	20.6	
	7:45	5/22/2017	44.0	23.4	4.1	28.5	
	8:00	6/5/2017	50.0	27.0	1.9	21.1	
	7:48	6/19/2017	47.0	27.4	1.6	24.0	
	8:34	7/4/2017	46.5	29.0	0.6	23.9	
	7:52	7/18/2017	44.5	29.6	0.2	25.7	
	7:56	8/1/2017	43.5	29.6	0.1	26.8	
	8:03	8/14/2017	44.5	29.8	0.3	25.4	
	8:15	8/29/2017	46.0	30.2	0.1	23.7	
	8:03	9/12/2017	46.5	30.6	0.3	22.6	
	8:15	9/25/2017	47.0	30.8	2.4	19.8	
	8:18	10/10/2017	49.0	31.8	0.7	18.5	
	7:57	10/23/2017	46.5	30.6	0.4	22.5	
	8:05	11/6/2017	46.5	31.0	1.8	20.7	
	8:11	11/17/2017	19.0	21.0	1.9	58.1	
	8:07	12/1/2017	47.0	30.8	0.8	21.4	
	8:17	12/18/2017	46.5	30.4	1.1	22.0	
	8:57	1/3/2018	43.5	29.4	1.2	25.9	
	8:03	1/11/2018	46.0	29.4	1.2	23.4	
	7:56	1/26/2018	35.0	23.2	4.6	37.2	
	8:27	2/13/2018	20.5	20.4	5.7	53.4	
	7:49	2/27/2018	27.0	25.2	2.1	45.7	
	7:49	3/13/2018	16.5	15.8	8.6	59.1	
	8:11	3/28/2018	26.0	24.4	1.7	47.9	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-3	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	
	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
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
	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	
	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	
LC-3	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-3	10:25	10/5/2009	16.5	19.2	4.9	59.4	
	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-3	9:55	1/25/2012	33.0	26.0	4.2	36.8	
	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	57.8	
	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	
	9:00	8/5/2013	16.0	10.4	5.3	68.3	Reduce from 10 hrs to 9 hrs on
	8:30	8/19/2013	17.5	18.8	4.9	58.8	
	8:40	9/5/2013	9.5	10.2	12.3	68.0	Reduce from 9 hrs to 4 hrs on
	8:55	9/16/2013	10.5	10.2	12.8	66.5	Reduce from 4 hrs to 2 hrs on
	7:45	9/30/2013	17.0	14.0	10.2	58.8	Reduce from 2 hrs to 1 hr on
	7:45	10/14/2013	23.5	18.0	8.4	50.1	Reduce from 1 hr to 0.5 hr on
	7:45	10/28/2013	21.5	15.4	10.3	52.8	Reduce from 0.5 hr to 0.25 hr on
	8:17	11/19/2013	31.0	21.8	7.4	39.8	Increase from 0.25 hr to 1 hr on
	7:40	12/2/2013	32.0	22.8	6.6	38.6	Reduce from 1 hr to 0.75 hr on
	7:20	12/16/2013	20.5	16.0	11.1	52.4	Reduce from 0.75 hr to 0.3 hr on
	7:10	12/27/2013	34.5	25.2	5.2	35.1	Reduce from 0.3 hr to 0.25 hr on
	7:12	1/13/2014	39.5	26.4	3.6	30.5	Increase from 0.25 hr to 1 hr on
	7:20	1/30/2014	37.0	26.6	4.2	32.2	Increase from 1 hr to 2 hr on
	7:40	2/12/2014	33.5	25.6	4.3	36.6	Increase from 2 hrs on to 8 hr on
	8:57	2/24/2014	31.0	23.6	5.2	40.2	Reduce from 8 hr on to 7 hr on
	8:30	3/10/2014	33.0	24.2	4.2	38.6	Increase from 7 hr on to 10hr on
	8:20	3/24/2014	23.5	18.8	6.9	50.8	Reduce from 10 hr on to 6 hr on
	7:35	4/7/2014	27.0	21.0	4.5	47.5	Increase from 6 hr on to 7 hr on
	10:50	4/22/2014	23.5	20.2	4.5	51.8	Increase from 7 hr on to 8 hr on
	7:57	5/7/2014	25.5	21.0	4.1	49.4	Increase from 8 hr on to 10 hr on
	7:55	5/19/2014	24.5	21.0	3.8	50.7	Increase from 10 hr on to 14 hr on
	7:20	5/30/2014	25.0	21.6	3.2	50.2	Increae from 14 hr on to 20 hr on
	7:45	6/16/2014	18.5	19.2	3.6	58.7	Increase from 20 hr on to 23.66 hr on
	8:08	6/30/2014	14.0	18.2	3.7	64.1	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-3	8:10	7/14/2014	11.5	17.2	4.4	66.9	
	8:11	7/28/2014	10.0	17.4	4.8	67.8	
	8:26	8/11/2014	8.0	15.6	5.3	71.1	Reduce from 23.66 hr on to 19.66 hr on
	7:30	8/25/2014	8.5	16.2	5.0	70.3	
	7:54	9/8/2014	8.0	15.2	6.1	70.7	Reduce from 19.66 hr on to 16 hr on
	7:35	9/22/2014	9.0	15.6	6.6	68.8	Reduce from 16 hr on to 12 hr on
	8:03	10/7/2014	9.5	15.2	6.8	68.5	Reduce from 12 hr on to 8 hr on
	8:00	10/20/2014	11.5	16.2	6.4	65.9	Reduce from 8 hr on to 4 hr on
	7:50	11/3/2014	16.5	18.2	5.9	59.4	Reduce from 4 hr on to 3 hr on
	7:35	11/17/2014	20.0	20.2	5.4	54.4	Reduce from 3 hr on to 2 hr on
	7:40	12/2/2014	23.0	20.0	6.3	50.7	Reduce from 2 hr on to 1 hr on
	7:19	12/15/2014	31.0	23.6	3.9	41.5	Blower off
	7:25	12/18/2014	30.0	23.6	4.5	41.9	Increase from 1 hr on to 2 hr on
	7:40	1/2/2015	30.1	24.0	5.0	40.9	Blower not working
	7:30	1/16/2015	24.0	17.6	8.1	50.3	Run 2 hr on
	7:39	1/26/2015	32.5	23.0	4.5	40.0	increase from 2 hr on to 3 hr on
	7:44	2/9/2015	31.0	24.6	4.3	40.1	Increase from 3 hr on to 5 hr on
	8:18	2/24/2015	31.6	23.2	4.1	41.1	Increase from 5 hr on to 8 hr on
	8:35	3/9/2015	26.0	21.0	4.5	48.5	Increase from 8 hr on to 12 hr on
	7:35	3/23/2015	17.0	17.2	5.9	59.9	Reduce from 12 hr on to 10 hr on
	7:43	4/6/2015	17.0	17.8	5.2	60.0	Reduce from 10 hr on to 9 hr on
	8:12	4/22/2015	14.5	16.6	5.8	63.1	Reduce from 9 hr on to 7 hr on
	7:30	5/4/2015	16.0	16.4	5.1	62.5	Reduce from 7 hr on to 6 hr on
	7:25	5/18/2015	17.5	18.4	4.3	59.8	Increase from 6 hr on to 7 hr on
	7:32	6/1/2015	15.5	17.6	5.0	61.9	
	7:35	6/15/2015	16.0	17.8	4.4	61.8	Increase from 7 hr on to 8 hr on
	7:40	6/29/2015	16.0	18.4	4.5	61.1	Increase from 8 hr on to 10 hr on
	7:35	7/14/2015	14.5	18.0	4.5	63.0	Increase from 10 hr on to 12 hr on
	7:38	7/27/2015	13.5	17.8	4.7	64.0	Increase from 12 hr on to 13 hr on
	7:35	8/10/2015	12.5	17.2	4.8	65.5	Increase from 13 hr on to 15 hr on
	7:35	8/24/2015	11.5	16.8	5.1	66.6	Reduce from 15 hr on to 14 hr on
	7:48	9/8/2015	11.5	17.2	4.8	66.5	Increase from 14 hr on to 15 hr on
	8:00	9/21/2015	11.0	17.0	5.5	66.5	Reduce from 15 hr on to 13 hr on
	7:35	10/5/2015	11.0	17.2	5.6	66.2	
	7:40	10/19/2015	11.0	16.8	6.1	66.1	Reduce from 13 hr on to 11 hr on
	7:55	11/2/2015	11.5	17.2	5.7	65.6	Reduce from 11 hr on to 9 hr on
	7:35	11/16/2015	13.5	17.8	5.6	63.1	Reduce from 9 hr on to 7 hr on
	11:05	11/30/2015	15.0	18.8	5.8	60.4	Reduce from 7 hr on to 5 hr on
	7:30	12/15/2015	18.5	19.6	4.7	57.2	Increase from 5 hr on to 7 hr on
	7:40	12/28/2015	20.0	20.6	4.9	54.5	
	8:25	1/9/2016	20.5	19.8	4.9	54.8	
	7:58	1/25/2016	21.5	21.2	5.1	52.2	Reduce from 7 hr on to 6 hr on
	8:00	2/8/2016	21.5	20.0	5.7	52.8	Reduce from 6 hr on to 4 hr on
	7:42	2/22/2016	27.0	21.0	4.7	47.3	Increase from 4 hr on to 6 hr on
	7:55	3/7/2016	25.0	20.2	4.5	50.3	Increase from 6 hr on to 9 hr on
	8:40	3/21/2016	23.0	21.6	4.3	51.1	Increase from 9 hr on to 13 hr on
	7:57	4/4/2016	20.0	19.6	5.6	54.8	Reduce from 13 hr on to 9 hr on
	8:12	4/18/2016	22.5	20.0	5.3	52.2	Reduce from 9 hr on to 7 hr on
	9:24	5/3/2016	25.5	20.8	4.8	48.9	Increase from 7 hr on to 8 hr on
	7:55	5/16/2016	28.5	22.2	4.5	44.8	Increase from 8 hr on to 10 hr on
	7:50	6/2/2016	31.0	23.2	3.6	42.2	Increase from 10 hr on to 15 hr on
	7:55	6/14/2016	29.0	22.8	3.7	44.5	Increase from 15 hr on to 20 hr on
	7:55	6/27/2016	26.5	21.8	4.4	47.3	Increase from 20 hr on to 23.5 hr on
	10:30	7/14/2016	25.0	21.6	3.8	49.6	
	8:00	7/25/2016	24.5	22.4	3.5	49.6	
	7:50	8/8/2016	23.0	21.8	3.8	51.4	
	7:45	8/25/2016	21.5	21.6	3.7	53.2	
	7:30	9/6/2016	18.0	20.4	4.2	57.4	
	10:10	10/3/2016	15.5	19.2	4.8	60.5	
	8:18	10/19/2016	14.5	18.4	5.6	61.5	Reduce from 23.5 hr on to 19.5 hr on
	8:54	10/31/2016	14.5	18.0	6.2	61.3	Reduce from 19.5 hr on to 13.5 hr on

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
LC-3	8:11	11/14/2016	16.0	18.4	6.2	59.4	Reduce from 13.5 hr on to 7.5 hr on
	8:57	11/28/2016	20.0	19.6	5.9	54.5	
	9:13	12/9/2016	22.5	21.4	5.9	50.2	Reduce from 7.5 hr on to 5 hr on
	8:00	12/22/2016	23.5	21.0	6.1	49.4	Reduce from 5 hr on to 3 hr on
	8:10	1/4/2017	22.5	19.8	6.6	51.1	Reduce from 3 hr on to 2 hr on
	7:40	1/13/2017	23.7	21.2	6.2	48.9	Reduce from 2 hr on to 1 hr on
	7:34	1/27/2017	34.5	25.6	4.5	35.4	Increase from 1 hr on to 2 hr on
	8:10	2/13/2017	33.0	23.8	5.0	38.2	Reduce from 2 hr on to 1.5 hr on
	8:05	2/27/2017	33.5	23.2	5.6	37.7	Reduce from 1.5 hr on to 1 hr on
	8:30	3/13/2017	36.5	24.4	5.4	33.7	Reduce from 1 hr on to 0.75 hr on
	7:35	3/28/2017	36.0	24.6	4.7	34.7	Increase from 0.75 hr on to 1 hr on
	8:10	4/12/2017	37.0	25.0	4.8	33.2	Increase from 1 hr on to 3.5 hr on (sampling)
	7:48	4/18/2017	21.0	16.2	9.6	53.2	Reduce from 3.5 hr on to 1.5 hr on
	7:16	4/25/2017	36.0	25.6	4.3	34.1	Increase from 1.5 hr on to 3.5 hr on
	7:27	5/8/2017	35.0	25.2	4.6	35.2	Increase from 3.5 hr on to 6.5 hr on
	7:38	5/22/2017	29.5	22.2	4.8	43.5	Increase from 6.5 hr on to 8.5 hr on
	7:52	6/5/2017	28.0	22.6	3.9	45.5	Increase from 8.5 hr on to 14.5 hr on
	7:40	6/19/2017	23.5	21.8	3.2	51.5	Increase from 14.5 hr on to 20.5 hr on
	8:31	7/4/2017	23.5	22.8	2.7	51.0	Increase from 20.5 hr on to 23.5 hr on
	7:48	7/18/2017	28.0	24.8	2.0	45.2	
	7:53	8/1/2017	29.5	25.6	1.8	43.1	
	7:58	8/14/2017	31.5	26.2	1.4	40.9	
	8:13	8/29/2017	31.0	26.6	1.3	41.1	
	8:01	9/12/2017	31.0	26.8	1.2	41.0	
	8:12	9/25/2017	32.0	27.0	2.6	38.4	
	8:15	10/10/2017	32.0	27.6	1.2	39.2	
	7:54	10/23/2017	31.5	27.0	1.1	40.4	
	8:02	11/6/2017	33.5	28.2	1.2	37.1	
	8:08	11/17/2017	34.0	28.2	0.9	36.9	
	8:05	12/1/2017	34.5	28.6	1.0	35.9	
	8:15	12/18/2017	34.0	28.4	1.0	36.6	
	8:52	1/3/2018	36.5	27.8	1.9	33.8	
	8:01	1/11/2018	31.0	24.4	4.2	40.4	
	7:53	1/26/2018	18.5	19.6	5.3	56.6	Decreased from 23.5 hr on to 20 hr on
	8:18	2/13/2018	9.5	14.0	8.0	68.5	Decrease from 20 hr on to 12 hr on
	7:46	2/27/2018	19.0	20.2	3.9	56.9	
	7:46	3/13/2018	28.0	25.0	1.2	45.8	
	8:08	3/28/2018	22.5	21.8	3.5	52.2	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	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	
	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	
	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

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	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	
	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	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	
	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	
	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	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	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	
	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
	8:50	8/5/2013	10.0	18.6	2.4	69.0	
	8:15	8/19/2013	9.0	17.4	3.1	70.5	
	8:30	9/5/2013	2.4	10.2	10.0	77.5	
	8:45	9/16/2013	3.5	11.4	9.2	75.9	
	7:30	9/30/2013	23.5	21.6	3.5	51.4	
	7:35	10/14/2013	14.5	19.4	4.5	61.6	
	7:39	10/28/2013	12.0	16.2	6.7	65.1	
	8:05	11/19/2013	15.0	18.0	5.8	61.2	
	7:30	12/2/2013	41.5	25.6	1.4	31.5	
	7:10	12/16/2013	22.5	20.0	3.2	54.3	
	7:05	12/27/2013	39.5	24.6	0.6	35.3	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	7:05	1/13/2014	45.5	24.6	0.4	29.5	
	7:15	1/30/2014	39.5	24.0	0.3	36.2	
	7:30	2/12/2014	39.5	21.8	2.5	36.2	
	7:45	2/24/2014	12.5	15.6	4.2	67.7	
	8:15	3/10/2014	42.0	23.6	0.9	33.5	
	8:10	3/24/2014	12.4	14.0	5.7	67.9	
	7:25	4/7/2014	22.5	18.2	2.2	57.1	
	10:42	4/22/2014	8.5	13.8	5.1	72.6	
	7:40	5/7/2014	20.0	18.2	2.2	59.6	
	7:40	5/19/2014	9.0	16.6	2.9	71.5	
	7:10	5/30/2014	6.0	15.4	4.2	74.4	
	7:25	6/16/2014	3.1	11.6	8.0	77.4	
	7:48	6/30/2014	4.8	12.4	7.8	75.1	
	8:00	7/14/2014	3.0	11.4	8.4	77.2	
	7:48	7/28/2014	1.5	10.2	10.0	78.4	
	8:15	8/11/2014	2.5	11.2	8.4	77.9	
	7:20	8/25/2014	1.1	8.6	10.7	79.7	
	7:40	9/8/2014	1.9	10.4	9.2	78.5	
	7:25	9/22/2014	1.5	9.8	10.4	78.3	
	7:45	10/7/2014	3.0	11.8	7.4	77.9	
	7:40	10/20/2014	6.0	16.0	2.8	75.2	
	7:30	11/3/2014	10.5	16.6	4.2	68.7	
	7:25	11/17/2014	12.5	16.2	4.9	66.4	
	7:30	12/2/2014	9.5	16.2	4.1	70.2	
	7:10	12/15/2014	24.5	20.0	1.7	53.8	Blower off
	7:15	12/18/2014	16.0	18.8	1.6	63.6	
	7:25	1/2/2015	14.5	18.0	2.9	64.6	
	7:18	1/16/2015	12.0	14.5	4.5	69.0	
	7:25	1/26/2015	27.0	19.6	0.6	52.8	
	7:25	2/9/2015	9.0	15.2	4.5	71.3	
	7:55	2/24/2015	19.5	11.4	9.0	60.1	
	8:21	3/9/2015	14.0	16.2	2.2	67.6	
	7:20	3/23/2015	6.5	13.6	3.4	76.5	
	7:30	4/6/2015	7.0	13.8	3.8	75.4	
	8:23	4/22/2015	49.0	9.6	8.7	32.7	
	7:15	5/4/2015	3.7	11.4	5.3	79.7	
	7:20	5/18/2015	7.0	15.6	3.0	74.4	
	7:20	6/1/2015	6.0	15.4	2.9	75.7	
	7:27	6/15/2015	9.5	17.6	1.9	71.0	
	7:30	6/29/2015	12.0	19.0	2.0	67.0	
	7:21	7/14/2015	9.5	18.0	2.5	70.0	
	7:16	7/27/2015	4.6	15.6	3.4	76.4	
	7:22	8/10/2015	5.5	15.4	2.9	76.2	
	7:20	8/24/2015	5.0	15.6	3.4	76.0	
	7:35	9/8/2015	11.5	20.4	1.2	66.9	
	7:45	9/21/2015	2.8	12.4	6.5	78.4	
	7:25	10/5/2015	8.5	19.6	1.3	70.6	
	7:30	10/19/2015	12.0	19.2	1.7	67.1	
	7:45	11/2/2015	3.3	12.2	6.6	78.0	
	7:25	11/16/2015	8.5	18.2	1.1	72.2	
	10:55	11/30/2015	7.0	15.0	5.6	72.4	
	7:16	12/15/2015	5.5	14.2	3.7	76.6	
	7:30	12/28/2015	11.0	18.6	1.3	69.1	
	8:11	1/9/2016	8.0	15.0	3.6	73.4	
	7:45	1/25/2016	20.0	20.6	1.3	58.1	
	7:45	2/8/2016	14.5	17.2	2.3	66.0	
	8:27	2/22/2016	12.0	15.8	1.7	70.5	
	7:42	3/7/2016	19.5	16.6	1.9	62.0	
	8:25	3/21/2016	16.5	18.8	1.4	63.3	
	7:45	4/4/2016	1.5	10.4	8.8	79.4	
	8:00	4/18/2016	8.5	15.2	3.1	73.2	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Active Extraction Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GV-6	9:35	5/3/2016	19.5	18.8	2.0	59.7	
	7:45	5/16/2016	20.0	19.4	2.0	58.6	
	7:40	6/2/2016	10.5	16.8	3.2	69.5	
	7:45	6/14/2016	16.5	19.4	2.3	61.8	
	7:40	6/27/2016	7.5	15.2	3.9	73.4	
	10:15	7/14/2016	9.5	17.4	3.8	69.3	
	7:50	7/25/2016	4.3	13.2	6.9	75.6	
	7:40	8/8/2016	5.5	13.8	6.9	73.8	
	7:25	8/25/2016	4.7	13.0	7.4	75.0	
	7:25	9/6/2016	4.9	12.2	8.2	74.8	
	9:55	10/3/2016	5.0	13.2	7.3	74.5	
	8:06	10/19/2016	2.2	9.8	10.1	78.0	
	8:38	10/31/2016	5.5	13.0	7.8	73.7	
	8:07	11/14/2016	6.5	14.6	5.8	73.1	
	9:01	11/28/2016	15.5	18.8	2.2	63.5	
	9:10	12/9/2016	4.5	13.4	6.7	75.4	
	7:50	12/22/2016	7.5	15.4	3.5	73.6	
	7:50	1/4/2017	13.0	16.4	2.9	67.7	
	7:20	1/13/2017	12.1	14.8	3.3	69.8	
	7:16	1/27/2017	24.5	19.6	1.8	54.1	
	7:47	2/13/2017	14.5	14.8	2.5	68.2	
	7:50	2/27/2017	17.0	15.8	3.3	63.9	
	8:15	3/13/2017	36.5	20.8	0.6	42.1	
	7:18	3/28/2017	24.0	17.6	2.8	55.6	
	8:00	4/12/2017	17.5	17.4	2.8	62.3	
	7:40	4/18/2017	25.0	19.4	2.3	53.3	
	7:09	4/25/2017	35.5	21.6	2.0	40.9	
	7:12	5/8/2017	17.5	19.0	2.7	60.8	
	7:22	5/22/2017	17.5	19.2	2.3	61.0	
	7:40	6/5/2017	11.0	17.6	3.2	68.2	
	7:28	6/19/2017	4.8	14.0	5.8	75.5	
	8:24	7/4/2017	6.5	14.8	6.3	72.4	
	7:46	7/18/2017	7.5	16.6	4.4	71.5	
	7:50	8/1/2017	10.0	18.0	4.0	68.0	
	7:56	8/14/2017	16.0	21.0	2.8	60.2	
	8:10	8/29/2017	10.0	17.6	4.7	67.7	
	7:58	9/12/2017	17.0	20.8	3.9	58.3	
	8:09	9/25/2017	9.5	16.2	5.7	68.6	
	8:12	10/10/2017	3.4	11.0	9.9	75.7	
	7:52	10/23/2017	13.5	16.4	6.4	63.7	
	7:59	11/6/2017	2.6	10.0	9.1	78.3	
	8:06	11/17/2017	18.0	20.8	2.3	58.9	
	8:03	12/1/2017	5.0	10.6	9.2	75.2	
	8:13	12/18/2017	10.0	14.0	6.1	69.9	
	8:49	1/3/2018	9.5	11.8	8.0	70.7	
	7:59	1/11/2018	12.0	14.0	6.7	67.3	
	7:57	1/26/2018	5.0	8.6	11.7	74.7	
	8:14	2/13/2018	2.1	6.8	13.3	77.8	
	7:44	2/27/2018	2.3	8.4	7.7	81.6	
	7:44	3/13/2018	1.6	6.2	12.7	79.6	
	8:06	3/28/2018	3.2	9.6	7.4	79.9	

CH4 = Methane
CO2 = Carbon Dioxide
O2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-1	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-1	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

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

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-1	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	
	8:45	8/5/2013	2.9	8.6	8.0	80.5	
	8:05	8/19/2013	1.5	2.8	17.1	78.6	
	8:20	9/15/2013	0.7	5.4	13.3	80.7	
	8:35	9/16/2013	0.5	4.4	14.6	80.5	
	7:20	9/30/2013	0.6	6.8	11.0	81.6	
	8:05	10/14/2013	1.0	4.2	15.2	79.6	
	7:20	10/28/2013	0.0	3.2	16.1	80.7	
	7:48	11/19/2013	0.0	4.2	15.2	80.6	
	7:20	12/2/2013	0.0	5.0	12.2	82.8	
	7:02	12/16/2013	0.0	5.4	12.7	81.9	
	7:00	12/27/2013	0.0	4.6	14.0	81.4	
	7:01	1/13/2014	0.0	1.2	17.6	81.2	
	7:05	1/30/2014	0.0	0.0	20.9	79.1	
	7:18	2/12/2014	0.0	0.0	20.9	79.1	
	7:35	2/24/2014	0.0	3.6	16.4	80.0	
	8:05	3/10/2014	0.0	2.8	15.6	81.6	
	8:02	3/24/2014	0.0	2.8	7.4	89.8	
	7:17	4/7/2014	0.0	0.2	19.3	80.5	
	7:40	4/22/2014	0.0	0.0	20.9	79.1	
	7:25	5/7/2014	0.0	0.8	18.9	80.3	
	7:35	5/19/2014	0.0	3.0	14.3	82.7	
	7:03	5/30/2014	0.0	4.6	12.1	83.3	
	7:20	6/16/2014	0.0	4.6	11.4	84.0	
	7:35	6/30/2014	0.2	8.4	4.7	86.7	
	7:45	7/14/2014	0.1	0.6	20.9	78.5	
	7:42	7/28/2014	0.0	5.6	13.1	81.3	
	8:10	8/11/2014	4.1	10.2	5.6	80.2	
	8:30	8/12/2014	5.0	11.2	5.3	78.5	
	7:12	8/25/2014	2.3	8.0	8.1	81.6	
	7:35	9/8/2014	0.1	6.2	11.4	82.3	
	7:18	9/22/2014	0.0	4.2	15.8	80.0	
	7:33	10/7/2014	0.0	3.4	16.0	80.6	
	7:32	10/20/2014	0.5	6.0	10.6	83.0	
	7:18	11/3/2014	0.0	8.2	8.0	83.8	
	7:15	11/17/2014	0.0	11.2	2.2	86.6	
	7:18	12/2/2014	0.0	6.8	8.5	84.7	
	7:05	12/15/2014	0.0	3.0	14.4	82.6	Blower Off
	7:08	12/18/2014	1.8	7.4	1.2	89.6	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-1	7:12	1/2/2015	0.1	1.2	19.2	79.5	
	7:08	1/16/2015	0.0	4.2	9.0	86.8	
	7:18	1/26/2015	0.0	4.0	9.8	86.2	
	7:18	2/9/2015	0.0	3.2	12.9	83.9	
	7:40	2/24/2015	0.0	6.8	5.9	87.3	
	8:10	3/9/2015	0.0	3.0	15.1	81.9	
	7:10	3/23/2015	0.0	2.6	15.5	81.9	
	7:18	4/6/2015	0.0	3.0	15.5	81.5	
	9:05	4/22/2015	0.0	0.0	20.9	79.1	
	7:05	5/4/2015	0.0	0.0	20.9	79.1	
	7:15	5/18/2015	0.0	5.6	9.7	84.7	
	7:04	6/1/2015	0.0	0.8	20.1	79.1	
	7:15	6/15/2015	0.0	1.4	18.4	80.2	
	7:18	6/29/2015	0.0	6.6	9.6	83.8	
	7:12	7/14/2015	0.0	1.0	19.6	79.4	
	7:08	7/27/2015	0.1	6.2	10.6	83.1	
	7:15	8/10/2015	7.0	12.2	2.3	78.5	
	7:12	8/24/2015	0.0	10.8	7.5	81.7	
	7:20	9/8/2015	0.6	6.8	9.9	82.7	
	7:35	9/21/2015	0.3	6.6	11.0	82.1	
	7:13	10/5/2015	3.6	10.4	6.1	79.9	
	7:18	10/19/2015	0.0	8.4	10.1	81.5	
	7:35	11/2/2015	0.0	4.8	14.1	81.1	
	7:17	11/16/2015	0.0	2.8	17.2	80.0	
	10:48	11/30/2015	0.0	1.0	20.5	78.5	
	7:08	12/15/2015	0.0	0.0	20.9	79.1	
	7:10	12/28/2015	0.0	0.0	20.9	79.1	
	8:02	1/9/2016	0.0	0.0	20.8	79.2	
	7:33	1/25/2016	0.0	0.0	20.9	79.1	
	7:30	2/8/2016	0.0	0.8	18.7	80.5	
	7:18	2/22/2016	0.05	0.6	19.0	80.4	
	7:32	3/7/2016	0.0	0.0	20.9	79.1	
	8:15	3/21/2016	0.0	0.0	20.9	79.1	
	7:34	4/4/2016	0.0	0.0	20.9	79.1	
	7:40	4/18/2016	0.0	0.0	20.9	79.1	
	8:47	5/3/2016	0.0	5.0	7.1	87.9	
	7:35	5/16/2016	0.0	6.4	7.3	86.3	
	7:33	6/2/2016	0.0	7.0	7.8	85.2	
	7:35	6/14/2016	0.0	6.2	11.1	82.7	
	7:35	6/27/2016	0.0	8.4	9.8	81.8	
	10:05	7/14/2016	0.1	13.2	3.0	83.7	
	7:29	7/25/2016	0.9	7.6	8.2	83.4	
	7:32	8/8/2016	1.2	7.0	10.1	81.8	
	7:18	8/25/2016	0.0	1.0	20.4	78.6	
	7:18	9/6/2016	0.2	4.8	14.0	81.0	
	9:42	10/3/2016	1.2	7.4	8.5	82.9	
	7:48	10/19/2016	0.0	5.4	12.8	81.8	
	8:26	10/31/2016	0.1	11.2	5.0	83.8	
	7:57	11/14/2016	0.0	7.0	9.0	84.0	
	8:41	11/28/2016	0.0	7.0	7.1	85.9	
	9:00	12/9/2016	0.2	1.4	19.7	78.7	
	7:35	12/22/2016	0.0	12.0	5.2	82.8	
	7:35	1/4/2017	0.0	0.4	20.8	78.8	
	7:11	1/13/2017	0.0	0.2	20.8	79.0	
	7:04	1/27/2017	0.0	0.0	20.9	79.1	
	7:40	2/13/2017	0.0	2.6	7.4	90.0	
	7:35	2/27/2017	0.0	0.0	20.0	80.0	
	8:03	3/13/2017	0.0	0.0	20.9	79.1	
	7:04	3/28/2017	0.0	0.0	20.9	79.1	
	7:46	4/12/2017	0.0	0.0	20.9	79.1	
	6:49	4/18/2017	0.0	0.0	20.9	79.1	
	6:53	4/25/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-1	7:03	5/8/2017	0.0	0.0	20.9	79.1	
	7:12	5/22/2017	0.0	7.0	7.2	85.8	
	7:23	6/5/2017	0.0	5.6	11.7	82.7	
	7:18	6/19/2017	0.0	0.8	20.3	78.9	
	8:21	7/4/2017	0.0	6.0	8.5	85.5	
	7:40	7/18/2017	1.6	8.8	5.4	84.2	
	7:42	8/1/2017	0.0	8.8	8.1	83.1	
	7:50	8/14/2017	0.2	11.6	6.0	82.3	
	8:01	8/29/2017	3.4	9.4	7.0	80.2	
	7:51	9/12/2017	1.4	8.6	8.3	81.7	
	8:02	9/25/2017	1.7	7.8	9.4	81.2	
	8:05	10/10/2017	0.1	4.4	14.4	81.2	
	7:43	10/23/2017	0.0	4.8	13.7	81.5	
	7:50	11/6/2017	1.0	7.2	8.3	83.6	
	8:59	11/17/2017	0.0	4.8	13.6	81.6	
	7:56	12/1/2017	0.0	4.4	14.1	81.5	
	8:06	12/18/2017	0.0	6.4	10.3	83.3	
	8:39	1/3/2018	0.0	4.2	14.1	81.7	
	7:53	1/11/2018	0.0	5.8	11.1	83.1	
	7:43	1/26/2018	0.0	3.4	15.1	81.5	
	7:58	2/13/2018	0.0	2.2	17.9	79.9	
	7:36	2/27/2018	0.0	1.8	18.5	79.7	
	7:34	3/13/2018	0.0	1.2	18.6	80.2	
	7:58	3/28/2018	0.0	3.6	14.3	82.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-2	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-2	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	
	9:05	10/14/2013	0.0	3.2	18.6	78.2	
	11:39	4/22/2014	0.0	3.6	15.8	80.6	
	8:00	4/22/2015	0.0	2.6	17.7	79.7	
	9:02	4/18/2016	0.0	0.8	20.2	79.0	
	9:05	4/12/2017	0.0	1.4	19.0	79.6	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-3	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-3	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	
	9:15	10/14/2013	0.0	0.6	20.3	79.1	
	12:11	4/22/2014	0.0	0.0	20.9	79.1	
	11:40	4/22/2015	0.0	0.0	20.9	79.1	
	9:25	4/18/2016	0.0	1.0	20.1	78.9	
	9:21	4/12/2017	0.0	0.0	20.9	79.1	
	7:50	4/18/2017	0.0	3.6	15.0	81.4	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-4	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-4	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	
	9:25	10/14/2013	0.0	1.2	20.9	77.9	
	12:20	4/22/2014	0.0	1.8	17.9	80.3	
	7:45	4/22/2015	0.0	1.2	20.3	78.5	
	9:35	4/18/2016	0.05	1.4	19.3	79.3	
	9:27	4/12/2017	0.0	0.6	20.1	79.3	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

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

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-5	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	
	7:54	10/14/2013	0.0	6.8	14.9	78.3	
	7:50	4/22/2014	0.0	1.8	17.7	80.5	
	9:04	4/22/2015	0.0	2.6	17.6	79.8	
	8:30	4/18/2016	0.0	2.4	15.6	82.0	
	8:21	4/12/2017	0.0	2.6	16.5	80.9	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-6	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-6	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	
	9:45	10/14/2013	0.0	2.4	19.6	78.0	
	10:25	4/22/2014	0.0	2.4	17.5	80.1	
	7:35	4/22/2015	0.0	2.6	18.9	78.5	
	9:50	4/18/2016	0.0	2.4	17.8	79.8	
	9:40	4/12/2017	0.0	1.8	19.3	78.9	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-7	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-7	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	
	9:40	10/14/2013	0.0	1.4	20.5	78.1	
	10:21	4/22/2014	0.0	2.8	16.4	80.8	
	7:30	4/22/2015	0.0	2.0	19.0	79.0	
	9:45	4/18/2016	0.0	1.4	18.8	79.8	
	9:37	4/12/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-8	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-8	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	
	9:10	10/14/2013	0.0	2.2	18.4	79.4	
	12:06	4/22/2014	0.0	3.6	15.0	81.4	
	7:50	4/22/2015	0.0	3.0	17.2	79.8	
	9:20	4/18/2016	0.05	3.0	16.6	80.4	
	9:17	4/12/2017	0.0	4.0	15.9	80.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-10	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-10	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	
	9:00	10/14/2013	0.0	3.6	17.9	78.5	
	11:29	4/22/2014	0.0	3.2	17.2	79.6	
	7:55	4/22/2015	0.0	3.6	17.1	79.3	
	8:55	4/18/2016	0.0	3.4	16.9	79.7	
	9:03	4/12/2017	0.0	4.2	17.2	78.6	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-11	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-11	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	
	8:36	10/14/2013	0.0	1.8	20.8	77.4	
	11:46	4/22/2014	0.0	3.4	16.8	79.8	
	13:05	4/22/2015	0.0	1.8	19.5	78.7	
	8:40	4/18/2016	0.0	2.4	19.0	78.6	
	8:37	4/12/2017	0.0	2.6	18.8	78.6	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-12	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
GP-12	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	
	8:10	10/14/2013	0.0	3.2	18.6	78.2	
	7:58	4/22/2014	0.0	2.6	17.8	79.6	
	9:15	4/22/2015	0.0	3.4	17.8	78.8	
	8:35	4/18/2016	0.0	2.4	17.1	80.5	
	8:25	4/12/2017	0.0	3.4	16.7	79.9	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-101	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-101	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	
	8:45	10/14/2013	0.0	0.4	20.9	78.7	
	11:56	4/22/2014	0.5	0.6	20.1	78.8	
	11:30	4/22/2015	0.0	0.4	20.7	78.9	
	8:45	4/18/2016	0.0	0.0	20.9	79.1	
	8:43	4/12/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-102	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-102	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	
	7:59	10/14/2013	0.0	4.0	17.4	78.6	
	7:53	4/22/2014	0.0	0.4	20.5	79.1	
	9:08	4/22/2015	0.0	1.0	20.9	78.1	
	8:22	4/18/2016	0.0	0.4	19.9	79.7	
	8:18	4/12/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-103	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-103	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	
	9:20	10/14/2013	0.0	0.2	20.9	78.9	
	12:14	4/22/2014	0.0	0.0	20.9	79.1	
	7:40	4/22/2015	0.0	0.0	20.9	79.1	
	9:30	4/18/2016	0.0	0.6	20.8	78.6	
	9:24	4/12/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-104	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	
	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	
	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	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
MW-104	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	
	7:40	10/14/2013	0.0	2.4	17.4	80.2	
	10:47	4/22/2014	0.0	0.2	20.7	79.1	
	10:26	4/22/2015	0.0	1.0	20.9	78.1	
	8:09	4/18/2016	0.0	0.2	20.9	78.9	
	8:06	4/12/2017	0.0	0.0	20.9	79.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

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

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
System Exhaust	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	
	8:49	8/6/2012	3.9	5.6	15.0	75.6	
	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	
	8:50	8/5/2013	6.5	9.0	12.3	72.2	
	8:08	8/19/2013	6.0	8.6	12.4	73.0	
	8:24	9/5/2013	5.0	7.8	13.6	73.6	
	8:38	9/16/2013	6.5	8.6	13.4	71.5	
	7:24	9/30/2013	12.0	10.8	11.9	65.3	
	7:24	10/14/2013	11.0	10.2	12.6	66.2	
	8:00	10/28/2013	11.5	9.8	14.0	64.7	
	7:55	11/19/2013	8.5	7.4	15.5	68.6	
	7:23	12/2/2013	11.5	7.8	15.1	65.6	
	7:05	12/16/2013	9.5	7.2	15.3	68.0	
	7:30	12/27/2013					Blower off
	7:02	1/13/2014	12.5	7.8	14.4	65.3	
	7:05	1/30/2014	14.5	9.4	14.0	62.1	
	7:21	2/12/2014	13.0	7.4	14.8	64.8	
	7:40	2/24/2014	8.5	6.2	14.6	70.7	
	8:07	3/10/2014	13.0	8.4	14.1	64.5	
	9:15	3/24/2014	16.0	14.4	8.1	61.5	
	7:45	4/7/2014	11.0	8.6	12.8	67.6	
	7:42	4/22/2014	8.5	9.0	12.5	70.0	
	7:28	5/7/2014	7.5	6.2	14.8	71.5	
	7:38	5/19/2014	4.7	5.0	16.4	74.0	
	7:05	5/30/2014	2.9	3.0	18.2	76.0	
	8:00	6/16/2014	4.0	4.8	15.8	75.5	
	7:40	6/30/2014	4.7	6.6	18.4	70.3	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

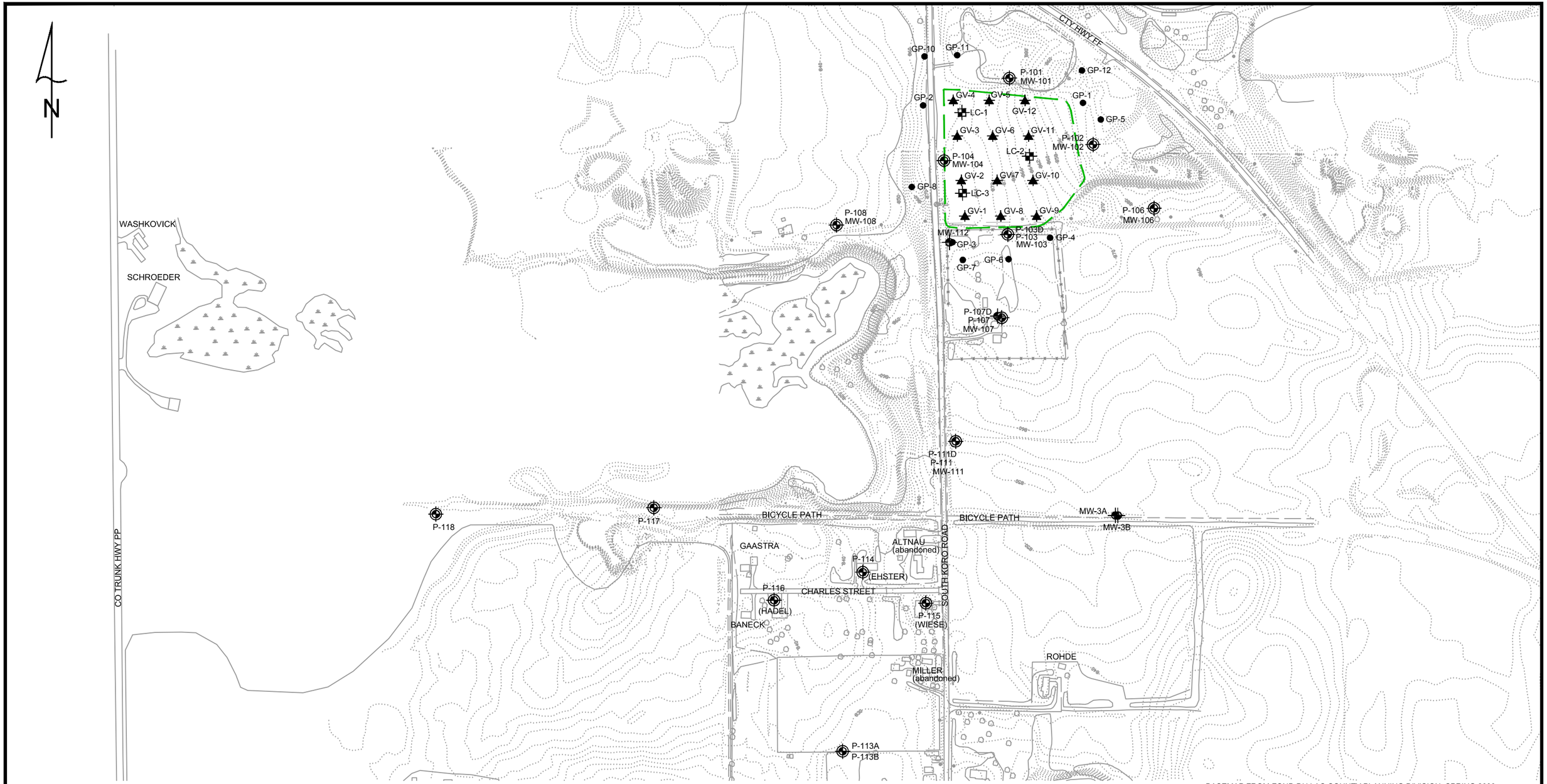
Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
System Exhaust	7:48	7/14/2014	3.1	6.0	15.8	75.1	
	8:48	7/28/2014	3.0	6.0	15.8	75.2	
	8:05	8/11/2014	3.0	7.0	13.8	76.2	
	13:15	8/25/2014	3.1	7.8	13.2	76.0	
	7:37	9/8/2014	3.5	8.2	12.7	75.7	
	7:23	9/22/2014	3.1	7.0	14.5	75.4	
	7:35	10/7/2014	4.5	9.0	11.2	75.4	
	7:36	10/20/2014	5.5	10.2	10.8	73.5	
	7:21	11/3/2014	6.5	8.6	14.8	70.1	
	7:18	11/17/2014	10.0	11.4	10.3	68.3	
	7:25	12/2/2014	9.0	9.8	11.6	69.6	
	7:50	12/15/2014	NA	NA	NA	NA	Blower off
	8:05	12/18/2014	12.0	11.2	11.3	65.5	
	7:15	1/2/2015	11.5	11.2	11.6	65.7	
	7:12	1/16/2015	8.0	7.2	14.3	70.5	
	7:20	1/26/2015	11.0	14.0	7.8	67.2	
	7:21	2/9/2015	6.5	7.2	14.3	72.0	
	7:45	2/24/2015	13.0	8.4	13.4	65.2	
	8:14	3/9/2015	9.0	8.2	12.7	70.1	
	7:12	3/23/2015	7.5	8.8	11.3	72.4	
	7:22	4/6/2015	7.0	8.2	11.8	73.0	
	9:00	4/22/2015	5.0	8.0	12.7	74.3	
	7:08	5/4/2015	6.5	9.2	10.2	74.1	
	7:15	5/18/2015	8.0	10.6	10.2	71.2	
	7:08	6/1/2015	7.0	10.8	10.0	72.2	
	7:20	6/15/2015	9.0	11.4	9.1	70.5	
	7:21	6/29/2015	8.5	10.8	10.6	70.1	
	7:18	7/14/2015	7.5	11.4	9.8	71.3	
	7:11	7/27/2015	5.5	9.6	11.1	73.8	
	7:18	8/10/2015	6.0	10.0	10.2	73.8	
	7:15	8/24/2015	5.0	9.2	10.9	74.9	
	7:25	9/8/2015	8.0	12.6	9.1	70.3	
	7:40	9/21/2015	4.5	8.6	12.2	74.7	
	7:16	10/5/2015	7.0	11.4	10.4	71.2	
	7:22	10/19/2015	7.0	10.2	11.3	71.5	
	7:38	11/2/2015	4.7	8.4	12.4	74.5	
	7:20	11/16/2015	6.5	10.0	11.3	72.2	
	10:50	11/30/2015	7.4	10.2	12.0	70.4	
	7:10	12/15/2015	4.3	6.8	13.9	75.1	
	7:20	12/28/2015	5.5	7.2	14.3	73.0	
	8:05	1/9/2016	7.0	8.0	12.5	72.5	
	7:40	1/25/2016	6.5	6.2	15.5	71.8	
	7:35	2/8/2016	5.0	5.2	16.0	73.8	
	8:21	2/22/2016	7.0	6.4	14.7	71.9	
	7:35	3/7/2016	9.0	7.2	13.5	70.3	
	8:18	3/21/2016	6.5	6.6	14.7	72.2	
	7:40	4/4/2016	3.8	4.8	16.1	75.4	
	7:45	4/18/2016	3.8	4.0	16.8	75.5	
	8:50	5/3/2016	4.2	3.6	16.9	75.4	
	7:38	5/16/2016	4.0	3.4	17.6	75.1	
	7:35	6/2/2016	2.6	2.8	17.9	76.7	
	7:37	6/14/2016	3.1	3.0	18.0	75.9	
	7:38	6/27/2016	2.2	2.4	18.1	77.4	
	10:10	7/14/2016	2.5	3.0	17.8	76.7	
	7:44	7/25/2016	2.1	3.0	18.0	76.9	
	7:35	8/8/2016	2.7	3.4	17.6	76.4	
	8:00	8/25/2016	2.6	3.6	17.2	76.6	
	7:20	9/6/2016	3.0	3.6	17.4	76.1	
	9:45	10/3/2016	3.4	4.8	16.5	75.3	
	7:50	10/19/2016	2.8	4.4	16.9	76.0	
	8:33	10/31/2016	3.7	16.1	5.4	74.8	
	7:59	11/14/2016	4.1	5.6	16.0	74.3	
	8:49	11/28/2016	6.5	7.4	14.3	71.8	
	9:04	12/9/2016	3.7	4.8	17.2	74.3	
	7:40	12/22/2016	4.6	5.4	15.9	74.1	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

Monitoring Points	Time	Date	CH_4 (%) variable	CO_2 (%) variable	O_2 (%) <5	N (%) <40	Comments target percentages
System Exhaust	7:40	1/4/2017	6.5	6.0	15.6	71.9	
	7:15	1/13/2017	6.8	6.2	14.8	72.2	
	7:08	1/27/2017	9.5	7.6	14.5	68.4	
	7:43	2/13/2017	7.5	5.8	14.8	71.9	
	7:40	2/27/2017	9.0	6.6	14.2	70.2	
	8:06	3/13/2017	11.5	7.0	15.4	66.1	
	7:07	3/28/2017	11.5	7.4	14.4	66.7	
	7:49	4/12/2017	9.0	7.4	14.8	68.8	
	6:50	4/18/2017	12.5	8.8	13.8	64.9	
	7:04	4/25/2017	12.5	13.9	8.4	65.2	
	7:07	5/8/2017	9.8	7.6	14.7	67.9	
	7:15	5/22/2017	9.0	7.6	13.9	69.5	
	7:26	6/5/2017	7.5	7.6	13.9	71.0	
	7:20	6/19/2017	5.0	6.8	14.6	73.6	
	8:23	7/4/2017	2.9	3.6	17.4	76.2	
	7:42	7/18/2017	1.8	2.4	18.6	77.2	
	7:43	3/1/1900	2.1	2.6	18.5	76.8	
	7:57	8/14/2017	2.5	2.8	18.6	76.2	
	8:04	8/29/2017	2.1	2.6	18.8	76.6	
	7:53	9/12/2017	2.5	2.8	18.8	75.9	
	8:03	9/25/2017	2.2	2.6	18.7	76.6	
	8:07	10/10/2017	1.9	2.2	14.4	81.6	
	7:46	10/23/2017	2.5	2.6	19.5	75.4	
	7:53	11/6/2017	1.6	1.8	20.0	76.7	
	8:01	11/17/2017	2.7	2.6	19.0	75.7	
	7:58	12/1/2017	1.7	1.8	19.4	77.1	
	8:07	12/18/2017	2.0	2.2	19.2	76.6	
	8:42	1/3/2018	0.1	1.0	20.8	78.1	
	7:54	1/11/2018	0.5	2.4	18.7	78.4	
	7:46	1/26/2018	8.0	9.6	12.4	70.0	
	8:01	2/13/2018	4.4	7.4	13.8	74.5	
	7:38	2/27/2018	3.2	4.6	15.9	76.3	
	7:36	3/13/2018	3.8	5.2	15.8	75.3	
	8:00	3/28/2018	0.1	3.8	17.3	78.8	

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
N = Nitrogen

FIGURES



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

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

SCALE

0 800

Feet

S:\CAD\RIPON\2202.054\10-3-17\2202054FIG1.DWG

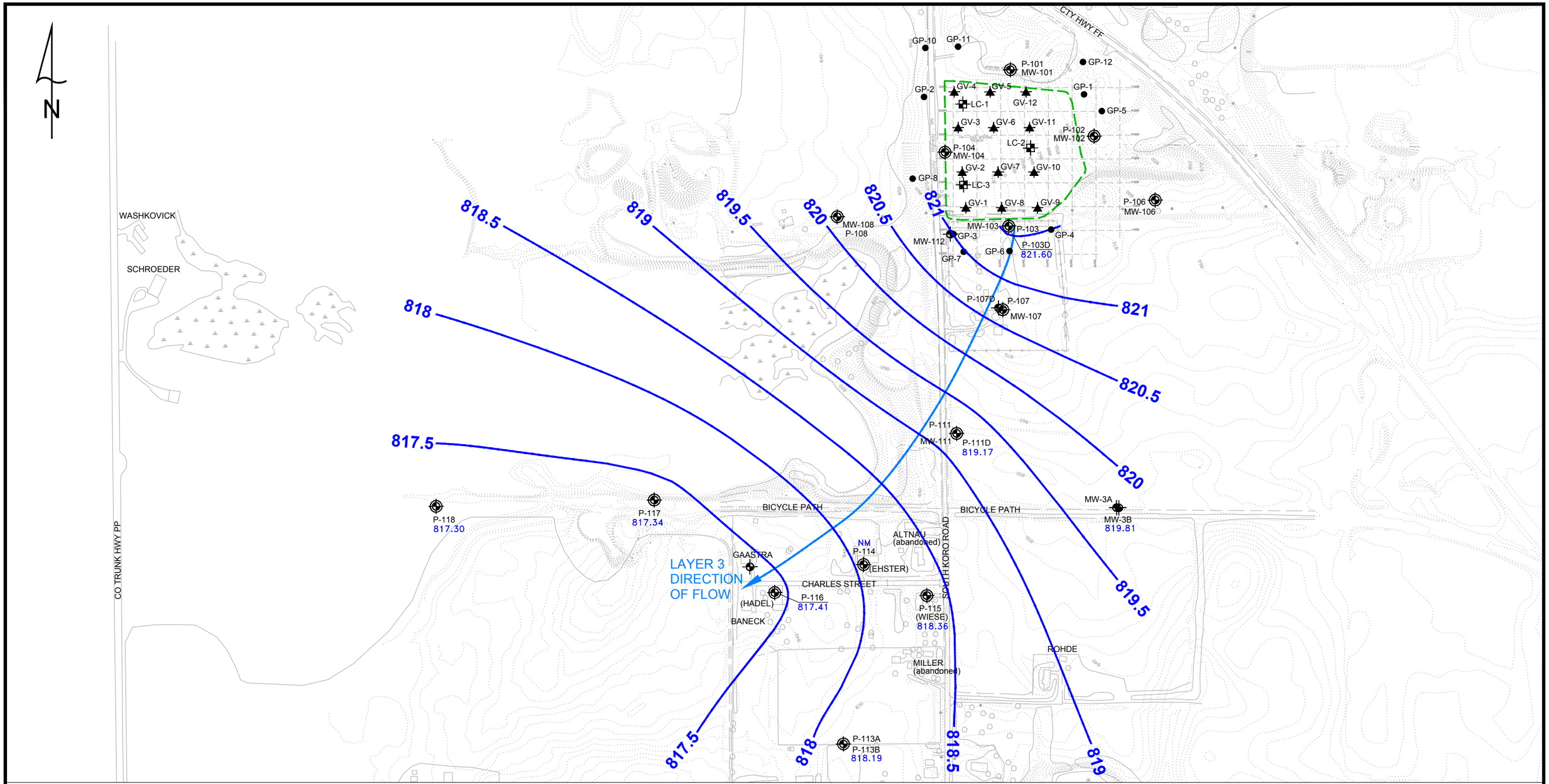
FF/NN LANDFILL
RIPON, WISCONSIN

SITE LAYOUT

DATE:	10/21/17
DESIGNED:	HJW
CHECKED:	MRN
APPROVED:	MRN
DRAWN:	HJW
PROJ.:	117-2202054

TETRA TECH

Figure 1



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
- 823.45 — GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR

P-114 was not included in March 2018 contours
See Section 3.1.1 in text for more details

SCALE
0 800
Feet

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

S:\CAD\RIPON\2202-061\2202061001A.DWG

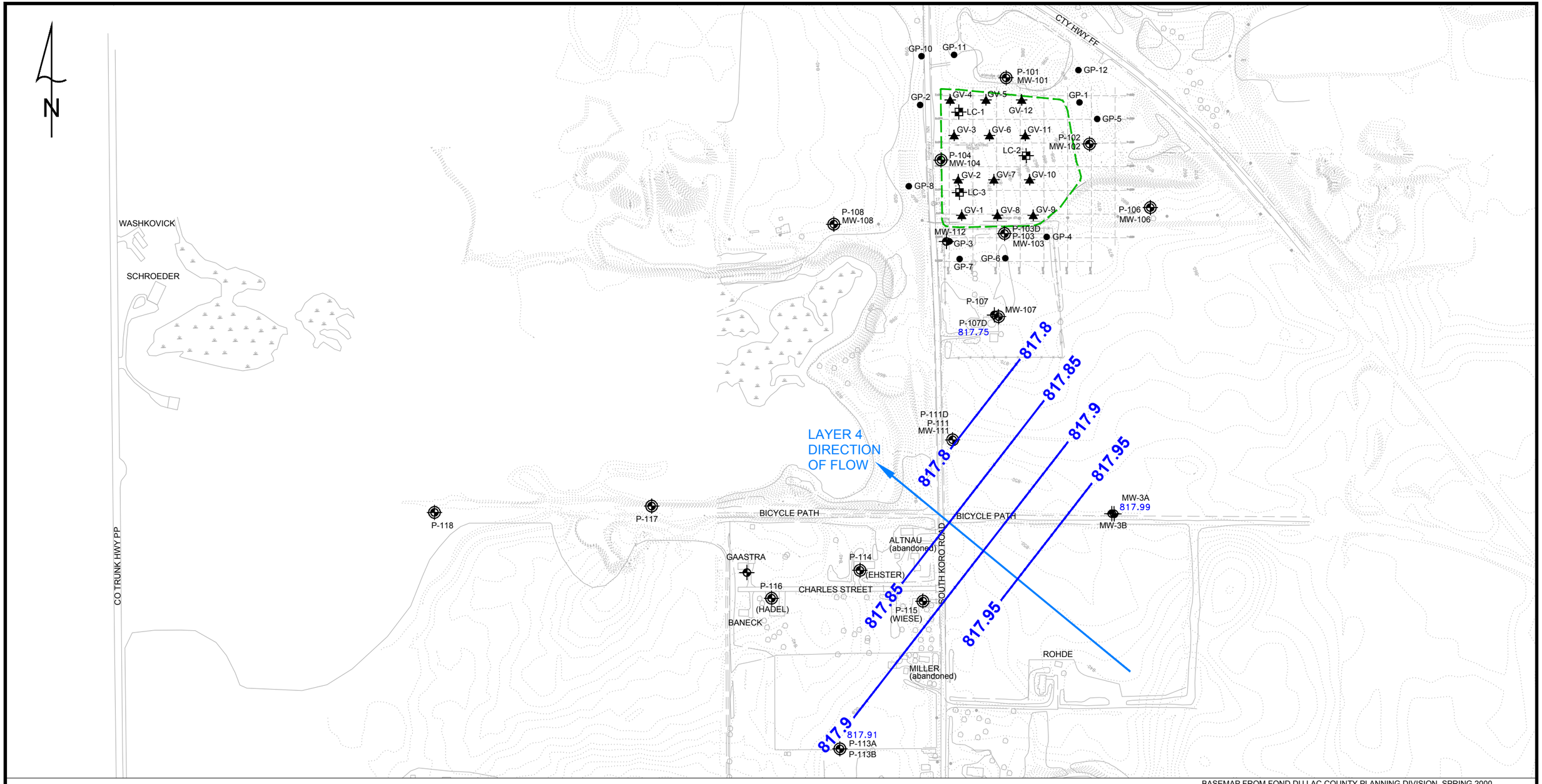
FF/NN LANDFILL
RIPON, WISCONSIN

GROUNDWATER ELEVATIONS
LAYER 3 WELLS
MARCH 2018

TETRA TECH

DATE:	4/19/18
DESIGNED:	AAW
CHECKED:	AAW
APPROVED:	MRN
DRAWN:	CMP
PROJ.:	117-2202061

Figure 3



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
- 823.45 — GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR

SCALE

0 800

Feet

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

FF/NN LANDFILL
RIPON, WISCONSIN

GROUNDWATER ELEVATIONS
LAYER 4 WELLS
MARCH 2018

DATE:	4/19/18
DESIGNED:	AAW
CHECKED:	AAW
APPROVED:	MRN
DRAWN:	CMP
PROJ.:	117-2202061

TETRA TECH

Figure 4

S:\CAD\RIPON\2202-061\2202061002A.DWG

CHARTS

Chart 3: Layer 3 Historic Water Level Data

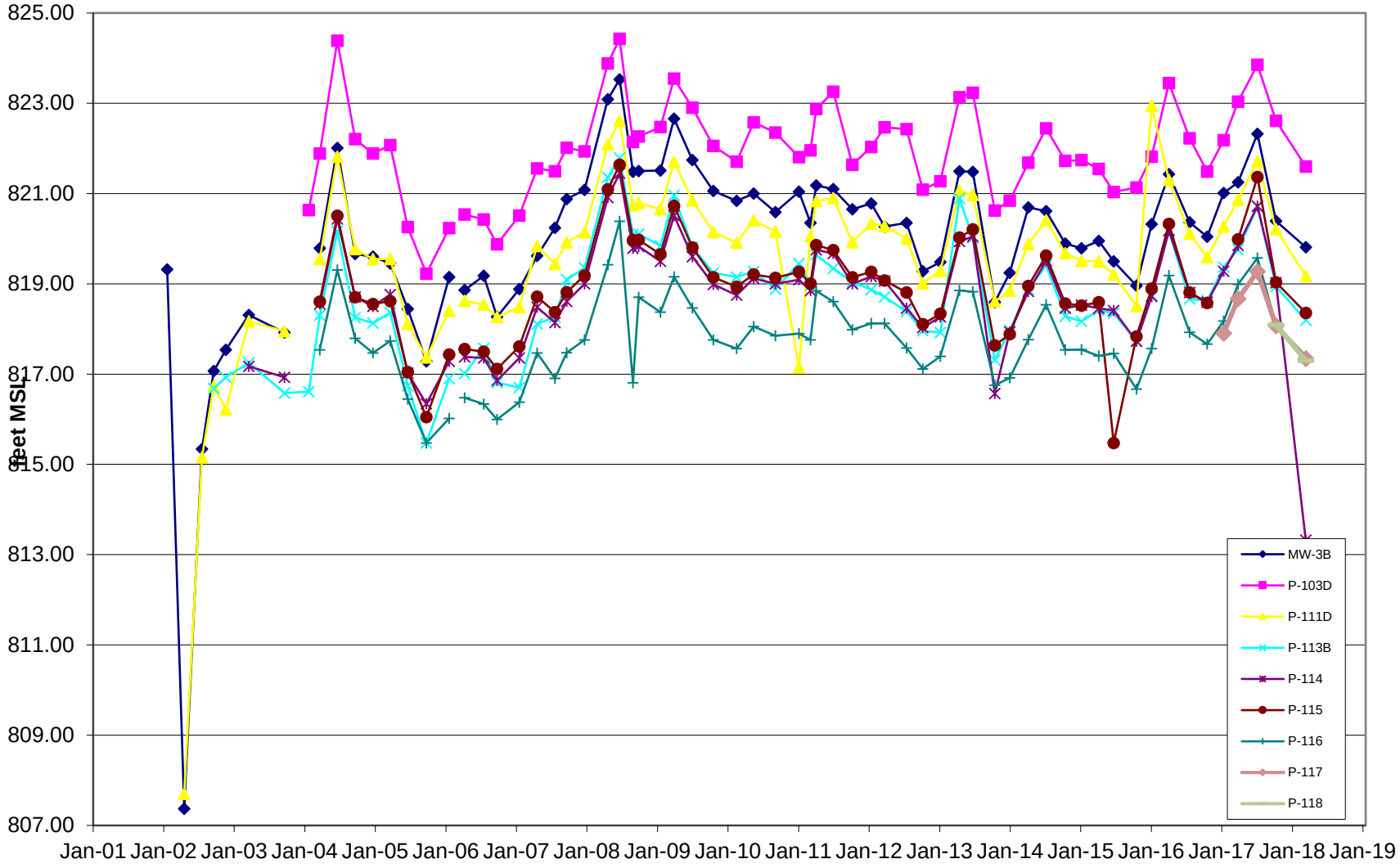


Chart 4: Layer 4 Historic Water Level Data

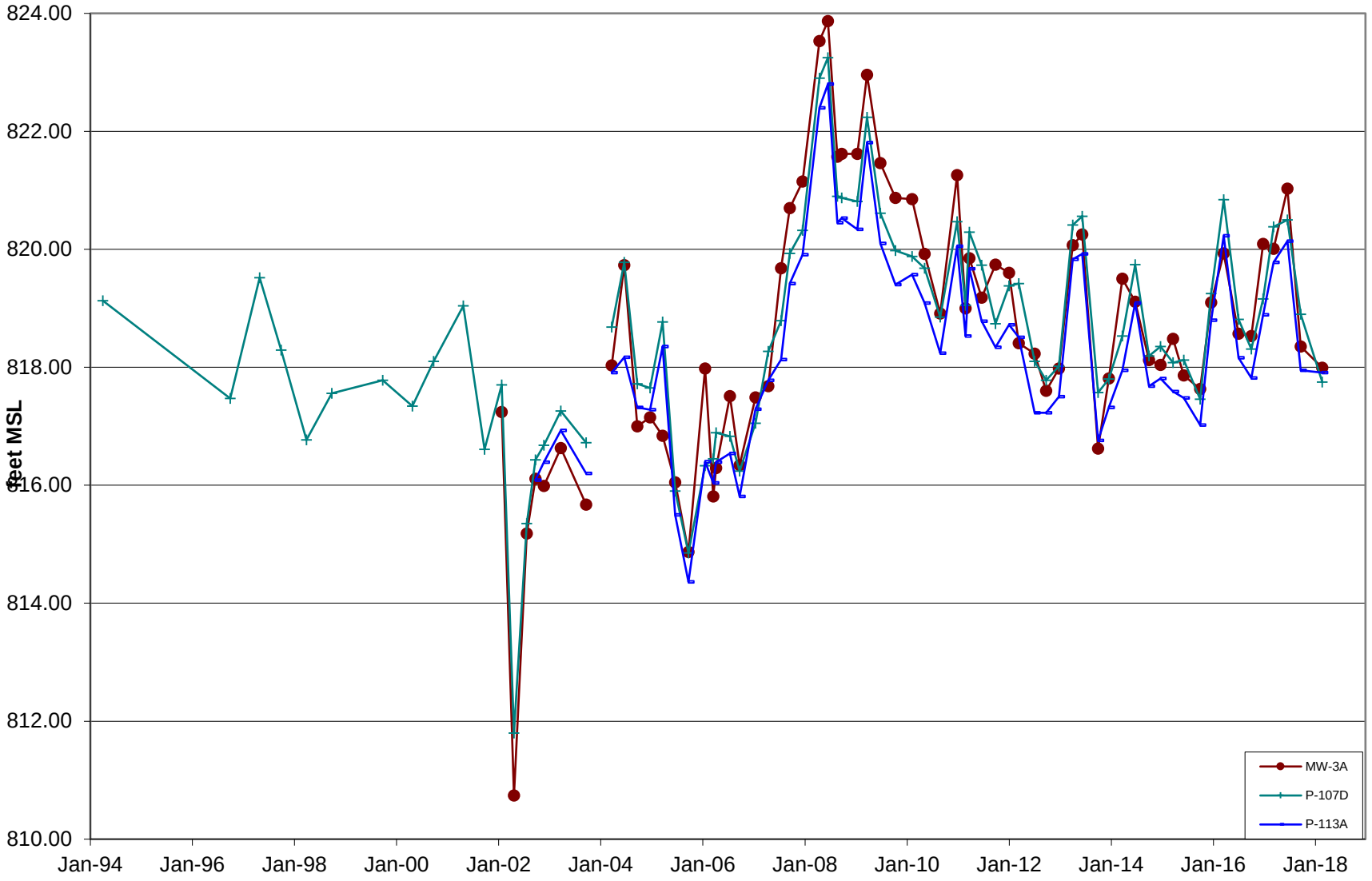


Chart 53: P-103D
Layer 3 Well

10' Down gradient

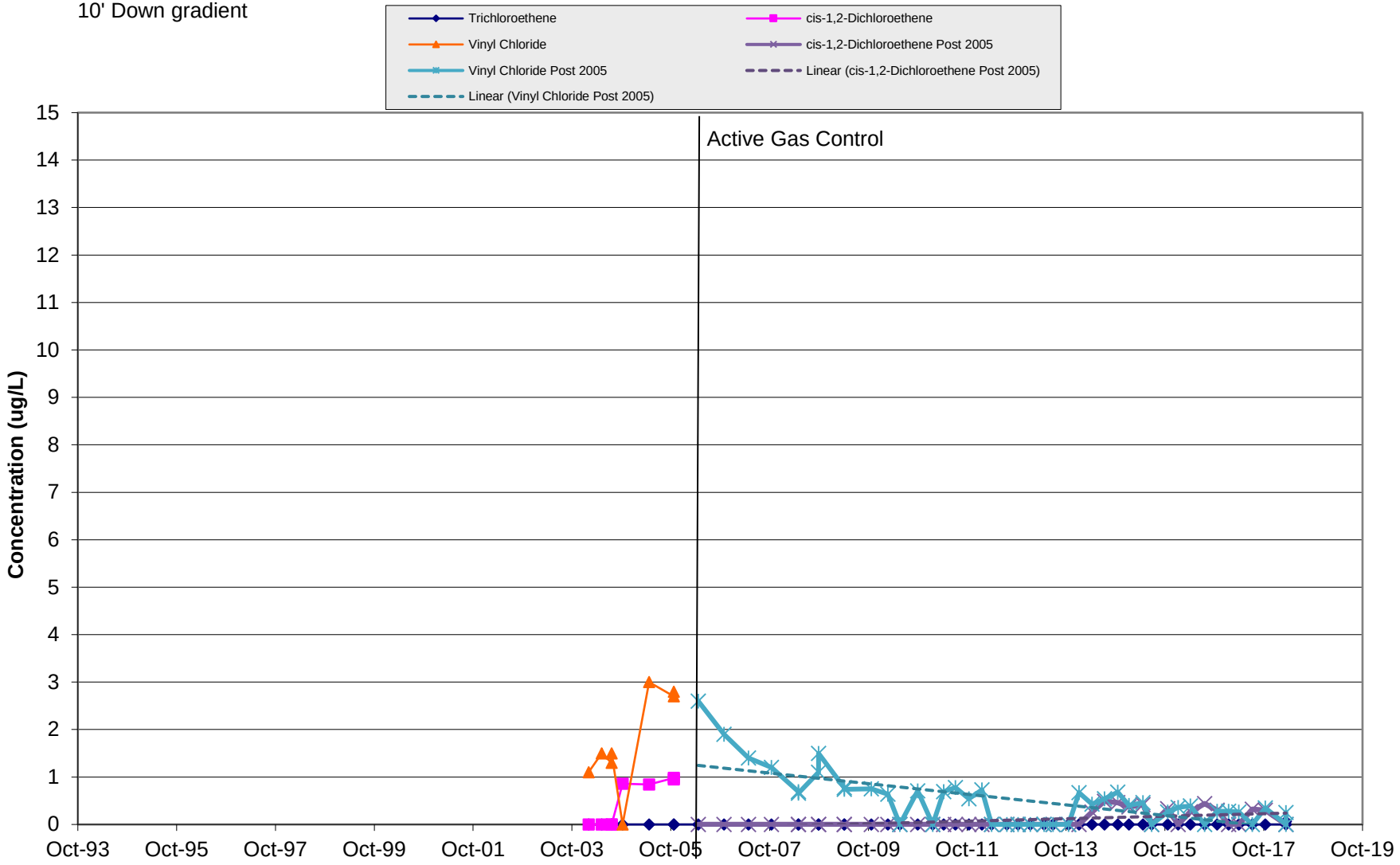


Chart 54: P-111D
Layer 3 Well

900' Down gradient

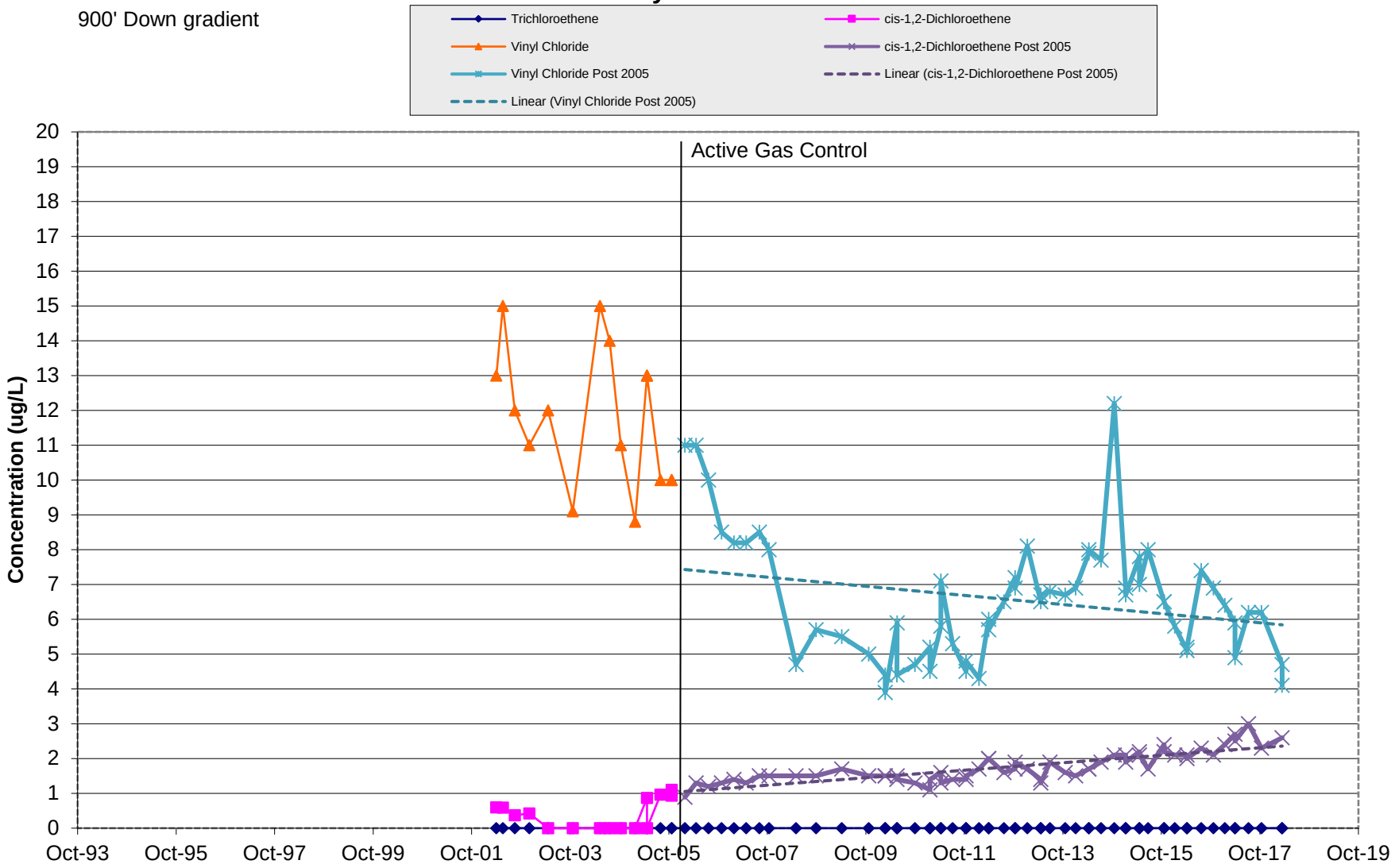


Chart 57: P-114
Layer 3 Well

1550' Down gradient

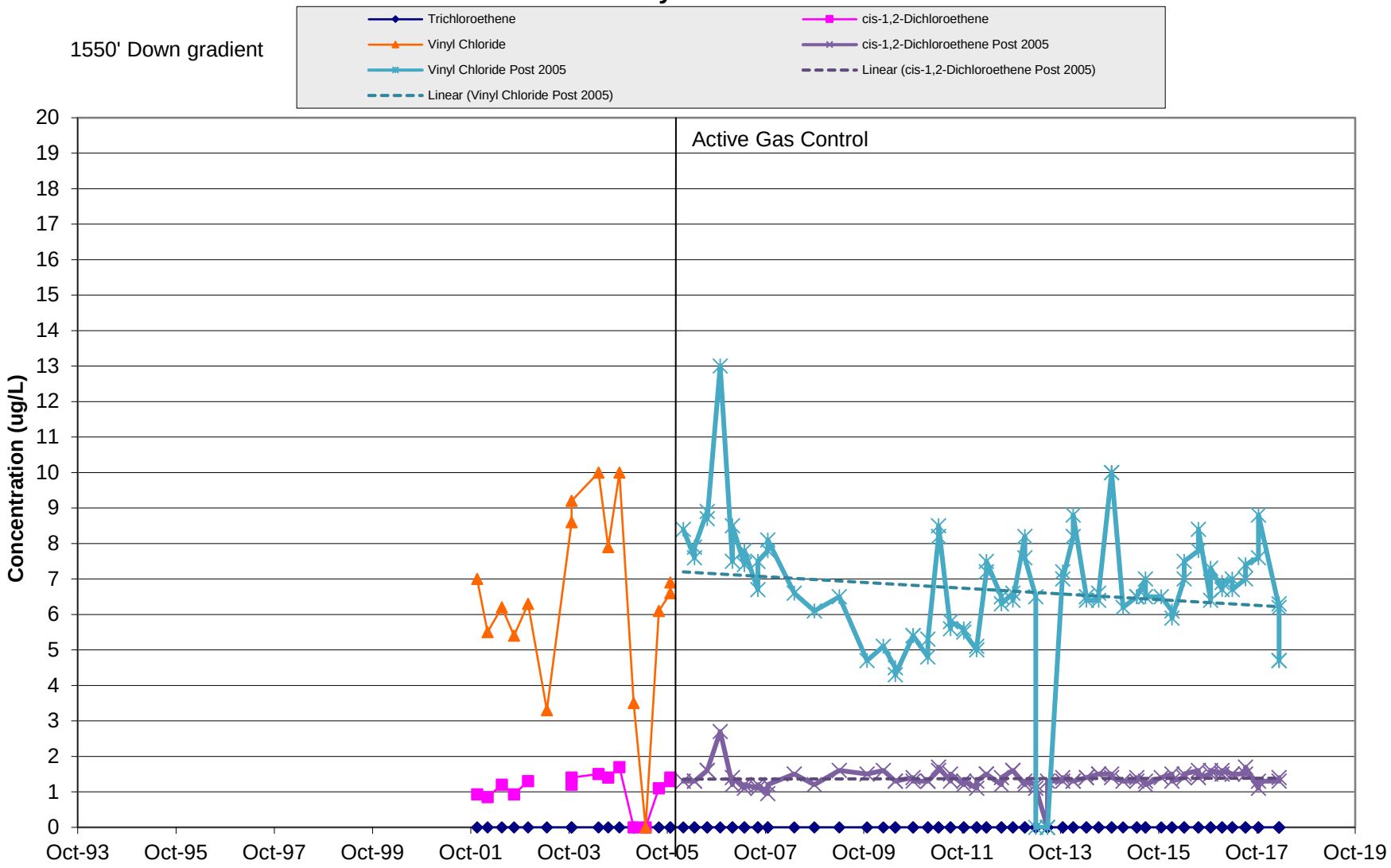
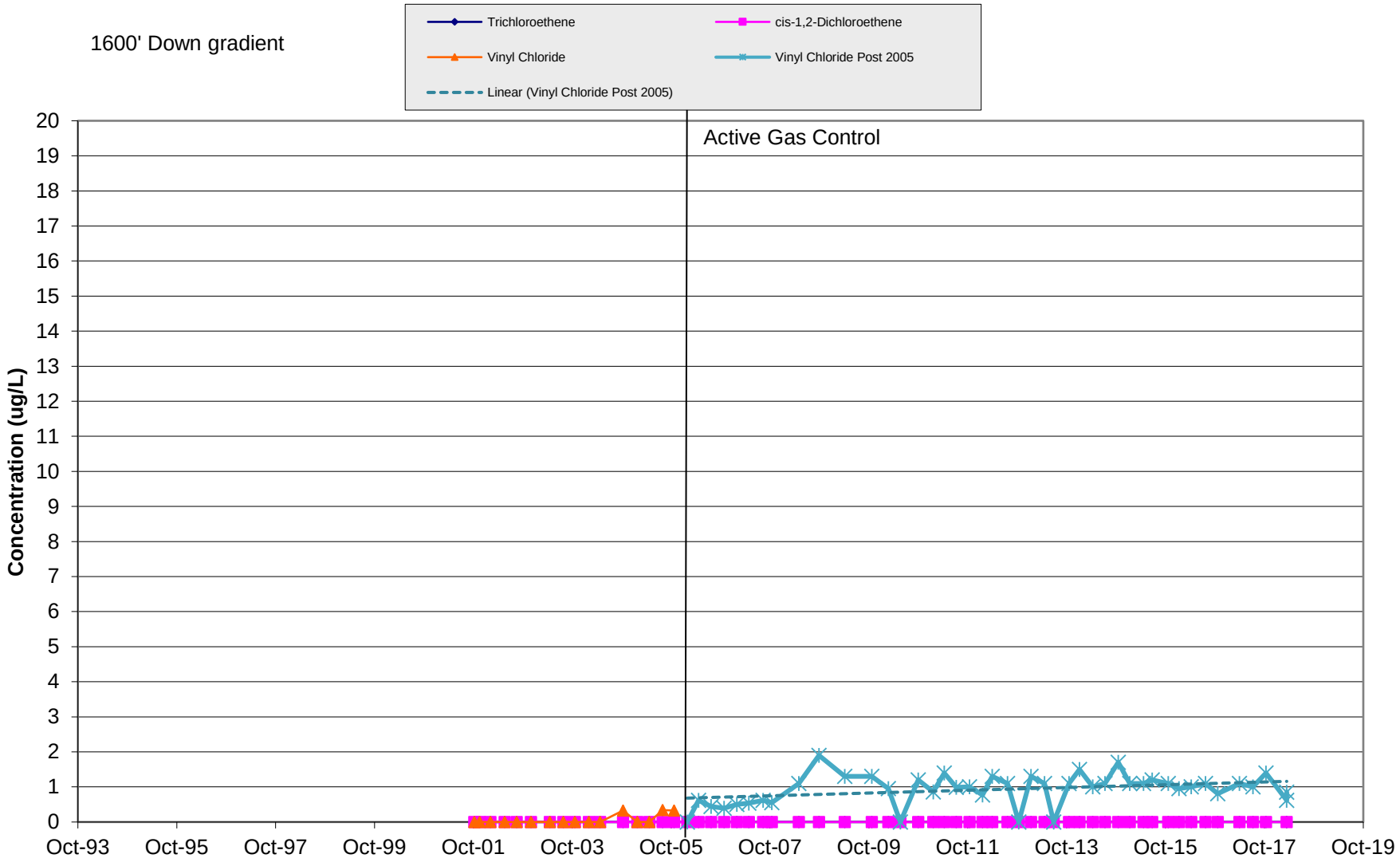


Chart 58: P-115
Layer 3 Well

1600' Down gradient



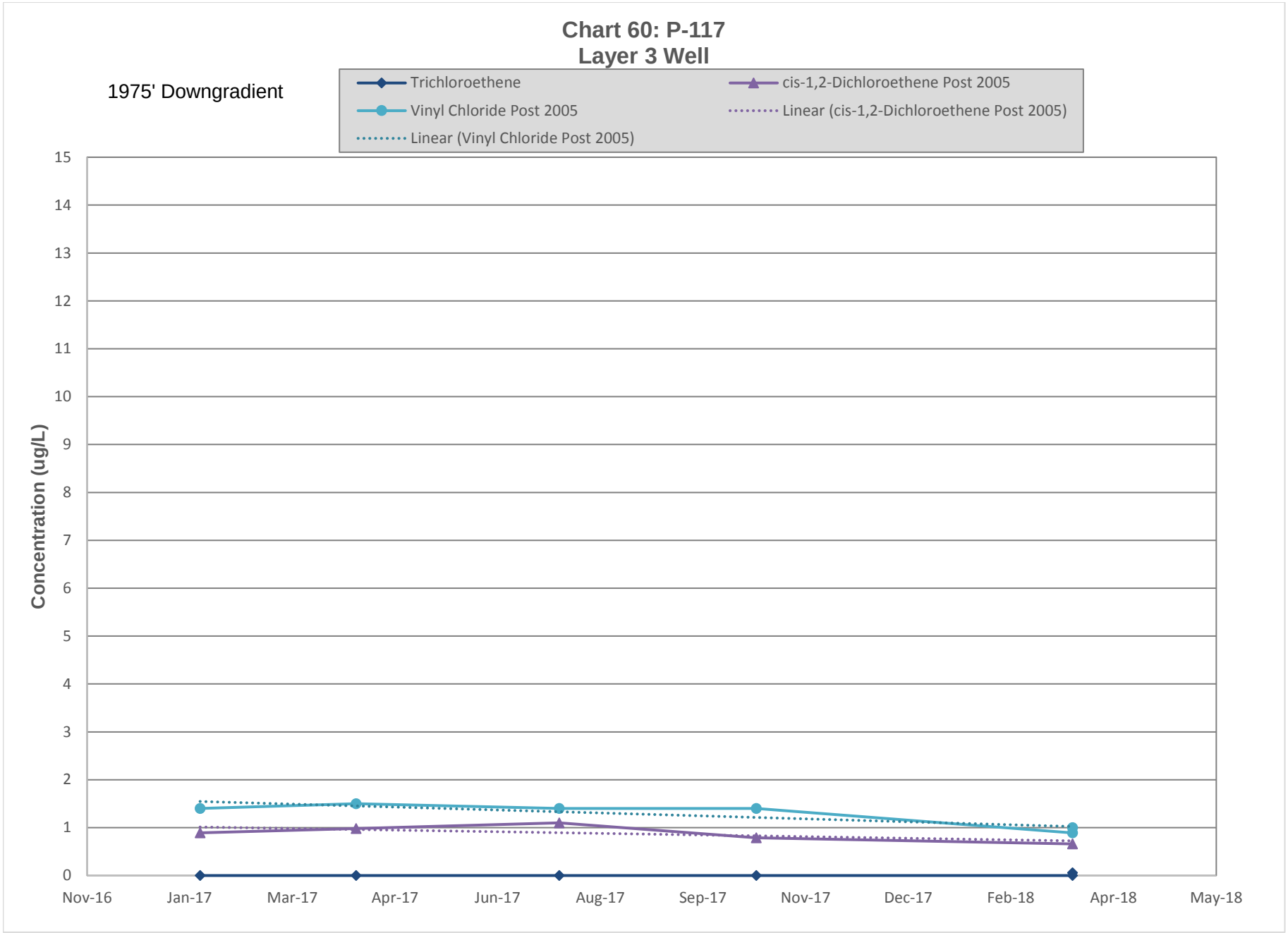
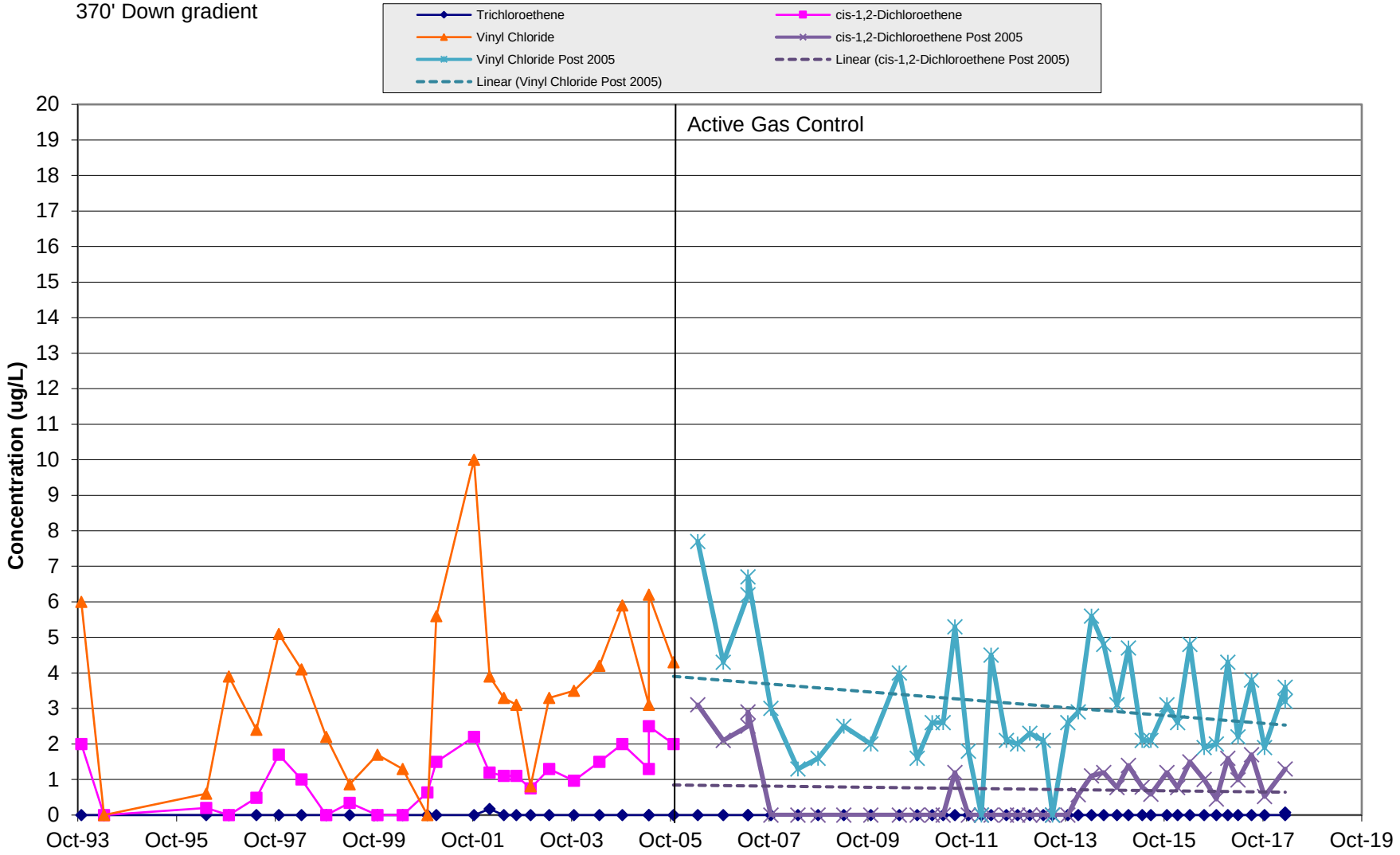


Chart 60: P-117
Layer 3 Well
1975' Downgradient
Trichloroethene
cis-1,2-Dichloroethene Post 2005
Vinyl Chloride Post 2005
Linear (cis-1,2-Dichloroethene Post 2005)
Linear (Vinyl Chloride Post 2005)
Concentration (ug/L)
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
Nov-16
Jan-17
Mar-17
Apr-17
Jun-17
Aug-17
Sep-17
Nov-17
Dec-17
Feb-18
Apr-18
May-18

Chart 63: P-107D
Layer 4 Well

370' Down gradient



ATTACHMENTS

ATTACHMENT A

STRATIGRAPHIC GROUPING TABLE

Stratigraphic Groupings of Monitoring Wells
FF/NN Landfill, Ripon, WI

Layer	Well ID	Well Screen Elevation (ft msl)	Lithology at Well Screen
Layer 1 Wells	MW-106	821.0	sand
	MW-101	820.4	sand
	MW-104	819.3	sand & gravel
	MW-102	818.9	sand & gravel
	MW-103	818.7	sand
	MW-107	816.5	sand
	MW-108	814.9	sand
	MW-112	814.1	sand
	MW-111	812.3	sand
Layer 2 Wells	P-106	791.7	sand
	P-101	790.0	sand
	P-103	789.9	silt
	P-107	785.6	sand
	P-108	783.5	sand
	P-104	782.0	sand
	P-102	781.3	sand
	P-111	774.2	sand
Layer 3 Wells	P-111D	704.0	sand and gravel
	P-103D	682.08	sandstone
	MW-3B	665.0	sandstone
	P-113B	634.2	sandstone
	P-114	654.4	sandstone
	P-115	662.7	sandstone
	P-116	681.3	sandstone
	P-117	673.7	sandstone
	P-118	665.5	dolomite
Layer 4 wells	MW-3A	570.0	sandstone
	P-107D	544.0	granite
	P-113A	507.8	sandstone

p:\ripon landfill\Stratigraphic groupings table.xls, Layers

ATTACHMENT B

LABORATORY ANALYTICAL RESULTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-142742-1
Client Project/Site: Ripon FF/NN Landfill - 117-2202061.01

For:
Tetra Tech GEO
175 N Corporate Drive
Suite 100
Brookfield, Wisconsin 53045

Attn: Ms. Ashley Wagner

Sandie Fredrick

Authorized for release by:
4/5/2018 10:09:22 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Case Narrative

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Job ID: 500-142742-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-142742-1

Comments
No additional comments.

Receipt
The samples were received on 3/23/2018 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.9º C.

Receipt Exceptions
Per client email on 3/27/18, the laboratory was instructed to run both 8260 and SIM analyses on all samples.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 490-504203 recovered outside control limits for the following analytes: Trichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The method blank for analytical batch 490-504203 contained Naphthalene above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples was not performed.

Method(s) 8260C: The following volatile samples were analyzed with significant headspace in the sample container(s): P-113B (500-142742-9), (480-133096-L-1 MS), (480-133096-K-1 MSD) and Trip Blank (500-142742-14). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260C SIM: The container used for reanalysis of the following sample contained headspace: P-114 (500-142742-11) The method used for analysis requires that the sample does not contain headspace.

Method(s) 8260C SIM: The reporting limit for 1,2,3-Trichloropropane is 0.0077 ppb. 1,2,3-Trichloropropane in the initial calibration associated with analytical batch 490-505613 has a lower limit of 0.05 ppb. (480-133096-J-1)

Method(s) 8260C SIM: The reporting limit for Vinyl chloride is 0.020 ppb. Vinyl chloride in the initial calibration associated with Analytical batch 490-505613 has a lower limit of 0.050 ppb.
(480-133096-J-1)

Method(s) 8260C SIM: The reporting limit for Ethylene Dibromide is 0.0058 ppb. Ethylene Dibromide in the initial calibration associated with analytical batch 490-505613 has a lower limit of 0.05 ppb. (480-133096-J-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-103D — Lab Sample ID: 500-142742-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.015	J	0.050	0.0063	ug/L	1		8260C SIM	Total/NA
Trichloroethene	0.062		0.050	0.0050	ug/L	1		8260C SIM	Total/NA
Vinyl chloride	0.25		0.050	0.011	ug/L	1		8260C SIM	Total/NA
Depth to Water (ft from MP)	51.48				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.46				SU	1		Field Sampling	Total/NA
Field Temperature	9.3				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	821.60				ft	1		Field Sampling	Total/NA
Specific Conductance	685				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-107D — Lab Sample ID: 500-142742-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.072		0.050	0.0050	ug/L	1		8260C SIM	Total/NA
Vinyl chloride	3.2		0.050	0.011	ug/L	1		8260C SIM	Total/NA
Chloroethane	0.88	J	1.0	0.36	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.21	ug/L	1		8260C	Total/NA
Vinyl chloride	3.6		1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	54.23				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.82				SU	1		Field Sampling	Total/NA
Field Temperature	9.3				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	817.75				ft	1		Field Sampling	Total/NA
Specific Conductance	530				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-111D — Lab Sample ID: 500-142742-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.27	J	1.0	0.25	ug/L	1		8260C SIM	Total/NA
Vinyl chloride	4.1		0.050	0.011	ug/L	1		8260C SIM	Total/NA
Chloroethane	0.52	J	1.0	0.36	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.6		1.0	0.21	ug/L	1		8260C	Total/NA
Vinyl chloride	4.7		1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	36.62				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.83				SU	1		Field Sampling	Total/NA
Field Temperature	9.2				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	819.17				ft	1		Field Sampling	Total/NA
Specific Conductance	752				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-117 — Lab Sample ID: 500-142742-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.057		0.050	0.0050	ug/L	1		8260C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Client Sample ID: P-117 (Continued) — Lab Sample ID: 500-142742-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.0		0.050	0.011	ug/L	1		8260C SIM	Total/NA
cis-1,2-Dichloroethene	0.66	J	1.0	0.21	ug/L	1		8260C	Total/NA
Vinyl chloride	0.89	J	1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	16.68				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.70				SU	1		Field Sampling	Total/NA
Field Temperature	9.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	817.34				ft	1		Field Sampling	Total/NA
Specific Conductance	684				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-118 — Lab Sample ID: 500-142742-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	9.63				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.93				SU	1		Field Sampling	Total/NA
Field Temperature	9.2				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	817.30				ft	1		Field Sampling	Total/NA
Specific Conductance	524				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: MW-3A — Lab Sample ID: 500-142742-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	32.78				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	Y				NONE	1		Field Sampling	Total/NA
Field pH	7.86				SU	1		Field Sampling	Total/NA
Field Temperature	8.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	100.22				ft	1		Field Sampling	Total/NA
Specific Conductance	488				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: MW-3B — Lab Sample ID: 500-142742-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.035	J	0.050	0.011	ug/L	1		8260C SIM	Total/NA
Depth to Water (ft from MP)	31.23				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	Y				NONE	1		Field Sampling	Total/NA
Field pH	7.90				SU	1		Field Sampling	Total/NA
Field Temperature	8.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	102.77				ft	1		Field Sampling	Total/NA
Specific Conductance	621				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-113A — Lab Sample ID: 500-142742-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: P-113A (Continued) — Lab Sample ID: 500-142742-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	15.18				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.93				SU	1		Field Sampling	Total/NA
Field Temperature	7.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	817.91				ft	1		Field Sampling	Total/NA
Specific Conductance	486				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-113B — Lab Sample ID: 500-142742-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	14.91				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.92				SU	1		Field Sampling	Total/NA
Field Temperature	9.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	818.19				ft	1		Field Sampling	Total/NA
Specific Conductance	579				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-116 — Lab Sample ID: 500-142742-10

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	27.93				ft	1		Field Sampling	Total/NA
Field Color	Y				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	8.03				SU	1		Field Sampling	Total/NA
Field Temperature	10.0				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	Y				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	817.41				ft	1		Field Sampling	Total/NA
Specific Conductance	447				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-114 — Lab Sample ID: 500-142742-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.39	J	1.0	0.25	ug/L	1		8260C SIM	Total/NA
Vinyl chloride	4.7		0.25	0.055	ug/L	5		8260C SIM	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.21	ug/L	1		8260C	Total/NA
Vinyl chloride	6.2		1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	26.03				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.94				SU	1		Field Sampling	Total/NA
Field Temperature	9.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	813.32				ft	1		Field Sampling	Total/NA
Specific Conductance	678				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-114 DUP — Lab Sample ID: 500-142742-12

This Detection Summary does not include radiochemical test results.

Client Sample ID: P-114 DUP (Continued) — Lab Sample ID: 500-142742-12

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	4.7		0.25	0.055	ug/L	5		8260C SIM	Total/NA
cis-1,2-Dichloroethene	1.4		1.0	0.21	ug/L	1		8260C	Total/NA
Vinyl chloride	6.3		1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	26.03				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	7.94				SU	1		Field Sampling	Total/NA
Field Temperature	9.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	813.32				ft	1		Field Sampling	Total/NA
Specific Conductance	678				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: P-115 — Lab Sample ID: 500-142742-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.85		0.050	0.011	ug/L	1		8260C SIM	Total/NA
Vinyl chloride	0.62	J	1.0	0.18	ug/L	1		8260C	Total/NA
Depth to Water (ft from MP)	24.35				ft	1		Field Sampling	Total/NA
Field Color	N				NONE	1		Field Sampling	Total/NA
Field Odor	N				NONE	1		Field Sampling	Total/NA
Field pH	8.02				SU	1		Field Sampling	Total/NA
Field Temperature	9.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	N				NONE	1		Field Sampling	Total/NA
Groundwater Elevation (ft MSL)	818.36				ft	1		Field Sampling	Total/NA
Specific Conductance	554				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 500-142742-14

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.21	J B	5.0	0.21	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
Field Sampling	Field Sampling	EPA	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-142742-1	P-103D	Ground Water	03/21/18 09:50	03/23/18 09:45
500-142742-2	P-107D	Ground Water	03/21/18 10:40	03/23/18 09:45
500-142742-3	P-111D	Ground Water	03/21/18 10:25	03/23/18 09:45
500-142742-4	P-117	Ground Water	03/21/18 11:15	03/23/18 09:45
500-142742-5	P-118	Ground Water	03/21/18 11:40	03/23/18 09:45
500-142742-6	MW-3A	Ground Water	03/21/18 14:55	03/23/18 09:45
500-142742-7	MW-3B	Ground Water	03/21/18 15:10	03/23/18 09:45
500-142742-8	P-113A	Ground Water	03/21/18 12:45	03/23/18 09:45
500-142742-9	P-113B	Ground Water	03/21/18 12:20	03/23/18 09:45
500-142742-10	P-116	Ground Water	03/21/18 13:20	03/23/18 09:45
500-142742-11	P-114	Ground Water	03/21/18 13:50	03/23/18 09:45
500-142742-12	P-114 DUP	Ground Water	03/21/18 13:55	03/23/18 09:45
500-142742-13	P-115	Ground Water	03/21/18 14:25	03/23/18 09:45
500-142742-14	Trip Blank	Water	03/21/18 00:00	03/23/18 09:45

Client Sample ID: P-103D
Date Collected: 03/21/18 09:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-1
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 17:43	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 17:43	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 17:43	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 17:43	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 17:43	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 17:43	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 17:43	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 17:43	1
Benzene	**0.015**	**J**	0.050	0.0063	ug/L			03/29/18 17:43	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 17:43	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 17:43	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:43	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 17:43	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 17:43	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:43	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:43	1
Trichloroethene	**0.062**		0.050	0.0050	ug/L			03/29/18 17:43	1
Vinyl chloride	**0.25**		0.050	0.011	ug/L			03/29/18 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*03/29/18 17:43*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/29/18 17:43*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 17:43*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 17:43*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 18:21	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 18:21	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 18:21	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 18:21	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 18:21	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 18:21	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 18:21	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 18:21	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 18:21	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 18:21	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 18:21	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 18:21	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 18:21	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 18:21	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 18:21	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 18:21	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 18:21	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 18:21	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 18:21	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 18:21	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 18:21	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-103D
Date Collected: 03/21/18 09:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-1
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 18:21	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 18:21	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 18:21	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 18:21	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 18:21	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 18:21	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 18:21	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 18:21	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 18:21	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 18:21	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 18:21	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*03/27/18 18:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 18:21*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*03/27/18 18:21*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 18:21*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**51.48**				ft			03/21/18 09:50	1
Field Color	**N**				NONE			03/21/18 09:50	1
Field Odor	**N**				NONE			03/21/18 09:50	1
Field pH	**7.46**				SU			03/21/18 09:50	1
Field Temperature	**9.3**				Degrees C			03/21/18 09:50	1
Field Turbidity	**N**				NONE			03/21/18 09:50	1
Groundwater Elevation (ft MSL)	**821.60**				ft			03/21/18 09:50	1
Specific Conductance	**685**				umhos/cm			03/21/18 09:50	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-107D
Date Collected: 03/21/18 10:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-2
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 20:00	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 20:00	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 20:00	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 20:00	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 20:00	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:00	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 20:00	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 20:00	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 20:00	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 20:00	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:00	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:00	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 20:00	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 20:00	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:00	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:00	1
Trichloroethene	**0.072**		0.050	0.0050	ug/L			03/29/18 20:00	1
Vinyl chloride	**3.2**		0.050	0.011	ug/L			03/29/18 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*03/29/18 20:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 20:00*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 20:00*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 20:00*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 18:48	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 18:48	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 18:48	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 18:48	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 18:48	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 18:48	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 18:48	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 18:48	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 18:48	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 18:48	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 18:48	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 18:48	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 18:48	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 18:48	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 18:48	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 18:48	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 18:48	1
Chloroethane	**0.88**	**J**	1.0	0.36	ug/L			03/27/18 18:48	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 18:48	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 18:48	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.21	ug/L			03/27/18 18:48	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-107D
Date Collected: 03/21/18 10:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-2
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 18:48	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 18:48	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 18:48	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 18:48	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 18:48	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 18:48	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 18:48	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 18:48	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 18:48	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 18:48	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 18:48	1
Vinyl chloride	**3.6**		1.0	0.18	ug/L			03/27/18 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*03/27/18 18:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 18:48*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/27/18 18:48*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 18:48*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**54.23**				ft			03/21/18 10:40	1
Field Color	**N**				NONE			03/21/18 10:40	1
Field Odor	**N**				NONE			03/21/18 10:40	1
Field pH	**7.82**				SU			03/21/18 10:40	1
Field Temperature	**9.3**				Degrees C			03/21/18 10:40	1
Field Turbidity	**N**				NONE			03/21/18 10:40	1
Groundwater Elevation (ft MSL)	**817.75**				ft			03/21/18 10:40	1
Specific Conductance	**530**				umhos/cm			03/21/18 10:40	1

Client Sample ID: P-111D
Date Collected: 03/21/18 10:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-3
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 20:27	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 20:27	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 20:27	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 20:27	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 20:27	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
1,4-Dioxane	**0.27**	**J**	1.0	0.25	ug/L			03/29/18 20:27	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 20:27	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 20:27	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 20:27	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 20:27	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 20:27	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:27	1
Vinyl chloride	**4.1**		0.050	0.011	ug/L			03/29/18 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*03/29/18 20:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/29/18 20:27*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 20:27*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 20:27*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 19:15	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 19:15	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 19:15	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 19:15	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 19:15	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 19:15	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 19:15	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 19:15	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 19:15	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 19:15	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 19:15	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 19:15	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 19:15	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 19:15	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 19:15	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 19:15	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 19:15	1
Chloroethane	**0.52**	**J**	1.0	0.36	ug/L			03/27/18 19:15	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 19:15	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 19:15	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.21	ug/L			03/27/18 19:15	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-111D
Date Collected: 03/21/18 10:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-3
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 19:15	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 19:15	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 19:15	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 19:15	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 19:15	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 19:15	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 19:15	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 19:15	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 19:15	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 19:15	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 19:15	1
Vinyl chloride	**4.7**		1.0	0.18	ug/L			03/27/18 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/27/18 19:15*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 19:15*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*03/27/18 19:15*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 19:15*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**36.62**				ft			03/21/18 10:25	1
Field Color	**N**				NONE			03/21/18 10:25	1
Field Odor	**N**				NONE			03/21/18 10:25	1
Field pH	**7.83**				SU			03/21/18 10:25	1
Field Temperature	**9.2**				Degrees C			03/21/18 10:25	1
Field Turbidity	**N**				NONE			03/21/18 10:25	1
Groundwater Elevation (ft MSL)	**819.17**				ft			03/21/18 10:25	1
Specific Conductance	**752**				umhos/cm			03/21/18 10:25	1

Client Sample ID: P-117
Date Collected: 03/21/18 11:15
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-4
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 19:32	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 19:32	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 19:32	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 19:32	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 19:32	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 19:32	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 19:32	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 19:32	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 19:32	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 19:32	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 19:32	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:32	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 19:32	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 19:32	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:32	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:32	1
Trichloroethene	**0.057**		0.050	0.0050	ug/L			03/29/18 19:32	1
Vinyl chloride	**1.0**		0.050	0.011	ug/L			03/29/18 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*03/29/18 19:32*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 19:32*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*03/29/18 19:32*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 19:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 19:43	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 19:43	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 19:43	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 19:43	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 19:43	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 19:43	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 19:43	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 19:43	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 19:43	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 19:43	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 19:43	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 19:43	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 19:43	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 19:43	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 19:43	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 19:43	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 19:43	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 19:43	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 19:43	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 19:43	1
cis-1,2-Dichloroethene	**0.66**	**J**	1.0	0.21	ug/L			03/27/18 19:43	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-117
Date Collected: 03/21/18 11:15
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-4
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 19:43	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 19:43	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 19:43	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 19:43	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 19:43	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 19:43	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 19:43	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 19:43	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 19:43	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 19:43	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 19:43	1
Vinyl chloride	**0.89**	**J**	1.0	0.18	ug/L			03/27/18 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*03/27/18 19:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 19:43*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*03/27/18 19:43*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 19:43*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**16.68**				ft			03/21/18 11:15	1
Field Color	**N**				NONE			03/21/18 11:15	1
Field Odor	**N**				NONE			03/21/18 11:15	1
Field pH	**7.70**				SU			03/21/18 11:15	1
Field Temperature	**9.5**				Degrees C			03/21/18 11:15	1
Field Turbidity	**N**				NONE			03/21/18 11:15	1
Groundwater Elevation (ft MSL)	**817.34**				ft			03/21/18 11:15	1
Specific Conductance	**684**				umhos/cm			03/21/18 11:15	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-118
Date Collected: 03/21/18 11:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-5
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 15:21	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 15:21	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 15:21	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 15:21	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 15:21	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 15:21	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 15:21	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 15:21	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 15:21	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 15:21	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 15:21	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 15:21	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*03/29/18 15:21*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 15:21*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 15:21*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 15:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 20:10	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 20:10	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 20:10	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 20:10	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 20:10	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 20:10	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 20:10	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 20:10	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 20:10	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 20:10	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 20:10	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 20:10	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 20:10	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 20:10	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 20:10	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 20:10	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 20:10	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 20:10	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 20:10	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 20:10	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 20:10	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-118
Date Collected: 03/21/18 11:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-5
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 20:10	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 20:10	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 20:10	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 20:10	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 20:10	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 20:10	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 20:10	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 20:10	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 20:10	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 20:10	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 20:10	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*03/27/18 20:10*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 20:10*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*03/27/18 20:10*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 20:10*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**9.63**				ft			03/21/18 11:40	1
Field Color	**N**				NONE			03/21/18 11:40	1
Field Odor	**N**				NONE			03/21/18 11:40	1
Field pH	**7.93**				SU			03/21/18 11:40	1
Field Temperature	**9.2**				Degrees C			03/21/18 11:40	1
Field Turbidity	**N**				NONE			03/21/18 11:40	1
Groundwater Elevation (ft MSL)	**817.30**				ft			03/21/18 11:40	1
Specific Conductance	**524**				umhos/cm			03/21/18 11:40	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: MW-3A
Date Collected: 03/21/18 14:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-6
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 16:22	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 16:22	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 16:22	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 16:22	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 16:22	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
1,4-Dioxane	<0.25	F1	1.0	0.25	ug/L			03/29/18 16:22	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 16:22	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 16:22	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 16:22	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 16:22	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 16:22	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:22	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*03/29/18 16:22*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/29/18 16:22*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 16:22*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 16:22*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 20:37	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 20:37	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 20:37	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 20:37	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 20:37	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 20:37	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 20:37	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 20:37	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 20:37	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 20:37	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 20:37	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 20:37	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 20:37	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 20:37	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 20:37	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 20:37	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 20:37	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 20:37	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 20:37	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 20:37	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 20:37	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: MW-3A
Date Collected: 03/21/18 14:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-6
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 20:37	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 20:37	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 20:37	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 20:37	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 20:37	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 20:37	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 20:37	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 20:37	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 20:37	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 20:37	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 20:37	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*03/27/18 20:37*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 20:37*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*03/27/18 20:37*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 20:37*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**32.78**				ft			03/21/18 14:55	1
Field Color	**N**				NONE			03/21/18 14:55	1
Field Odor	**Y**				NONE			03/21/18 14:55	1
Field pH	**7.86**				SU			03/21/18 14:55	1
Field Temperature	**8.8**				Degrees C			03/21/18 14:55	1
Field Turbidity	**N**				NONE			03/21/18 14:55	1
Groundwater Elevation (ft MSL)	**100.22**				ft			03/21/18 14:55	1
Specific Conductance	**488**				umhos/cm			03/21/18 14:55	1

Client Sample ID: MW-3B
Date Collected: 03/21/18 15:10
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-7
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 16:49	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 16:49	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 16:49	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 16:49	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 16:49	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 16:49	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 16:49	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 16:49	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 16:49	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 16:49	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 16:49	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 16:49	1
Vinyl chloride	**0.035**	**J**	0.050	0.011	ug/L			03/29/18 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 16:49*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 16:49*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 16:49*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 16:49*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:04	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:04	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 21:04	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 21:04	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:04	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 21:04	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 21:04	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:04	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 21:04	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 21:04	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 21:04	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 21:04	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 21:04	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 21:04	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 21:04	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:04	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 21:04	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 21:04	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 21:04	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 21:04	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 21:04	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: MW-3B
Date Collected: 03/21/18 15:10
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-7
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 21:04	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:04	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 21:04	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 21:04	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 21:04	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 21:04	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 21:04	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 21:04	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:04	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 21:04	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 21:04	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*03/27/18 21:04*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 21:04*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*03/27/18 21:04*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 21:04*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**31.23**				ft			03/21/18 15:10	1
Field Color	**N**				NONE			03/21/18 15:10	1
Field Odor	**Y**				NONE			03/21/18 15:10	1
Field pH	**7.90**				SU			03/21/18 15:10	1
Field Temperature	**8.9**				Degrees C			03/21/18 15:10	1
Field Turbidity	**N**				NONE			03/21/18 15:10	1
Groundwater Elevation (ft MSL)	**102.77**				ft			03/21/18 15:10	1
Specific Conductance	**621**				umhos/cm			03/21/18 15:10	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-113A
Date Collected: 03/21/18 12:45
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-8
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 17:16	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 17:16	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 17:16	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 17:16	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 17:16	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 17:16	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 17:16	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 17:16	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 17:16	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 17:16	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 17:16	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 17:16	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 17:16*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/29/18 17:16*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 17:16*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 17:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:32	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:32	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 21:32	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 21:32	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:32	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 21:32	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 21:32	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:32	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 21:32	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 21:32	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 21:32	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 21:32	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 21:32	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 21:32	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 21:32	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:32	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 21:32	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 21:32	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 21:32	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 21:32	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 21:32	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-113A
Date Collected: 03/21/18 12:45
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-8
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 21:32	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:32	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 21:32	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 21:32	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 21:32	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 21:32	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 21:32	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 21:32	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:32	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 21:32	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 21:32	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*03/27/18 21:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 21:32*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*03/27/18 21:32*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 21:32*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**15.18**				ft			03/21/18 12:45	1
Field Color	**N**				NONE			03/21/18 12:45	1
Field Odor	**N**				NONE			03/21/18 12:45	1
Field pH	**7.93**				SU			03/21/18 12:45	1
Field Temperature	**7.9**				Degrees C			03/21/18 12:45	1
Field Turbidity	**N**				NONE			03/21/18 12:45	1
Groundwater Elevation (ft MSL)	**817.91**				ft			03/21/18 12:45	1
Specific Conductance	**486**				umhos/cm			03/21/18 12:45	1

Client Sample ID: P-113B
Date Collected: 03/21/18 12:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-9
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 18:11	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 18:11	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 18:11	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 18:11	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 18:11	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 18:11	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 18:11	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 18:11	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 18:11	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 18:11	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 18:11	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:11	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 18:11*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 18:11*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 18:11*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 18:11*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 17:53	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 17:53	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 17:53	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 17:53	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 17:53	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 17:53	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 17:53	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 17:53	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 17:53	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 17:53	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 17:53	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 17:53	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 17:53	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 17:53	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 17:53	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 17:53	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 17:53	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 17:53	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 17:53	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 17:53	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 17:53	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-113B
Date Collected: 03/21/18 12:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-9
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 17:53	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 17:53	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 17:53	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 17:53	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 17:53	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 17:53	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 17:53	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 17:53	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 17:53	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 17:53	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 17:53	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*03/27/18 17:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 17:53*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*03/27/18 17:53*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 17:53*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**14.91**				ft			03/21/18 12:20	1
Field Color	**N**				NONE			03/21/18 12:20	1
Field Odor	**N**				NONE			03/21/18 12:20	1
Field pH	**7.92**				SU			03/21/18 12:20	1
Field Temperature	**9.5**				Degrees C			03/21/18 12:20	1
Field Turbidity	**N**				NONE			03/21/18 12:20	1
Groundwater Elevation (ft MSL)	**818.19**				ft			03/21/18 12:20	1
Specific Conductance	**579**				umhos/cm			03/21/18 12:20	1

Client Sample ID: P-116
Date Collected: 03/21/18 13:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-10
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 18:38	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 18:38	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 18:38	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 18:38	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 18:38	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 18:38	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 18:38	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 18:38	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 18:38	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 18:38	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 18:38	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 18:38	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 18:38*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/29/18 18:38*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 18:38*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 18:38*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:59	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 21:59	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 21:59	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 21:59	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:59	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 21:59	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 21:59	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:59	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 21:59	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 21:59	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 21:59	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 21:59	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 21:59	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 21:59	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 21:59	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 21:59	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 21:59	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 21:59	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 21:59	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 21:59	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 21:59	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1

Client Sample ID: P-116
Date Collected: 03/21/18 13:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-10
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 21:59	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 21:59	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 21:59	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 21:59	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 21:59	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 21:59	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 21:59	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 21:59	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 21:59	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 21:59	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 21:59	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*03/27/18 21:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*03/27/18 21:59*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*03/27/18 21:59*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 21:59*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**27.93**				ft			03/21/18 13:20	1
Field Color	**Y**				NONE			03/21/18 13:20	1
Field Odor	**N**				NONE			03/21/18 13:20	1
Field pH	**8.03**				SU			03/21/18 13:20	1
Field Temperature	**10.0**				Degrees C			03/21/18 13:20	1
Field Turbidity	**Y**				NONE			03/21/18 13:20	1
Groundwater Elevation (ft MSL)	**817.41**				ft			03/21/18 13:20	1
Specific Conductance	**447**				umhos/cm			03/21/18 13:20	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-114
Date Collected: 03/21/18 13:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-11
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 20:54	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 20:54	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 20:54	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 20:54	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 20:54	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
1,4-Dioxane	**0.39**	**J**	1.0	0.25	ug/L			03/29/18 20:54	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 20:54	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 20:54	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 20:54	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 20:54	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 20:54	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 20:54	1
Vinyl chloride	**4.7**		0.25	0.055	ug/L			04/02/18 18:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 20:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*04/02/18 18:28*	*5*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/29/18 20:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*04/02/18 18:28*	*5*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 20:54*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*04/02/18 18:28*	*5*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/29/18 20:54*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/02/18 18:28*	*5*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 22:26	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 22:26	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 22:26	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 22:26	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 22:26	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 22:26	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 22:26	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 22:26	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 22:26	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 22:26	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 22:26	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 22:26	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 22:26	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 22:26	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 22:26	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 22:26	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 22:26	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 22:26	1

Client Sample ID: P-114
Date Collected: 03/21/18 13:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-11
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 22:26	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 22:26	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.21	ug/L			03/27/18 22:26	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 22:26	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 22:26	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 22:26	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 22:26	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 22:26	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 22:26	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 22:26	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 22:26	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 22:26	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 22:26	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 22:26	1
Vinyl chloride	**6.2**		1.0	0.18	ug/L			03/27/18 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*03/27/18 22:26*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 22:26*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*03/27/18 22:26*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 22:26*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**26.03**				ft			03/21/18 13:50	1
Field Color	**N**				NONE			03/21/18 13:50	1
Field Odor	**N**				NONE			03/21/18 13:50	1
Field pH	**7.94**				SU			03/21/18 13:50	1
Field Temperature	**9.5**				Degrees C			03/21/18 13:50	1
Field Turbidity	**N**				NONE			03/21/18 13:50	1
Groundwater Elevation (ft MSL)	**813.32**				ft			03/21/18 13:50	1
Specific Conductance	**678**				umhos/cm			03/21/18 13:50	1

Client Sample ID: P-114 DUP
Date Collected: 03/21/18 13:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-12
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 21:21	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 21:21	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 21:21	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 21:21	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 21:21	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 21:21	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 21:21	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 21:21	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 21:21	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 21:21	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 21:21	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 21:21	1
Vinyl chloride	**4.7**		0.25	0.055	ug/L			04/02/18 18:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*03/29/18 21:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*04/02/18 18:55*	*5*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/29/18 21:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*04/02/18 18:55*	*5*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 21:21*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*04/02/18 18:55*	*5*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 21:21*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/02/18 18:55*	*5*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 22:54	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 22:54	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 22:54	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 22:54	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 22:54	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 22:54	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 22:54	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 22:54	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 22:54	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 22:54	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 22:54	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 22:54	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 22:54	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 22:54	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 22:54	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 22:54	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 22:54	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 22:54	1

Client Sample ID: P-114 DUP
Date Collected: 03/21/18 13:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-12
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 22:54	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 22:54	1
cis-1,2-Dichloroethene	**1.4**		1.0	0.21	ug/L			03/27/18 22:54	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 22:54	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 22:54	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 22:54	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 22:54	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 22:54	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 22:54	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 22:54	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 22:54	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 22:54	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 22:54	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 22:54	1
Vinyl chloride	**6.3**		1.0	0.18	ug/L			03/27/18 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/27/18 22:54*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 22:54*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*03/27/18 22:54*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*03/27/18 22:54*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**26.03**				ft			03/21/18 13:55	1
Field Color	**N**				NONE			03/21/18 13:55	1
Field Odor	**N**				NONE			03/21/18 13:55	1
Field pH	**7.94**				SU			03/21/18 13:55	1
Field Temperature	**9.5**				Degrees C			03/21/18 13:55	1
Field Turbidity	**N**				NONE			03/21/18 13:55	1
Groundwater Elevation (ft MSL)	**813.32**				ft			03/21/18 13:55	1
Specific Conductance	**678**				umhos/cm			03/21/18 13:55	1

Client Sample ID: P-115
Date Collected: 03/21/18 14:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-13
Matrix: Ground Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 19:05	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 19:05	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 19:05	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 19:05	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 19:05	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 19:05	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 19:05	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 19:05	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 19:05	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 19:05	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 19:05	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 19:05	1
Vinyl chloride	**0.85**		0.050	0.011	ug/L			03/29/18 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*03/29/18 19:05*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/29/18 19:05*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 19:05*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/29/18 19:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 23:21	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 23:21	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 23:21	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 23:21	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 23:21	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 23:21	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 23:21	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 23:21	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 23:21	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 23:21	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 23:21	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 23:21	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 23:21	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 23:21	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 23:21	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 23:21	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 23:21	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 23:21	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 23:21	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 23:21	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 23:21	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1

Client Sample ID: P-115
Date Collected: 03/21/18 14:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-13
Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 23:21	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 23:21	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 23:21	1
Naphthalene	<0.21		5.0	0.21	ug/L			03/27/18 23:21	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 23:21	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 23:21	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 23:21	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 23:21	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 23:21	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 23:21	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 23:21	1
Vinyl chloride	**0.62**	**J**	1.0	0.18	ug/L			03/27/18 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*03/27/18 23:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/27/18 23:21*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*03/27/18 23:21*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*03/27/18 23:21*	*1*

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	**24.35**				ft			03/21/18 14:25	1
Field Color	**N**				NONE			03/21/18 14:25	1
Field Odor	**N**				NONE			03/21/18 14:25	1
Field pH	**8.02**				SU			03/21/18 14:25	1
Field Temperature	**9.9**				Degrees C			03/21/18 14:25	1
Field Turbidity	**N**				NONE			03/21/18 14:25	1
Groundwater Elevation (ft MSL)	**818.36**				ft			03/21/18 14:25	1
Specific Conductance	**554**				umhos/cm			03/21/18 14:25	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: Trip Blank

Date Collected: 03/21/18 00:00
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-14

Matrix: Water

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086	^c	0.050	0.0086	ug/L			03/29/18 14:54	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 14:54	1
1,2,3-Trichloropropane	<0.0077	^c	0.050	0.0077	ug/L			03/29/18 14:54	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 14:54	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 14:54	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 14:54	1
4-Isopropyltoluene	<0.0050	^c	0.050	0.0050	ug/L			03/29/18 14:54	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 14:54	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 14:54	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 14:54	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 14:54	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:54	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 14:54*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/29/18 14:54*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/29/18 14:54*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 14:54*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 17:26	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 17:26	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 17:26	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 17:26	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 17:26	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 17:26	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 17:26	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 17:26	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 17:26	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 17:26	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 17:26	1
Bromoform	<0.29	^c	1.0	0.29	ug/L			03/27/18 17:26	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 17:26	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 17:26	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 17:26	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 17:26	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 17:26	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 17:26	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 17:26	1
Chloromethane	<0.36	^c	1.0	0.36	ug/L			03/27/18 17:26	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 17:26	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: Trip Blank
Date Collected: 03/21/18 00:00
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-14
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 17:26	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 17:26	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 17:26	1
Naphthalene	**0.21**	**J B**	5.0	0.21	ug/L			03/27/18 17:26	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 17:26	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 17:26	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 17:26	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 17:26	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 17:26	1
Trichloroethene	<0.20	^c *	1.0	0.20	ug/L			03/27/18 17:26	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*03/27/18 17:26*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*03/27/18 17:26*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*03/27/18 17:26*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*03/27/18 17:26*	*1*

Definitions/Glossary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

GC/MS VOA

Analysis Batch: 504203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-142742-1	P-103D	Total/NA	Ground Water	8260C	
500-142742-2	P-107D	Total/NA	Ground Water	8260C	
500-142742-3	P-111D	Total/NA	Ground Water	8260C	
500-142742-4	P-117	Total/NA	Ground Water	8260C	
500-142742-5	P-118	Total/NA	Ground Water	8260C	
500-142742-6	MW-3A	Total/NA	Ground Water	8260C	
500-142742-7	MW-3B	Total/NA	Ground Water	8260C	
500-142742-8	P-113A	Total/NA	Ground Water	8260C	
500-142742-9	P-113B	Total/NA	Ground Water	8260C	
500-142742-10	P-116	Total/NA	Ground Water	8260C	
500-142742-11	P-114	Total/NA	Ground Water	8260C	
500-142742-12	P-114 DUP	Total/NA	Ground Water	8260C	
500-142742-13	P-115	Total/NA	Ground Water	8260C	
500-142742-14	Trip Blank	Total/NA	Water	8260C	
MB 490-504203/6	Method Blank	Total/NA	Water	8260C	
LCS 490-504203/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-504203/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 504811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-142742-1	P-103D	Total/NA	Ground Water	8260C SIM	
500-142742-2	P-107D	Total/NA	Ground Water	8260C SIM	
500-142742-3	P-111D	Total/NA	Ground Water	8260C SIM	
500-142742-4	P-117	Total/NA	Ground Water	8260C SIM	
500-142742-5	P-118	Total/NA	Ground Water	8260C SIM	
500-142742-6	MW-3A	Total/NA	Ground Water	8260C SIM	
500-142742-7	MW-3B	Total/NA	Ground Water	8260C SIM	
500-142742-8	P-113A	Total/NA	Ground Water	8260C SIM	
500-142742-9	P-113B	Total/NA	Ground Water	8260C SIM	
500-142742-10	P-116	Total/NA	Ground Water	8260C SIM	
500-142742-11	P-114	Total/NA	Ground Water	8260C SIM	
500-142742-12	P-114 DUP	Total/NA	Ground Water	8260C SIM	
500-142742-13	P-115	Total/NA	Ground Water	8260C SIM	
500-142742-14	Trip Blank	Total/NA	Water	8260C SIM	
MB 490-504811/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 490-504811/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 490-504811/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
500-142742-6 MS	MW-3A	Total/NA	Ground Water	8260C SIM	
500-142742-6 MSD	MW-3A	Total/NA	Ground Water	8260C SIM	

Analysis Batch: 505613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-142742-11	P-114	Total/NA	Ground Water	8260C SIM	
500-142742-12	P-114 DUP	Total/NA	Ground Water	8260C SIM	
MB 490-505613/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 490-505613/6	Lab Control Sample	Total/NA	Water	8260C SIM	

Field Service / Mobile Lab

Analysis Batch: 426383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-142742-1	P-103D	Total/NA	Ground Water	Field Sampling	
500-142742-2	P-107D	Total/NA	Ground Water	Field Sampling	
500-142742-3	P-111D	Total/NA	Ground Water	Field Sampling	
500-142742-4	P-117	Total/NA	Ground Water	Field Sampling	
500-142742-5	P-118	Total/NA	Ground Water	Field Sampling	
500-142742-6	MW-3A	Total/NA	Ground Water	Field Sampling	
500-142742-7	MW-3B	Total/NA	Ground Water	Field Sampling	
500-142742-8	P-113A	Total/NA	Ground Water	Field Sampling	
500-142742-9	P-113B	Total/NA	Ground Water	Field Sampling	
500-142742-10	P-116	Total/NA	Ground Water	Field Sampling	
500-142742-11	P-114	Total/NA	Ground Water	Field Sampling	
500-142742-12	P-114 DUP	Total/NA	Ground Water	Field Sampling	
500-142742-13	P-115	Total/NA	Ground Water	Field Sampling	

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
500-142742-1	P-103D	99	95	100	85
500-142742-2	P-107D	98	95	103	85
500-142742-3	P-111D	102	95	104	84
500-142742-4	P-117	100	96	105	85
500-142742-5	P-118	100	96	105	84
500-142742-6	MW-3A	100	95	107	85
500-142742-7	MW-3B	104	96	107	85
500-142742-8	P-113A	101	95	105	84
500-142742-9	P-113B	96	96	97	84
500-142742-10	P-116	100	97	109	84
500-142742-11	P-114	101	95	107	84
500-142742-12	P-114 DUP	102	96	108	83
500-142742-13	P-115	99	95	109	84

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
500-142742-14	Trip Blank	92	98	97	86
LCS 490-504203/3	Lab Control Sample	99	97	103	87
LCSD 490-504203/4	Lab Control Sample Dup	99	99	104	88
MB 490-504203/6	Method Blank	98	96	103	85

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
500-142742-1	P-103D	103	98	102	97
500-142742-2	P-107D	103	99	102	97
500-142742-3	P-111D	101	98	102	97
500-142742-4	P-117	101	99	101	97
500-142742-5	P-118	104	99	102	98
500-142742-6	MW-3A	103	100	103	98
500-142742-6 MS	MW-3A	98	98	101	97

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
500-142742-6 MSD	MW-3A	98	98	101	97
500-142742-7	MW-3B	102	99	102	97
500-142742-8	P-113A	102	98	102	98
500-142742-9	P-113B	102	99	103	97
500-142742-10	P-116	102	100	103	98
500-142742-11	P-114	102	98	103	96
500-142742-11	P-114	100	98	100	95
500-142742-12	P-114 DUP	101	99	102	97
500-142742-12	P-114 DUP	102	98	100	95
500-142742-13	P-115	103	100	103	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
500-142742-14	Trip Blank	102	100	102	98
LCS 490-504811/4	Lab Control Sample	99	97	102	98
LCS 490-505613/6	Lab Control Sample	98	97	101	96
LCSD 490-504811/5	Lab Control Sample Dup	99	99	101	98
MB 490-504811/8	Method Blank	102	101	103	98
MB 490-505613/9	Method Blank	101	98	102	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 490-504203/6
Matrix: Water
Analysis Batch: 504203

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 14:42	1
1,1,2-Trichloroethane	<0.19		1.0	0.19	ug/L			03/27/18 14:42	1
1,1-Dichloroethane	<0.24		1.0	0.24	ug/L			03/27/18 14:42	1
1,1-Dichloroethene	<0.25		1.0	0.25	ug/L			03/27/18 14:42	1
1,2-Dichlorobenzene	<0.19		1.0	0.19	ug/L			03/27/18 14:42	1
1,2-Dichloroethane	<0.20		1.0	0.20	ug/L			03/27/18 14:42	1
1,2-Dichloropropane	<0.25		1.0	0.25	ug/L			03/27/18 14:42	1
1,3-Dichlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 14:42	1
1,4-Dichlorobenzene	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
2-Butanone (MEK)	<2.6		50	2.6	ug/L			03/27/18 14:42	1
Acetone	<2.7		25	2.7	ug/L			03/27/18 14:42	1
Benzene	<0.20		1.0	0.20	ug/L			03/27/18 14:42	1
Bromoform	<0.29		1.0	0.29	ug/L			03/27/18 14:42	1
Bromomethane	<0.35		1.0	0.35	ug/L			03/27/18 14:42	1
Carbon disulfide	<0.22		1.0	0.22	ug/L			03/27/18 14:42	1
Carbon tetrachloride	<0.18		1.0	0.18	ug/L			03/27/18 14:42	1
Chlorobenzene	<0.18		1.0	0.18	ug/L			03/27/18 14:42	1
Chlorodibromomethane	<0.25		1.0	0.25	ug/L			03/27/18 14:42	1
Chloroethane	<0.36		1.0	0.36	ug/L			03/27/18 14:42	1
Chloroform	<0.23		1.0	0.23	ug/L			03/27/18 14:42	1
Chloromethane	<0.36		1.0	0.36	ug/L			03/27/18 14:42	1
cis-1,2-Dichloroethene	<0.21		1.0	0.21	ug/L			03/27/18 14:42	1
cis-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
Dibromomethane	<0.45		1.0	0.45	ug/L			03/27/18 14:42	1
Dichlorobromomethane	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
Dichlorodifluoromethane	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
Ethylbenzene	<0.19		1.0	0.19	ug/L			03/27/18 14:42	1
Methyl tert-butyl ether	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
Methylene Chloride	<1.0		5.0	1.0	ug/L			03/27/18 14:42	1
Naphthalene	0.930	J	5.0	0.21	ug/L			03/27/18 14:42	1
Styrene	<0.28		1.0	0.28	ug/L			03/27/18 14:42	1
Tetrachloroethene	<0.14		1.0	0.14	ug/L			03/27/18 14:42	1
Tetrahydrofuran	<0.82		10	0.82	ug/L			03/27/18 14:42	1
Toluene	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
trans-1,2-Dichloroethene	<0.23		1.0	0.23	ug/L			03/27/18 14:42	1
trans-1,3-Dichloropropene	<0.17		1.0	0.17	ug/L			03/27/18 14:42	1
Trichloroethene	<0.20		1.0	0.20	ug/L			03/27/18 14:42	1
Trichlorofluoromethane	<0.21		1.0	0.21	ug/L			03/27/18 14:42	1
Vinyl chloride	<0.18		1.0	0.18	ug/L			03/27/18 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*03/27/18 14:42*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*03/27/18 14:42*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/27/18 14:42*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*03/27/18 14:42*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 490-504203/3
Matrix: Water
Analysis Batch: 504203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.1		ug/L		111	78 - 135
1,1,2-Trichloroethane	20.0	18.1		ug/L		91	80 - 124
1,1-Dichloroethane	20.0	22.5		ug/L		112	78 - 125
1,1-Dichloroethene	20.0	23.9		ug/L		119	79 - 124
1,2-Dichlorobenzene	20.0	18.2		ug/L		91	80 - 121
1,2-Dichloroethane	20.0	22.4		ug/L		112	77 - 121
1,2-Dichloropropane	20.0	23.0		ug/L		115	75 - 120
1,3-Dichlorobenzene	20.0	18.3		ug/L		92	80 - 122
1,4-Dichlorobenzene	20.0	18.3		ug/L		91	80 - 120
2-Butanone (MEK)	100	116		ug/L		116	62 - 133
Acetone	100	120		ug/L		120	54 - 145
Benzene	20.0	23.5		ug/L		118	80 - 121
Bromoform	20.0	15.2		ug/L		76	46 - 145
Bromomethane	20.0	17.6		ug/L		88	41 - 150
Carbon disulfide	20.0	23.9		ug/L		120	77 - 126
Carbon tetrachloride	20.0	23.7		ug/L		118	64 - 147
Chlorobenzene	20.0	19.0		ug/L		95	80 - 120
Chlorodibromomethane	20.0	16.6		ug/L		83	69 - 133
Chloroethane	20.0	22.9		ug/L		115	72 - 120
Chloroform	20.0	22.0		ug/L		110	73 - 129
Chloromethane	20.0	24.3		ug/L		122	12 - 150
cis-1,2-Dichloroethene	20.0	22.6		ug/L		113	76 - 125
cis-1,3-Dichloropropene	20.0	18.7		ug/L		94	74 - 140
Dibromomethane	20.0	22.4		ug/L		112	71 - 125
Dichlorobromomethane	20.0	21.7		ug/L		109	75 - 129
Dichlorodifluoromethane	20.0	20.5		ug/L		102	37 - 127
Ethylbenzene	20.0	19.4		ug/L		97	80 - 130
Methyl tert-butyl ether	20.0	22.0		ug/L		110	72 - 133
Methylene Chloride	20.0	21.9		ug/L		109	79 - 123
Naphthalene	20.0	21.6		ug/L		108	62 - 138
Styrene	20.0	19.2		ug/L		96	80 - 127
Tetrachloroethene	20.0	18.9		ug/L		95	80 - 126
Tetrahydrofuran	40.0	44.1		ug/L		110	51 - 124
Toluene	20.0	18.9		ug/L		95	80 - 126
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	79 - 126
trans-1,3-Dichloropropene	20.0	18.1		ug/L		91	63 - 134
Trichloroethene	20.0	25.7	*	ug/L		129	80 - 123
Trichlorofluoromethane	20.0	22.2		ug/L		111	65 - 124
Vinyl chloride	20.0	23.3		ug/L		117	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 490-504203/4
Matrix: Water
Analysis Batch: 504203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	22.0		ug/L		110	78 - 135	1	15
1,1,2-Trichloroethane			20.0	18.9		ug/L		95	80 - 124	4	13
1,1-Dichloroethane			20.0	22.1		ug/L		111	78 - 125	2	17
1,1-Dichloroethene			20.0	22.7		ug/L		114	79 - 124	5	20
1,2-Dichlorobenzene			20.0	18.7		ug/L		94	80 - 121	3	12
1,2-Dichloroethane			20.0	22.0		ug/L		110	77 - 121	2	13
1,2-Dichloropropane			20.0	23.0		ug/L		115	75 - 120	0	15
1,3-Dichlorobenzene			20.0	18.5		ug/L		93	80 - 122	1	13
1,4-Dichlorobenzene			20.0	18.7		ug/L		93	80 - 120	2	12
2-Butanone (MEK)			100	113		ug/L		113	62 - 133	2	19
Acetone			100	120		ug/L		120	54 - 145	0	23
Benzene			20.0	23.7		ug/L		118	80 - 121	1	12
Bromoform			20.0	15.5		ug/L		77	46 - 145	2	14
Bromomethane			20.0	18.3		ug/L		91	41 - 150	4	19
Carbon disulfide			20.0	23.8		ug/L		119	77 - 126	1	16
Carbon tetrachloride			20.0	22.9		ug/L		115	64 - 147	3	16
Chlorobenzene			20.0	18.9		ug/L		94	80 - 120	0	12
Chlorodibromomethane			20.0	16.8		ug/L		84	69 - 133	1	13
Chloroethane			20.0	22.6		ug/L		113	72 - 120	2	15
Chloroform			20.0	21.4		ug/L		107	73 - 129	3	14
Chloromethane			20.0	24.0		ug/L		120	12 - 150	1	20
cis-1,2-Dichloroethene			20.0	22.7		ug/L		114	76 - 125	0	15
cis-1,3-Dichloropropene			20.0	18.9		ug/L		95	74 - 140	1	15
Dibromomethane			20.0	22.6		ug/L		113	71 - 125	1	14
Dichlorobromomethane			20.0	21.6		ug/L		108	75 - 129	1	14
Dichlorodifluoromethane			20.0	19.7		ug/L		99	37 - 127	4	16
Ethylbenzene			20.0	19.4		ug/L		97	80 - 130	0	12
Methyl tert-butyl ether			20.0	22.3		ug/L		111	72 - 133	1	16
Methylene Chloride			20.0	22.1		ug/L		111	79 - 123	1	15
Naphthalene			20.0	21.3		ug/L		106	62 - 138	2	15
Styrene			20.0	19.2		ug/L		96	80 - 127	0	12
Tetrachloroethene			20.0	18.8		ug/L		94	80 - 126	1	17
Tetrahydrofuran			40.0	45.8		ug/L		115	51 - 124	4	20
Toluene			20.0	18.8		ug/L		94	80 - 126	1	13
trans-1,2-Dichloroethene			20.0	20.7		ug/L		104	79 - 126	2	15
trans-1,3-Dichloropropene			20.0	18.6		ug/L		93	63 - 134	3	13
Trichloroethene			20.0	25.5	*	ug/L		127	80 - 123	1	14
Trichlorofluoromethane			20.0	22.0		ug/L		110	65 - 124	1	22
Vinyl chloride			20.0	21.8		ug/L		109	68 - 120	7	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-504811/8
Matrix: Water
Analysis Batch: 504811

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086		0.050	0.0086	ug/L			03/29/18 14:12	1
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			03/29/18 14:12	1
1,2,3-Trichloropropane	<0.0077		0.050	0.0077	ug/L			03/29/18 14:12	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			03/29/18 14:12	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			03/29/18 14:12	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			03/29/18 14:12	1
4-Isopropyltoluene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
Benzene	<0.0063		0.050	0.0063	ug/L			03/29/18 14:12	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			03/29/18 14:12	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			03/29/18 14:12	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			03/29/18 14:12	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			03/29/18 14:12	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			03/29/18 14:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*03/29/18 14:12*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*03/29/18 14:12*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/29/18 14:12*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/29/18 14:12*	*1*

Lab Sample ID: LCS 490-504811/4
Matrix: Water
Analysis Batch: 504811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	1.00	0.870		ug/L		87	69 - 131
1,1,2-Trichloroethane	1.00	0.898		ug/L		90	70 - 130
1,2,3-Trichloropropane	1.00	0.859		ug/L		86	70 - 131
1,2,4-Trichlorobenzene	1.00	0.934		ug/L		93	58 - 147
1,2-Dibromo-3-Chloropropane	1.00	0.910		ug/L		91	45 - 138
1,2-Dichloroethane	1.00	0.937		ug/L		94	70 - 130
1,4-Dioxane	5.00	6.74		ug/L		135	18 - 150
4-Isopropyltoluene	1.00	0.838		ug/L		84	66 - 130
Benzene	1.00	0.899		ug/L		90	70 - 130
Carbon tetrachloride	1.00	0.886		ug/L		89	70 - 147
Chlorodibromomethane	1.00	0.878		ug/L		88	70 - 133
cis-1,3-Dichloropropene	1.00	0.894		ug/L		89	70 - 133
Ethylene Dibromide	1.00	0.877		ug/L		88	70 - 130
Hexachlorobutadiene	1.00	0.891		ug/L		89	70 - 138
Isopropylbenzene	1.00	0.878		ug/L		88	70 - 131
trans-1,3-Dichloropropene	1.00	0.910		ug/L		91	63 - 142
Trichloroethene	1.00	0.888		ug/L		89	70 - 130
Vinyl chloride	1.00	0.826		ug/L		83	57 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 490-504811/5
Matrix: Water
Analysis Batch: 504811

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane			1.00	0.934		ug/L		93	69 - 131	7	15
1,1,2-Trichloroethane			1.00	0.943		ug/L		94	70 - 130	5	13
1,2,3-Trichloropropane			1.00	0.915		ug/L		92	70 - 131	6	14
1,2,4-Trichlorobenzene			1.00	1.00		ug/L		100	58 - 147	7	15
1,2-Dibromo-3-Chloropropane			1.00	0.965		ug/L		97	45 - 138	6	19
1,2-Dichloroethane			1.00	0.973		ug/L		97	70 - 130	4	13
1,4-Dioxane			5.00	6.40		ug/L		128	18 - 150	5	34
4-Isopropyltoluene			1.00	0.902		ug/L		90	66 - 130	7	13
Benzene			1.00	0.946		ug/L		95	70 - 130	5	12
Carbon tetrachloride			1.00	0.932		ug/L		93	70 - 147	5	16
Chlorodibromomethane			1.00	0.914		ug/L		91	70 - 133	4	13
cis-1,3-Dichloropropene			1.00	0.936		ug/L		94	70 - 133	5	15
Ethylene Dibromide			1.00	0.920		ug/L		92	70 - 130	5	13
Hexachlorobutadiene			1.00	0.951		ug/L		95	70 - 138	7	16
Isopropylbenzene			1.00	0.928		ug/L		93	70 - 131	5	13
trans-1,3-Dichloropropene			1.00	0.948		ug/L		95	63 - 142	4	13
Trichloroethene			1.00	0.946		ug/L		95	70 - 130	6	14
Vinyl chloride			1.00	0.874		ug/L		87	57 - 137	6	15

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 500-142742-6 MS
Matrix: Ground Water
Analysis Batch: 504811

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	<0.0086	^c	1.00	0.972		ug/L		97	60 - 140
1,1,2-Trichloroethane	<0.0061		1.00	1.01		ug/L		101	60 - 140
1,2,3-Trichloropropane	<0.0077	^c	1.00	0.961		ug/L		96	60 - 140
1,2,4-Trichlorobenzene	<0.0061		1.00	1.03		ug/L		103	70 - 130
1,2-Dibromo-3-Chloropropane	<0.0071		1.00	0.980		ug/L		98	40 - 160
1,2-Dichloroethane	<0.0050		1.00	1.05		ug/L		105	60 - 140
1,4-Dioxane	<0.25	F1	5.00	3.02		ug/L		60	40 - 160
4-Isopropyltoluene	<0.0050	^c	1.00	0.980		ug/L		98	70 - 130
Benzene	<0.0063		1.00	1.06		ug/L		106	70 - 130
Carbon tetrachloride	<0.0067		1.00	1.04		ug/L		104	60 - 140
Chlorodibromomethane	<0.0050		1.00	0.952		ug/L		95	60 - 140
cis-1,3-Dichloropropene	<0.0050		1.00	0.983		ug/L		98	60 - 140
Ethylene Dibromide	<0.0058		1.00	0.976		ug/L		98	60 - 140

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-142742-6 MS
Matrix: Ground Water
Analysis Batch: 504811

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	<0.0053		1.00	0.990		ug/L		99	60 - 140
Isopropylbenzene	<0.0050		1.00	1.03		ug/L		103	70 - 130
trans-1,3-Dichloropropene	<0.0050		1.00	0.973		ug/L		97	60 - 140
Trichloroethene	<0.0050		1.00	1.06		ug/L		106	60 - 140
Vinyl chloride	<0.011		1.00	0.966		ug/L		97	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 500-142742-6 MSD
Matrix: Ground Water
Analysis Batch: 504811

Client Sample ID: MW-3A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	<0.0086	^c	1.00	1.02		ug/L		102	60 - 140	4	19
1,1,2-Trichloroethane	<0.0061		1.00	1.04		ug/L		104	60 - 140	3	18
1,2,3-Trichloropropane	<0.0077	^c	1.00	1.00		ug/L		100	60 - 140	4	19
1,2,4-Trichlorobenzene	<0.0061		1.00	1.10		ug/L		110	70 - 130	7	24
1,2-Dibromo-3-Chloropropane	<0.0071		1.00	1.02		ug/L		102	40 - 160	4	26
1,2-Dichloroethane	<0.0050		1.00	1.10		ug/L		110	60 - 140	5	22
1,4-Dioxane	<0.25	F1	5.00	8.11	F1 F2	ug/L		162	40 - 160	91	50
4-Isopropyltoluene	<0.0050	^c	1.00	1.03		ug/L		103	70 - 130	5	16
Benzene	<0.0063		1.00	1.10		ug/L		110	70 - 130	4	22
Carbon tetrachloride	<0.0067		1.00	1.08		ug/L		108	60 - 140	4	18
Chlorodibromomethane	<0.0050		1.00	0.981		ug/L		98	60 - 140	3	19
cis-1,3-Dichloropropene	<0.0050		1.00	1.01		ug/L		101	60 - 140	3	19
Ethylene Dibromide	<0.0058		1.00	1.01		ug/L		101	60 - 140	3	21
Hexachlorobutadiene	<0.0053		1.00	1.06		ug/L		106	60 - 140	6	26
Isopropylbenzene	<0.0050		1.00	1.07		ug/L		107	70 - 130	4	17
trans-1,3-Dichloropropene	<0.0050		1.00	1.00		ug/L		100	60 - 140	3	18
Trichloroethene	<0.0050		1.00	1.10		ug/L		110	60 - 140	5	17
Vinyl chloride	<0.011		1.00	1.01		ug/L		101	60 - 140	4	37

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 490-505613/9
Matrix: Water
Analysis Batch: 505613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0086		0.050	0.0086	ug/L			04/02/18 15:39	1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-505613/9
Matrix: Water
Analysis Batch: 505613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.0061		0.050	0.0061	ug/L			04/02/18 15:39	1
1,2,3-Trichloropropane	<0.0077		0.050	0.0077	ug/L			04/02/18 15:39	1
1,2,4-Trichlorobenzene	<0.0061		0.050	0.0061	ug/L			04/02/18 15:39	1
1,2-Dibromo-3-Chloropropane	<0.0071		0.050	0.0071	ug/L			04/02/18 15:39	1
1,2-Dichloroethane	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
1,4-Dioxane	<0.25		1.0	0.25	ug/L			04/02/18 15:39	1
4-Isopropyltoluene	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
Benzene	<0.0063		0.050	0.0063	ug/L			04/02/18 15:39	1
Carbon tetrachloride	<0.0067		0.050	0.0067	ug/L			04/02/18 15:39	1
Chlorodibromomethane	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
cis-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
Ethylene Dibromide	<0.0058		0.050	0.0058	ug/L			04/02/18 15:39	1
Hexachlorobutadiene	<0.0053		0.050	0.0053	ug/L			04/02/18 15:39	1
Isopropylbenzene	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
trans-1,3-Dichloropropene	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
Trichloroethene	<0.0050		0.050	0.0050	ug/L			04/02/18 15:39	1
Vinyl chloride	<0.011		0.050	0.011	ug/L			04/02/18 15:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*04/02/18 15:39*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*04/02/18 15:39*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*04/02/18 15:39*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/02/18 15:39*	*1*

Lab Sample ID: LCS 490-505613/6
Matrix: Water
Analysis Batch: 505613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	1.00	0.885		ug/L		88	69 - 131
1,1,2-Trichloroethane	1.00	0.938		ug/L		94	70 - 130
1,2,3-Trichloropropane	1.00	0.874		ug/L		87	70 - 131
1,2,4-Trichlorobenzene	1.00	1.01		ug/L		101	58 - 147
1,2-Dibromo-3-Chloropropane	1.00	0.905		ug/L		90	45 - 138
1,2-Dichloroethane	1.00	1.01		ug/L		101	70 - 130
1,4-Dioxane	5.00	7.35		ug/L		147	18 - 150
4-Isopropyltoluene	1.00	0.859		ug/L		86	66 - 130
Benzene	1.00	0.987		ug/L		99	70 - 130
Carbon tetrachloride	1.00	0.934		ug/L		93	70 - 147
Chlorodibromomethane	1.00	0.894		ug/L		89	70 - 133
cis-1,3-Dichloropropene	1.00	0.926		ug/L		93	70 - 133
Ethylene Dibromide	1.00	0.917		ug/L		92	70 - 130
Hexachlorobutadiene	1.00	0.903		ug/L		90	70 - 138
Isopropylbenzene	1.00	0.914		ug/L		91	70 - 131
trans-1,3-Dichloropropene	1.00	0.936		ug/L		94	63 - 142
Trichloroethene	1.00	0.981		ug/L		98	70 - 130
Vinyl chloride	1.00	0.888		ug/L		89	57 - 137

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-505613/6
Matrix: Water
Analysis Batch: 505613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-103D
Date Collected: 03/21/18 09:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 18:21	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 17:43	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 09:50	JVB	TAL CHI

Client Sample ID: P-107D
Date Collected: 03/21/18 10:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 18:48	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 20:00	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 10:40	JVB	TAL CHI

Client Sample ID: P-111D
Date Collected: 03/21/18 10:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 19:15	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 20:27	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 10:25	JVB	TAL CHI

Client Sample ID: P-117
Date Collected: 03/21/18 11:15
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 19:43	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 19:32	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 11:15	JVB	TAL CHI

Client Sample ID: P-118
Date Collected: 03/21/18 11:40
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 20:10	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 15:21	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 11:40	JVB	TAL CHI

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: MW-3A
Date Collected: 03/21/18 14:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 20:37	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 16:22	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 14:55	JVB	TAL CHI

Client Sample ID: MW-3B
Date Collected: 03/21/18 15:10
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-7
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 21:04	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 16:49	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 15:10	JVB	TAL CHI

Client Sample ID: P-113A
Date Collected: 03/21/18 12:45
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-8
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 21:32	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 17:16	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 12:45	JVB	TAL CHI

Client Sample ID: P-113B
Date Collected: 03/21/18 12:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 17:53	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 18:11	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 12:20	JVB	TAL CHI

Client Sample ID: P-116
Date Collected: 03/21/18 13:20
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-10
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 21:59	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 18:38	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 13:20	JVB	TAL CHI

Lab Chronicle

Client: Tetra Tech GEO
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

TestAmerica Job ID: 500-142742-1

Client Sample ID: P-114
Date Collected: 03/21/18 13:50
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-11
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 22:26	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 20:54	JRV	TAL NSH
Total/NA	Analysis	8260C SIM		5	505613	04/02/18 18:28	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 13:50	JVB	TAL CHI

Client Sample ID: P-114 DUP
Date Collected: 03/21/18 13:55
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-12
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 22:54	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 21:21	JRV	TAL NSH
Total/NA	Analysis	8260C SIM		5	505613	04/02/18 18:55	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 13:55	JVB	TAL CHI

Client Sample ID: P-115
Date Collected: 03/21/18 14:25
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-13
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 23:21	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 19:05	JRV	TAL NSH
Total/NA	Analysis	Field Sampling		1	426383	03/21/18 14:25	JVB	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 03/21/18 00:00
Date Received: 03/23/18 09:45

Lab Sample ID: 500-142742-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	504203	03/27/18 17:26	S1S	TAL NSH
Total/NA	Analysis	8260C SIM		1	504811	03/29/18 14:54	JRV	TAL NSH

Laboratory References:
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Tetra Tech GEO
TestAmerica Job ID: 500-142742-1
Project/Site: Ripon FF/NN Landfill - 117-2202061.01

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-18

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-142742

Chain of Custody Number:

Page 1 of 2

Temperature °C of Cooler: 5.9

Report To (optional)		Bill To (optional)	
Contact:	Ashley Wagner	Contact:	Same as
Company:	Tetra Tech	Company:	Report to
Address:	175 N. Corporate Dr #100	Address:	
Address:	Brookfield, WI 53045	Address:	
Phone:	(262) 719-5242 (cell)	Phone:	
Fax:		Fax:	
E-Mail:	ashley.wagner@tetratech.com	PO#/Reference#:	

Client	Client Project #
Tetra Tech	117-2202061.01
Project Name	
Ripon FF/NN Landfill	
Project Location/State	**Lab Project #**
Ripon, WI	
Sampler	**Lab PM**
Ashley A. Wagner	

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOCs SIM	Parameter: VOCs 8260	GEMS ID #'s Comments
1		P-103 D	3-21	950	5	GW	1	✓	✓	141
2		P-107 D		1040				✓	✓	119
3		P-111 D		1025				✓	✓	130
4		P-117		1115				✓	✓	144
5		P-118		1140	4			✓	✓	145
6		MW-3A		1455	5			✓	✓	133
7		MW-3B		1510				✓	✓	134
8		P-113 A		1245				✓	✓	136
9		P-113 B		1220				✓	✓	138
10		P-116		1320				✓	✓	143

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other

Requested Due Date _____

Sample Disposal

[ ] Return to Client [X] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

	Company	Date	Time		Company	Date	Time
Relinquished By	TT	3-22-18	1540	Received By	TA	3-22-18	1500
Relinquished By	TA	3-22-18	1700	Received By	TA	03/23/18	0945
Relinquished By				Received By			

Lab Courier

Shipped ✓

Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Please provide GEMS data package + exceedance page

Landfill ID = 407

Lab Comments:

500-142742 COC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-142742

Chain of Custody Number:

Page 2 of 2

Temperature °C of Cooler: 5.9

(optional) Report To		(optional) Bill To	
Contact:	Ashley Wagner	Contact:	
Company:	Tetra Tech	Company:	
Address:	175 N. Corporate Dr. Suite 100	Address:	
Address:	Brookfield, WI 53045	Address:	
Phone:	(262) 719-5242 (cell)	Phone:	
Fax:		Fax:	
E-Mail:	ashley.wagner@tetratech.com	PO#/Reference#:	

Client	Client Project #	Preservative	1	1								
Tetra Tech	117-2202061.01											
Project Name		Parameter	VOCs	SIM 8260								
Ripon FF/NN Landfill												
Project Location/State	Lab Project #											
Ripon, WI												
Sampler	Lab PM											
Ashley A. Wagner												

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix									GCMS ID #S Comments
11		P-114	3-21-18	1350	5	GW	✓	✓							140
12		P-114 Dup	↓	1355	↓	↓	✓	✓							
13		P-115	↓	1425	↓	↓	✓	✓							142
14		Trip Blank	—	—	2	DI	✓	✓	Lab	Prepared					999

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other

Requested Due Date _____

Sample Disposal

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	TT	3.22.18	1540	[signature]	TA	3-22-18	1540
[signature]	TA	3-22-18	1700	[signature]	TA	03/23/18	0945

Lab Courier ☐

Shipped ✓

Hand Delivered ☐

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments

Please provide GCMS data package + exceedance page

Landfill ID= 467

Lab Comments:

4/5/2018

TAL-4124-500 (1209)

THE LEADER IN ENVIRONMENTAL TESTING

500-142742 Waybill

ORIGIN ID:RRLA (262) 202-5855
SHIPPING
TESTAMERICA
4125 N 124TH ST

BROOKFIELD, WI 53005
UNITED STATES US

SHIP DATE: 22MAR18
ACTWGT: 60.00 LB
CAD: 525155/CAFE3111

BILL RECIPIENT

TO SAMPLE RECEIPT
TESTAMERICA LABS
2417 BOND STREET

UNIVERSITY PARK IL 60484
(708) 534-5200

INV:
PO:
REF:
DEPT:

FedEx
Express

TRK# 0201 7125 4937 7084

FRI - 23 MAR 10:30A
PRIORITY OVERNIGHT

79 JOTA

60484
IL-US ORD

48qt.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

500-142742 Chain of Custody

Cooler Received/Opened On 03-24-2018 @ 09:45

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 0765 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 31470368 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: 2 front + back

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) EA

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? (YES)...NO...NA

● ← Larger than this.

14. Was there a Trip Blank in this cooler? (YES)...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) EA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) EA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) EA

I certify that I attached a label with the unique LIMS number to each container (intial) EA

21. Were there Non-Conformance issues at login? (YES)...NO Was a NCM generated? (YES)...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

Loc: 500
142742

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie J	C	COC No: 500-102084.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	State of Origin: Wisconsin	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-142742-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/4/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Ripon FF/NN Landfill	Project #: 49013545			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) TCL Volatiles List	8260C_SIM/5030C	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
P-103D (500-142742-1)	3/21/18	09:50 Central		Water			X	X	5	
P-107D (500-142742-2)	3/21/18	10:40 Central		Water			X	X	5	
P-111D (500-142742-3)	3/21/18	10:25 Central		Water			X	X	5	
P-117 (500-142742-4)	3/21/18	11:15 Central		Water			X	X	5	
P-118 (500-142742-5)	3/21/18	11:40 Central		Water			X	X	4	
MW-3A (500-142742-6)	3/21/18	14:55 Central		Water			X	X	5	
MW-3B (500-142742-7)	3/21/18	15:10 Central		Water			X	X	5	
P-113A (500-142742-8)	3/21/18	12:45 Central		Water			X	X	5	
P-113B (500-142742-9)	3/21/18	12:20 Central		Water			X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		03/23/18 @ 1630	TA			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3-24-18 945	Company TA-NAS

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9

Ver: 09/20/2016

TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie J	Carrier Tracking No(s):	COC No: 500-102084.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	State of Origin: Wisconsin	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-142742-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/4/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Ripon FF/NN Landfill	Project #: 49013545			
Site:	SSOW#:			

Analysis Requested

Loc: 500
142742

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) TCL Volatiles List	8260C_SIM/5030C	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
P-116 (500-142742-10)	3/21/18	13:20 Central		Water			X	X	5	
P-114 (500-142742-11)	3/21/18	13:50 Central		Water			X	X	5	
P-114 DUP (500-142742-12)	3/21/18	13:55 Central		Water			X	X	5	
P-115 (500-142742-13)	3/21/18	14:25 Central		Water			X	X	5	
Trip Blank (500-142742-14)	3/21/18	Central		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		03/23/18 @ 1630	TA			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3-24-18	Company NAS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.9

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Tetra Tech GEO

Job Number: 500-142742-1

Login Number: 142742
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.9c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

	GEMS ID	Depth to Water (ft)	Elevation (msl)	ORP	Dissolved Oxygen	Specific Conductivity	pH	Temperature	Color	Odor	Turbidity
MW-3A	133	32.78	100.22	-105	1.07	488	7.86	8.8	Clear	Some	Clear
MW-3B	134	31.23	102.77	-133	0.45	621	7.90	8.9	Clear	Some	Clear
P-103D	141	51.48	821.60	-127	0.57	685	7.46	9.3	Clear	None	Clear
P-107D	119	54.23	817.75	-66	3.88	530	7.82	9.3	Clear	None	Clear
P-111D	130	36.62	819.17	-120	0.60	752	7.83	9.2	Clear	None	Clear
P-113A	136	15.18	817.91	-98	2.28	486	7.93	7.9	Clear	None	Clear
P-113B	138	14.91	818.19	-132	0.59	579	7.92	9.5	Clear	None	Clear
P-114	140	26.03	813.32	-137	0.28	678	7.94	9.5	Clear	None	Clear
P-115	142	24.35	818.36	-143	0.63	554	8.02	9.9	Clear	None	Clear
P-116	143	27.93	817.41	-113	0.46	447	8.03	10.0	Grayish	None	Slightly Cloudy
P-117	144	16.68	817.34	-116	0.32	684	7.70	9.5	Clear	None	Clear
P-118	145	9.63	817.30	-101	0.29	524	7.93	9.2	Clear	None	Clear

ATTACHMENT 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.	117-2202058.01	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Wagner	DO	MP-20 Flow Cell

MONITOR WELL ID	MW-3A			MW-3B			P-113A		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	3-21-18			3-21-18			3-21-18		
STATIC WATER LEVEL (feet)*	32.78			31.23			15.18		
WELL DEPTH (feet)*	280.1			185.72			325.31		
PUMP INLET DEPTH (feet)*	67.5			54.5			73.5		
START PURGE TIME (Military)	14:40			14:40			12:00		
END PURGE TIME (Military)	14:52			15:08			12:40		
PURGE VOLUME (gallons)	1.5			2.5			0.75		
SAMPLE TIME (Military)	14:55			15:10			12:45		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	0:00	1:00	2:00	0:00	1:00	2:00	0:00	2:00	4:00
TEMPERATURE (° C)	8.83	8.75	8.75	8.89	8.89	8.90	7.94	7.86	7.89
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.477	0.479	0.488	0.635	0.636	0.621	0.477	0.475	0.486
DISSOLVED OXYGEN (ppm)	1.34	1.23	1.07	0.46	0.46	0.45	2.22	2.35	2.28
pH	7.85	7.88	7.86	7.90	7.90	7.90	7.88	7.96	7.93
DISSOLVED OXYGEN (% Sat.)	11.6	10.6	9.2	4.0	4.1	4.0	19.2	19.8	19.2
ORP (mV)	-107	-106	-105	-133	-133	-133	-100	-100	-98
COLOR	Clear			Clear			Clear		
ODOR	Rotten Eggs			Rotten Eggs			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 8260SIM)	3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No		
VOCs (EPA Method SW 8260C)	2 – 40 ml; G; HCl – L; No			2– 40 ml; G; HCl – L; No			2 – 40 ml; G; HCl – L; No		
Sample Blank (use water from well, zero)	0.00			0.00			0.00		
Iron +2 (mg/L) (Hach DR 900 test 255) using reagent powder pillow (wait 3 min)	0.03			1.00			0.45		
DI water with reagent powder pillow	---			---			---		
October results:	0.1			1.02			0.56		
NAME OF LABORATORY	Test America			Test America			Test America		
DATE SENT TO LAB	3-21-18			3-21-18			3-21-18		
SAMPLER=S NAME	Ashley A. Wagner			Ashley A. Wagner			Ashley A. Wagner		

***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.	117-2202058.01	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Wagner	DO	MP-20 Flow Cell

MONITOR WELL ID	P-113B			P-103D			P-107D		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	3-21-18			3-21-18			3-21-18		
STATIC WATER LEVEL (feet)*	14.91			51.48			54.23		
WELL DEPTH (feet)*	198.9			192.66			327.95		
PUMP INLET DEPTH (feet)*	48.5			87.5			76.5		
START PURGE TIME (Military)	12:00			9:30			10:00		
END PURGE TIME (Military)	12:20			9:45			10:35		
PURGE VOLUME (gallons)	1.5			3.0			6.5		
SAMPLE TIME (Military)	12:20			9:50			10:40		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	0:00	1:00	2:00	0:00	1:00	2:00	0:00	1:00	2:00
TEMPERATURE (° C)	9.54	9.47	9.50	9.29	9.33	9.34	9.09	9.26	9.32
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.574	0.572	0.579	0.685	0.682	0.685	0.542	0.528	0.530
DISSOLVED OXYGEN (ppm)	0.64	0.66	0.59	0.61	0.67	0.57	8.98	4.75	3.88
pH	7.95	7.94	7.92	7.31	7.44	7.46	7.97	7.78	7.82
DISSOLVED OXYGEN (% Sat.)	5.6	5.8	5.2	5.3	6.1	5.0	78.0	41.9	34.2
ORP (mV)	-131	-131	-132	-120	-125	-127	-61	-64	-66
COLOR	Clear			Clear			Clear		
ODOR	None			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 8260SIM)	3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No		
VOCs (EPA Method SW 8260C)	2 – 40 ml; G; HCl – L; No			2– 40 ml; G; HCl – L; No			2 – 40 ml; G; HCl – L; No		
Sample Blank (use water from well, zero)	0.00			0.00			0.00		
Iron +2 (mg/L) (Hach DR 900 test 255) using reagent powder pillow (wait 3 min)	1.06			2.98			0.10		
DI water with reagent powder pillow	---			---			0.00		
October results:	0.99			2.98			0.10		
NAME OF LABORATORY	Test America			Test America			Test America		
DATE SENT TO LAB	3-21-18			3-21-18			3-21-18		
SAMPLER=S NAME	Ashley A. Wagner			Ashley A. Wagner			Ashley A. Wagner		

***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.	117-2202058.01	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Wagner	DO	MP-20 Flow Cell

MONITOR WELL ID	P-111D			P-117			P-118		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	3-21-18			3-21-18			3-21-18		
STATIC WATER LEVEL (feet)*	36.62			16.68			9.63		
WELL DEPTH (feet)*	151.0			165.54			167.8		
PUMP INLET DEPTH (feet)*	151.0			163.0			165		
START PURGE TIME (Military)	10:10			10:55			11:23		
END PURGE TIME (Military)	10:20			11:15			11:40		
PURGE VOLUME (gallons)	2.0			2.0			2.0		
SAMPLE TIME (Military)	10:25			11:15			11:40		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	0:00	1:00	2:00	0:00	1:00	2:00	0:00	1:00	2:00
TEMPERATURE (° C)	9.20	9.20	9.23	9.59	9.58	9.53	9.30	9.22	9.22
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.759	0.760	0.752	0.683	0.683	0.684	0.535	0.542	0.524
DISSOLVED OXYGEN (ppm)	0.70	0.63	0.60	0.35	0.35	0.32	0.27	0.30	0.29
pH	7.81	7.83	7.83	7.75	7.75	7.70	7.95	7.95	7.93
DISSOLVED OXYGEN (% Sat.)	6.1	5.5	5.3	3.0	3.1	2.8	2.3	2.6	2.5
ORP (mV)	-113	-117	-120	-115	-115	-116	-99	-100	-101
COLOR	Clear			Clear			Clear		
ODOR	None			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 8260SIM)	3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No			2 – 40 ml; G; HCl – L; No		
VOCs (EPA Method SW 8260C)	2 – 40 ml; G; HCl – L; No			2– 40 ml; G; HCl – L; No			2 – 40 ml; G; HCl – L; No		
Sample Blank (use water from well, zero)	0.00			0.00			0.00		
Iron +2 (mg/L) (Hach DR 900 test 255) using reagent powder pillow (wait 3 min)	0.90			1.34			0.23		
DI water with reagent powder pillow	---			---			---		
October results:	0.75			1.31			0.17		
NAME OF LABORATORY	Test America			Test America			Test America		
DATE SENT TO LAB	3-21-18			3-21-18			3-21-18		
SAMPLER=S NAME	Ashley A. Wagner			Ashley A. Wagner			Ashley A. Wagner		

***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.	117-2202058.01	Conductivity	MP-20 Flow Cell
LOCATION	Ripon, WI	ORP	MP-20 Flow Cell
PERSONNEL	Ashley A. Wagner	DO	MP-20 Flow Cell

MONITOR WELL ID	P-114/Dup			P-115			P-116		
WATER TYPE	Groundwater			Groundwater			Groundwater		
DATE (month/day/year)	3-21-18			3-21-18			3-21-18		
STATIC WATER LEVEL (feet)*	26.03			24.35			27.93		
WELL DEPTH (feet)*	181.72			179.57			163.19		
PUMP INLET DEPTH (feet)*	53.5			53.5			163		
START PURGE TIME (Military)	13:30			14:10			13:00		
END PURGE TIME (Military)	13:50			14:25			13:18		
PURGE VOLUME (gallons)	3.5			2.0			0.75		
SAMPLE TIME (Military)	13:50/13:55			14:25			13:20		
STABILIZED INDICATOR PARAMETERS READINGS	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
TIME (minutes since initial reading)	0:00	1:00	2:00	0:00	1:00	2:00	0:00	2:00	4:00
TEMPERATURE (° C)	9.56	9.56	9.54	9.88	9.88	9.85	9.96	9.99	10.00
ELECTRICAL CONDUCTANCE at 25° C (ms/cm)	0.688	0.677	0.678	0.560	0.542	0.554	0.472	0.473	0.447
DISSOLVED OXYGEN (ppm)	0.28	0.29	0.28	0.84	0.74	0.63	0.56	0.51	0.46
pH	7.88	7.95	7.94	8.03	8.04	8.02	7.95	7.96	8.03
DISSOLVED OXYGEN (% Sat.)	2.5	2.6	2.5	7.4	6.5	5.6	5.0	4.5	4.1
ORP (mV)	-137	-137	-137	-141	-142	-143	-101	-109	-113
COLOR	Clear			Clear			Grayish		
ODOR	None			None			None		
CLARITY	Clear			Clear			Slightly Cloudy		
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 8260SIM)	3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No			3 – 40 ml; G; HCl – L; No		
VOCs (EPA Method SW 8260C)	2 – 40 ml; G; HCl – L; No			2– 40 ml; G; HCl – L; No			2 – 40 ml; G; HCl – L; No		
Sample Blank (use water from well, zero)	0.00			0.00			0.00		
Iron +2 (mg/L) (Hach DR 900 test 255) using reagent powder pillow (wait 3 min)	0.82			0.72			0.00		
DI water with reagent powder pillow	---			---			---		
October results:	0.77			0.80			0.56		
NAME OF LABORATORY	Test America			Test America			Test America		
DATE SENT TO LAB	3-21-18			3-21-18			3-21-18		
SAMPLER=S NAME	Ashley A. Wagner			Ashley A. Wagner			Ashley A. Wagner		

***Measured from top of well casing.**

TETRA TECH

ATTACHMENT D

LANDFILL GAS EXTRACTION SYSTEM MONITORING

TETRA TECH GEO

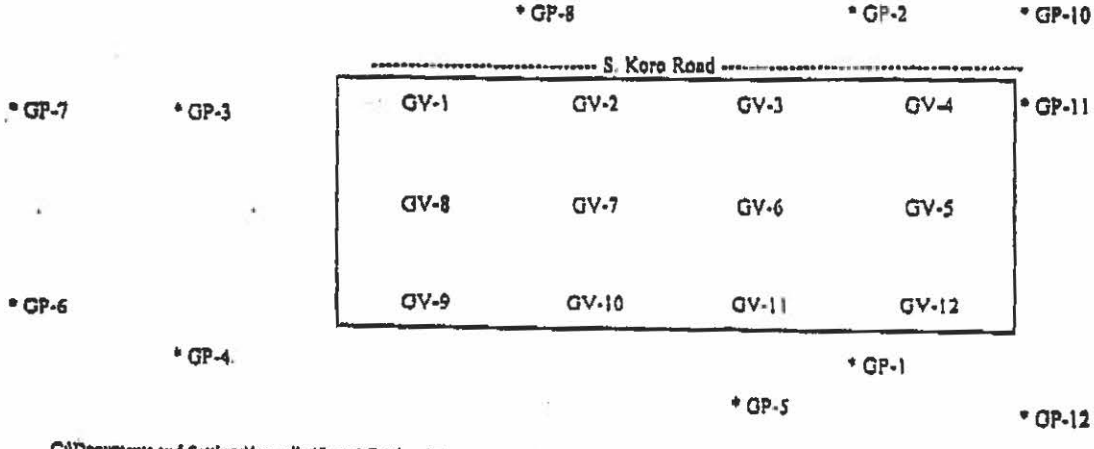
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: McKala Kiessling
Water level in buried knockout tank 0 "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 23 F
Measuring Device: Eagle
In Trailer Vacuum Gage 0 "Hg

* LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
11/6/17	0749	Background	0 *	0.0	20.9	
	0757	LC-1	23.5	26.8	0.1	
	0805	LC-2	46.5	31.0	1.8	
	0802	LC-3	33.5	28.2	1.2	
	0754	GV-6	52*	10.0	9.1	
	0750	GP-1	19*	7.2	8.3	
	0853	GP-1	1.0*	5.8	9.3	2nd Reading
	0753	Exhaust	31*	1.8	20.0	



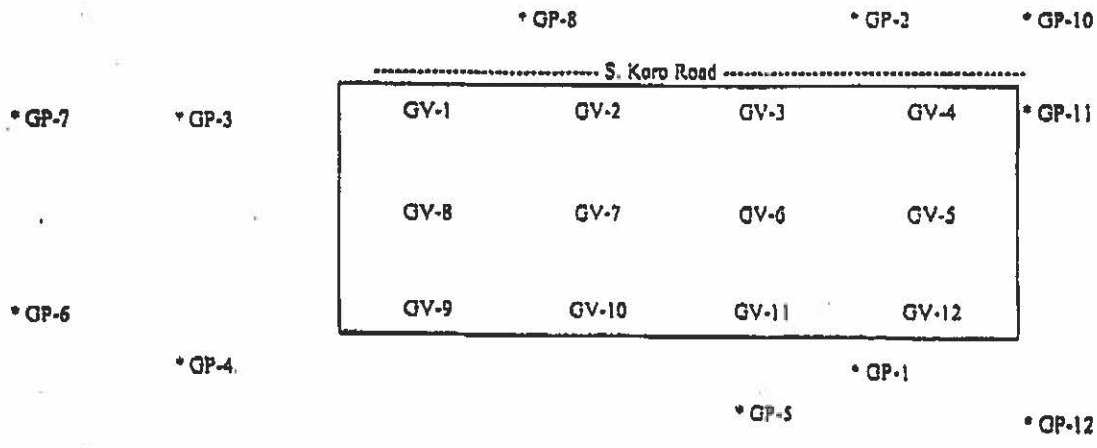
TETRA TECH GEO

GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: McKala Kiessling
Water level in buried knockout tank — 9" TLEL

Barometric Pressure: 29.1 Hg
Temperature (ambient): 31 F
Measuring Device: Eagle
In Trailer Vacuum Gage 1 "Hg

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
11/17/17	0758	Background	0 *	0.0	20.9	
	0804	LC-1	26.5	27.0	0.1	
	0811	LC-2	19.0	21.0	1.9	
	0806	LC-3	34.0	28.2	0.9	
	0800	GV-6	18.0	20.8	2.3	
	0759	GP-1	0*	4.8	13.6	
	0859	GP-1	0*	2.6	11.8	*2nd Reading
	0801	Exhaust	54*	2.6	19.0	



TETRA TECH GEO

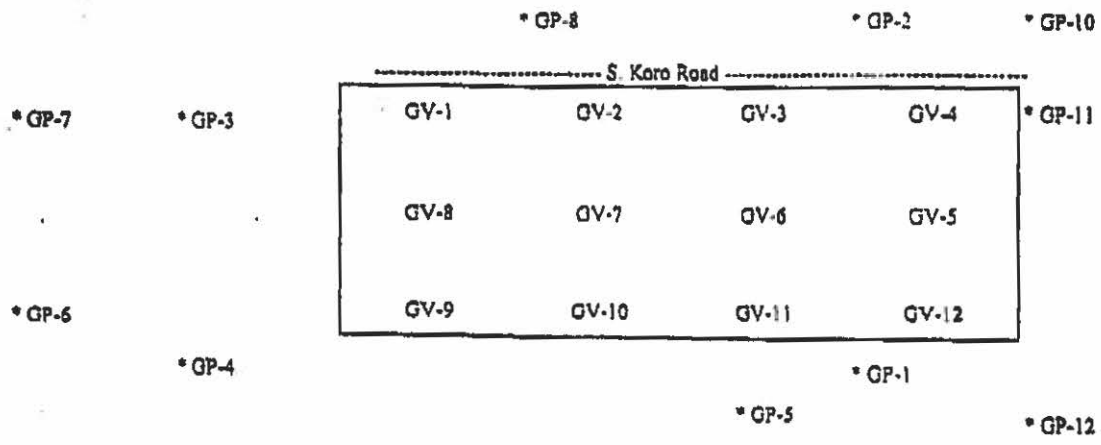
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin.
Personnel: MKala Kiessling
Water level in buried knockout tank 0 "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 18 F
Measuring Device: Eagle
In Trailer Vacuum Gage 1 "Hg

*LEL

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
12/1/17	0756	Background	0*	0.0	20.9	
	0801	LC-1	25.0	26.2	0.2	
	0801	LC-2	47.0	30.8	0.8	
	0805	LC-3	34.5	28.6	1.0	
	0803	GV-6	5.0	10.6	9.2	
	0756	GP-1	0.0*	4.4	14.1	
	0855	GP-1	0*	4.6	14.4	2nd Reading
	0758	Exhaust	34*	1.8	19.4	



TETRA TECH GEO

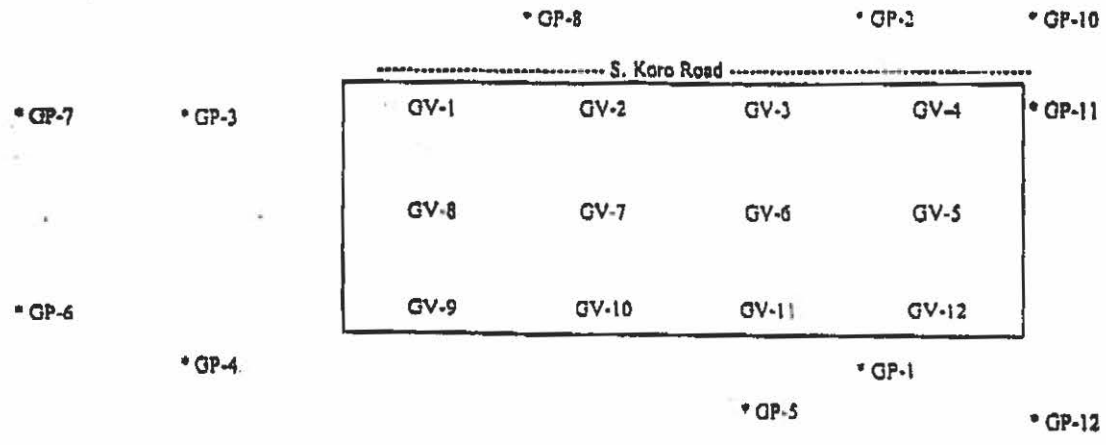
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: McKala Kressling
Water level in buried knockout tank -0 "

Barometric Pressure: 29.0 Hg
Temperature (ambient): 38 F
Measuring Device: Eagle
In Trailer Vacuum Gage -1 "Hg

* LEL

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
12/18/17	0804	Background	0*	0.0	20.9	
	0811	LC-1	27.5	26.4	0.2	
	0817	LC-2	41.5	30.4	1.1	
	0815	LC-3	34.0	28.4	1.0	
	0813	GV-6	10.0	14.0	6.1	
	0806	GP-1	0*	6.4	10.3	
	0956	GP-1	0*	9.6	5.4	2nd Reading
	0807	Exhaust	40*	2.2	19.2	



TETRA TECH GEO

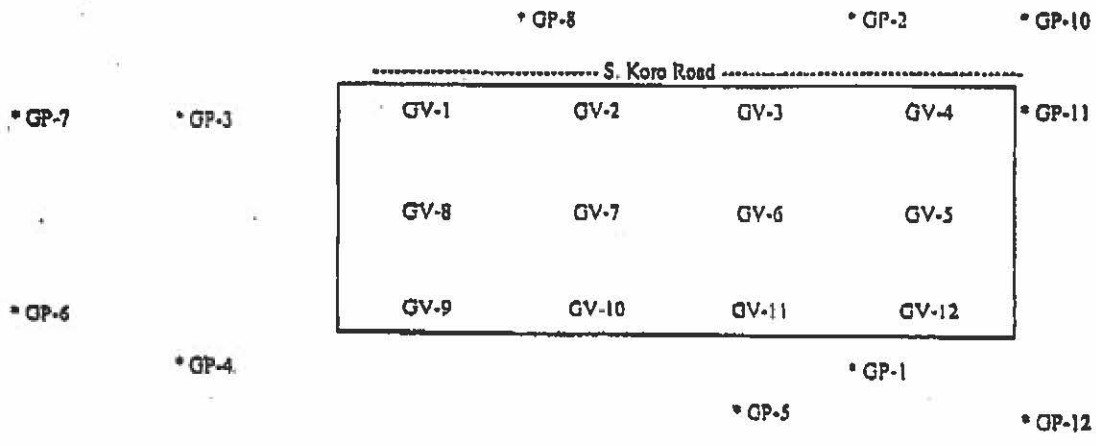
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Ripon, Wisconsin
Personnel: McKala Kiesling
Water level in buried knockout tank 0 "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 7 F
Measuring Device: Eagle
In Trailer Vacuum Gage 1 "Hg

* LEL

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
1/3/18	0837	Background	0*	0.0	20.9	
	0847	LC-1	31.5	25.4	0.4	
	0857	LC-2	43.5	29.4	1.2	
	0852	LC-3	36.5	27.8	1.9	
	0849	GV-6	9.5	11.8	8.0	
	0839	GP-1	5*	4.2	14.1	
	0940	GP-1	0*	6.4	11.5	2nd Reading
	0842	Exhaust	17*	1.0	20.8	



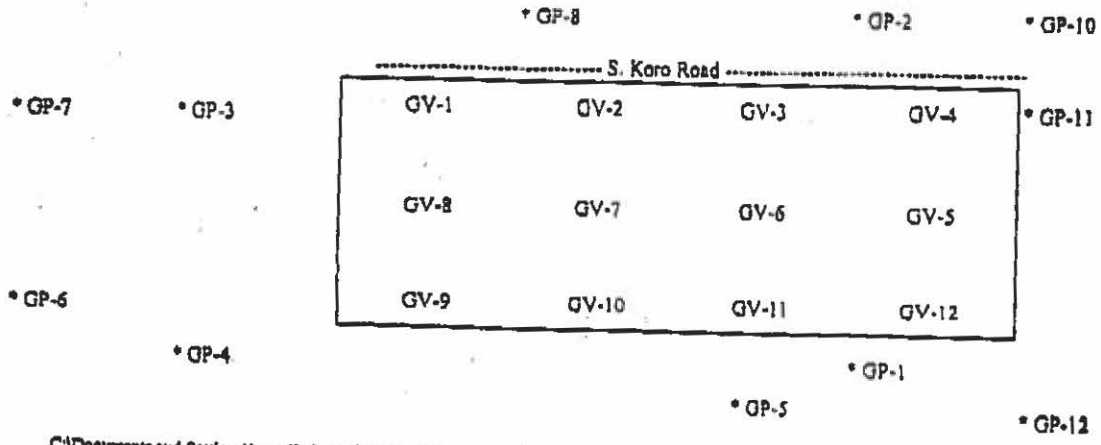
TETRA TECH GEO

GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: MKala Kiessling
Water level in buried knockout tank 8 "

Barometric Pressure: 28.7 Hg
Temperature (ambient): 45 F
Measuring Device: Eagle
In Trailer Vacuum Gage 1 "Hg

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
3/11/18	0752	Background	0*	0.0	20.9	
	0757 ~~0752~~	LC-1	36.5	26.2	0.2	
	0803	LC-2	46.0	29.4	1.2	
	0801	LC-3	31.0	24.4	4.2	
	0759	GV-6	12.0	14.0	6.7	
	0753	GP-1	0*	5.8	11.1	
	0854	GP-1	0*	7.6	7.8	2nd Reading
	0754	Exhaust	52*	2.4	18.7	



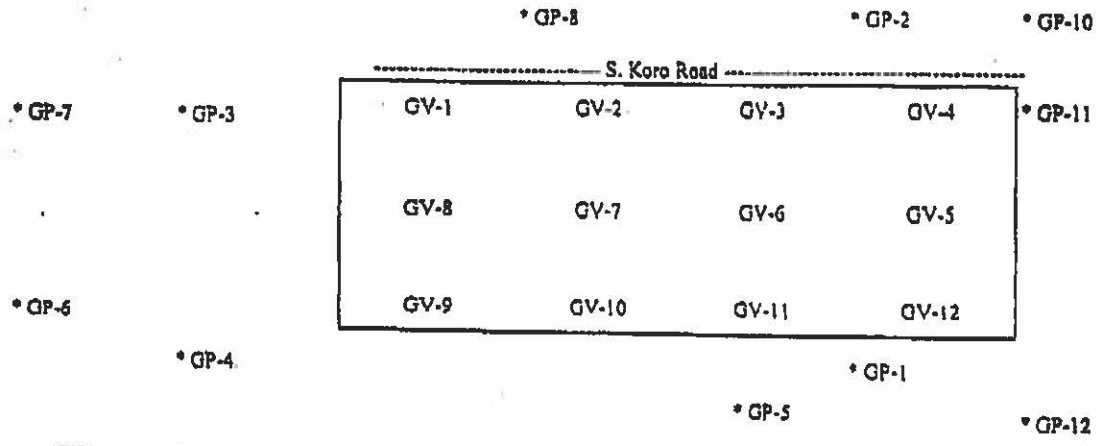
TETRA TECH GEO

GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: McKala Kiessling
Water level in buried knockout tank 07 "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 30 F
Measuring Device: Eagle
In Trailer Vacuum Gage 04 "Hg

Date	Time	Measurement Point	% CH_4 * LEL	% CO_2	% O_2	Comments
1/26/18	0741	Background	0*	0.0	20.9	
	0750	LC-1	8.5	17.8	4.2	
1756	~~0755~~	LC-2	35.0	23.2	4.6	
	0753	LC-3	18.5	19.0	5.3	
	0757	GV-6	5.0	8.6	11.7	
	0743	GP-1	0*	3.4	15.1	
	0843	GP-1	0*	7.2	8.1	2nd Readings
✓	0746	Exhaust	8.0	9.6	12.4	



TETRA TECH GEO

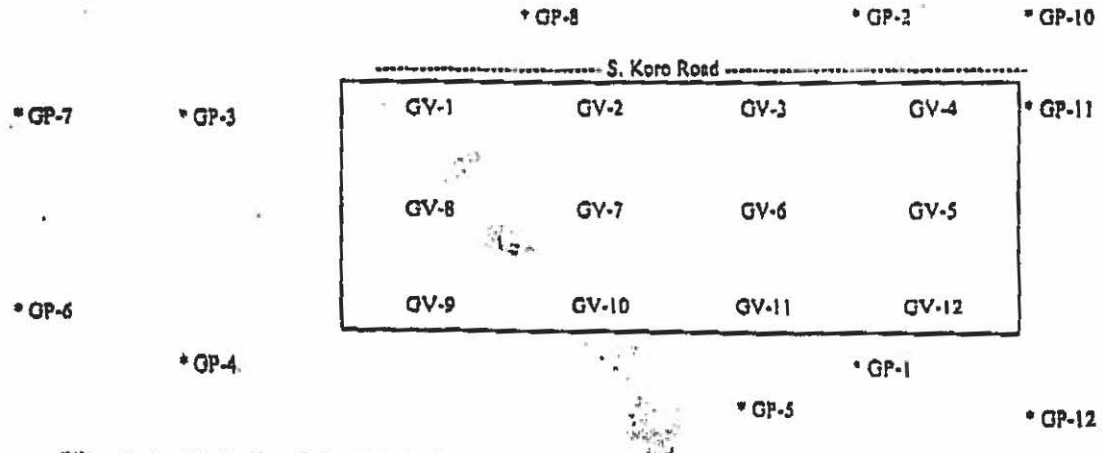
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin.
Personnel: McKala Kiessling
Water level in buried knockout tank ____ "

Barometric Pressure: 29.6 Hg
Temperature (ambient): 12 F
Measuring Device: -Eagle
In Trailer Vacuum Gage 4.5 "Hg

* LEL

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
2/13/18	0757	Background	0*	0.0	20.9	
		LC-1	*unable to draw to get reading			
	0827	LC-2	20.5	20.4	5.7	
	0818	LC-3	9.5	14.0	8.0	
	0814	GV-6	42*	6.8	13.3	
	0758	GP-1	0*	2.2	17.9	
	0900	GP-1	0*	~~5.0~~ 3.5	13.5	2nd Reading
	0801	Exhaust	87*	7.4	13.8	



TETRA TECH GEO

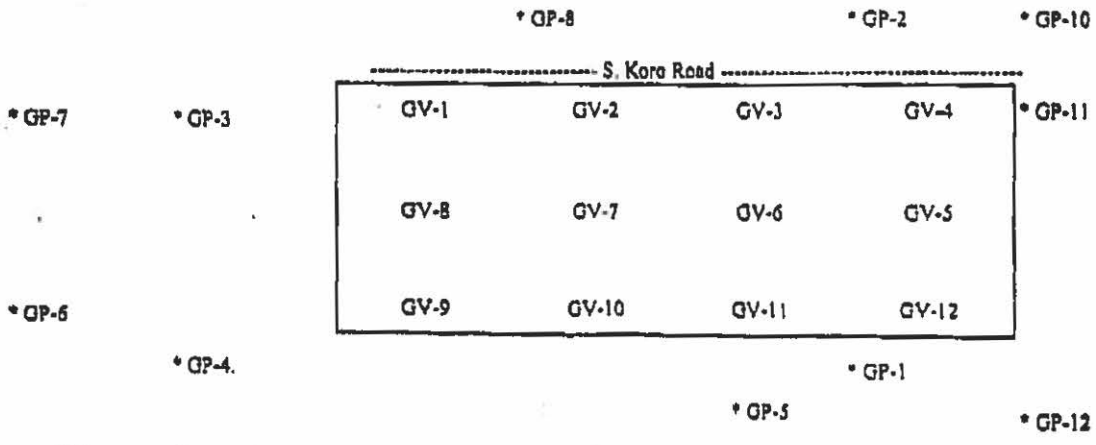
GAS PROBE DATA MONITORING POINTS

29.1

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: McKala Kiessling
Water level in buried knockout tank 12 3/8 "

Barometric Pressure: ~~29.0~~ Hg
Temperature (ambient): 35 F
Measuring Device: Eagle 2
In Trailer Vacuum Gage ~~3~~ "Hg

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
2/27/18 ~~2/26/18~~	0735	Background	0 *	0.0	20.9	
	0742	LC-1	7.5	17.8	1.8	
	0749	LC-2	27.0	25.2	2.1	
	0746	LC-3	19.0	20.2	~~2.3~~ 3.2	
	0744	GV-6	46 *	8.4	7.7	
	0730	GP-1	0 *	1.8	18.5	
	0810	GP-1	0 *	10.0	11.4	2nd Reading
	0738	Exhaust	60.4 *	4.6	15.9	



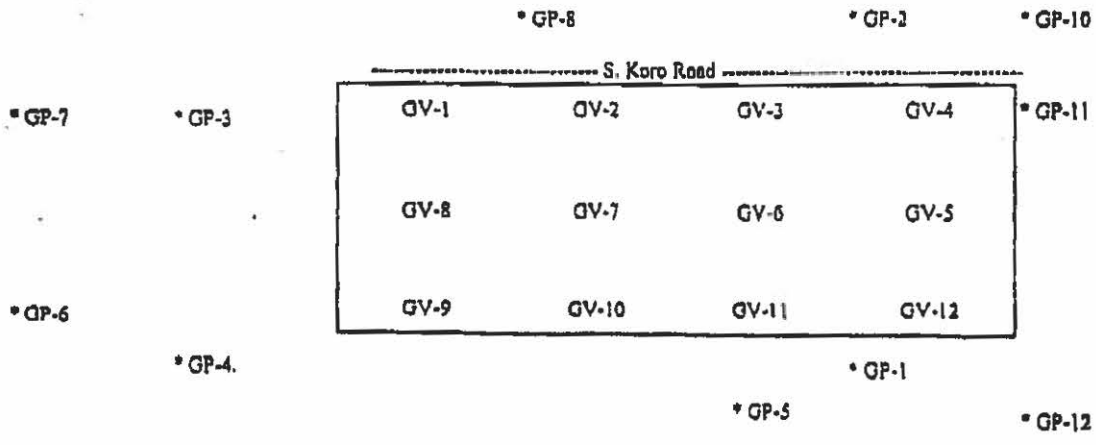
TETRA TECH GEO

GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: Mikala Kiessling
Water level in buried knockout tank 8 " #1 EL

Barometric Pressure: 29.1 Hg
Temperature (ambient): 22 F
Measuring Device: Eagle 4
In Trailer Vacuum Gage "Hg

Date	Time	Measurement Point	% CH_4	% CO_2	% O_2	Comments
3/13/18	0733	Background	0*	0.0	20.9	
	0742	LC-1	83*	11.8	7.7	
	0749	LC-2	16.5	15.8	8.6	
	0746	LC-3	28	25.0	1.2	
	0744	GV-6	31*	6.2	12.7	
	0734	GP-1	0*	1.2	18.6	
	0835	GP-1	0*	0.2	20.9	2nd Reading
	0736	Exhaust	75*	5.2	15.8	



TETRA TECH GEO

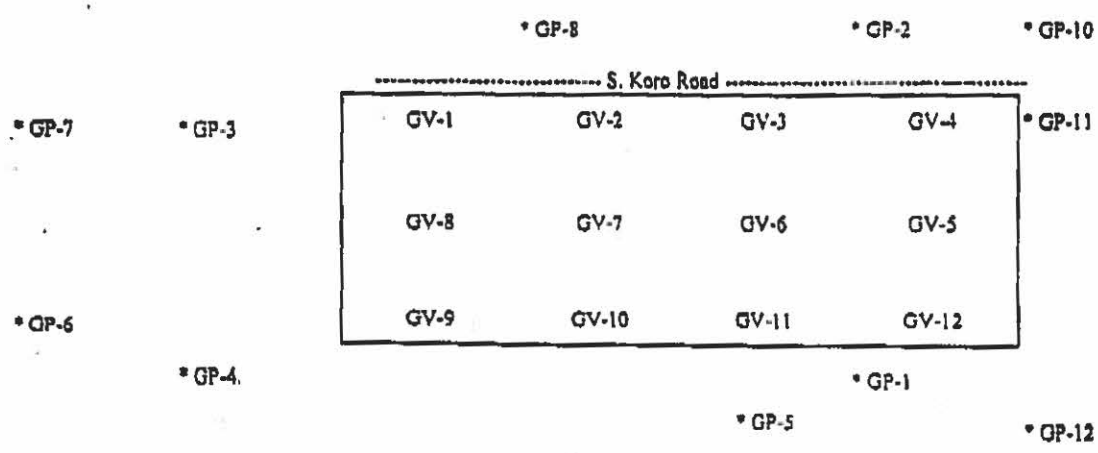
GAS PROBE DATA MONITORING POINTS

Project: FF/NN Landfill
Location: Rinon, Wisconsin
Personnel: McKala Kiessling
Water level in buried knockout tank 9 "

Barometric Pressure: 29.1 Hg
Temperature (ambient): 22 F
Measuring Device: Eagle
In Trailer Vacuum Gage 2 "Hg

*LEL

Date	Time	Measure-ment Point	% CH_4	% CO_2	% O_2	Comments
3/28/18	0757	Background	0*	0.0	20.9	
	0804	LC-1	7.0	18.0	1.2	
	0811	LC-2	26.0	24.4	1.7	
	0808	LC-3	22.5	21.8	3.5	
	0806	GV-6	163*	9.6	7.4	
	0758	GP-1	0*	3.6	14.3	
	0858	GP-1	0*	7.2	7.8	2nd Reading
	0800	Exhaust	161*	3.8	17.3	



ATTACHMENT E

GROUNDWATER MONITORING PROGRAM APPROVAL, APRIL 18, 2013 AND CONDITIONAL APPROVAL, JUNE 8, 2017

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711

April 18, 2013

Nelson Olavarria (Representative for the Ripon FF/NN Landfill Potentially Responsible Party (PRP) Group)
Cooper Industries
600 Travis Street, #5600
Houston, TX. 77210

SUBJECT: Conditional Approval of Revised Groundwater Monitoring Program for the Ripon HWY FF/NN Landfill
Ripon HWY FF/NN Landfill
License #467, Ripon, WI
WDNR BRRTS #02-20-000915

Dear Mr. Olavarria:

The Department and US EPA have completed the review of your request for revisions to the approved groundwater monitoring program, prepared for you by Tetra Tech Inc., received on March 21, 2013 as part of the Status Report and January, 2013 Sampling Event submittal. The Department is approving the revisions subject to the following condition.

The revised monitoring plan shall follow the attached Department revised monitoring schedule table 8 for wells to be sampled, sample parameters and sampling frequency.

The Department appreciates your efforts to restore the environment at this site. Should you have any questions regarding this letter, please call me at (608)267-7563 or email me at gary.edelstein@wisconsin.gov. Thank you for your cooperation.

Sincerely,

Gary A. Edelstein, P.E.
Waste Management Engineer
Remediation & Redevelopment Program

Attach.

cc: Kevin McKnight, DNR - ecopy
Bernard Schorle, EPA – ecopy - schorle.bernard@epa.gov
Mike Noel, Tetra Tech – ecopy – Mike.Noel@tetratech.com
Lori Rich, City of Ripon – ecopy – lrich@cityofripon.com

Table 8. Groundwater Monitoring Schedule
FF/NN Landfill, Ripon, WI

DNR

			Current Plan (4/8/11)				Proposed Plan		
Stratigraphic Layer	Sampling Point	Gradient	Water Level	MNA	VOCs	Results	Water Level	MNA	VOCs
Layer 1	MW-101	U	Q		A	ND	A		Drop
Layer 1	MW-102	S	Q		A	ND	A		Drop
Layer 1	MW-103	D	Q	Q	Q	TCE>PALs<ES	SA	SA	SA
Layer 1	MW-104	Within	Q		SA	chlorobenzene <PALs	A		A
Layer 1	MW-106	S	Q		A	ND	A		Drop
Layer 1	MW-107	D	Q		SA	ND	A		A
Layer 1	MW-108	S	Q		A	ND	A		Drop
Layer 1	MW-111	D	Q		A	ND	A		Drop
Layer 1	MW-112	D	Q	Q	Q	VC ND past 6 events	SA	SA	SA
Layer 2	P-101	U	Q		A	ND	A		Drop
Layer 2	P-102	S	Q		A	ND	A		Drop
Layer 2	P-103	D	Q	Q	Q	VC ND past 3 events	SA	SA	SA
Layer 2	P-104	Beneath	Q		A	ND	A		Drop
Layer 2	P-106	S	Q		A	ND	A		A
Layer 2	P-107	D	Q		SA	VC ND last event	A		A
Layer 2	P-108	S	Q		A	ND	A		Drop
Layer 2	P-111	D	Q		A	ND	A		Drop
Layer 3	MW-3B	D	Q	Q	Q	ND	Q	Q	Q
Layer 3	P-103D	D	Q	Q	Q	VC ND past 3 events	Q	Q	Q
Layer 3	P-111D	D	Q	Q	Q	VC>ES	Q	Q	Q
Layer 3	P-113B	D	Q	Q	Q	ND	Q	Q	Q
Layer 3	P-114	D	Q	Q	Q	VC>ES	Q	Q	Q
Layer 3	P-115	D	Q	Q	Q	VC>ES	Q	Q	Q
Layer 3	P-116	D	Q	Q	Q	ND	Q	Q	Q
Layer 4	MW-3A	D	Q	Q	Q	ND	Q	Q	Q
Layer 4	P-107D	D	Q	Q	Q	VC>ES	Q	Q	Q
Layer 4	P-113A	D	Q	Q	Q	ND	Q	Q	Q
Private Wells	Baneck	D			A				A
Private Wells	Gaastra	D			A				A
Private Wells	Rohde	D			A				A
Landfill	Leachate LH-1	Within	A		A		A		A
Landfill	Leachate LH-2	Within	A		A		A		A
Landfill	Leachate LH-3	Within	A		A		A		A
Landfill	Gas VOCs LH-1	Within			Q				A
Landfill	Gas VOCs LH-2	Within			Q				A
Landfill	Gas VOCs LH-3	Within			Q				A
Landfill	Gas VOCs GV-6	Within			Q				A
Landfill	Gas VOCs GP-3	D			Q				A
Landfill	Cap Inspection On Landfill	On Landfill			A				A

Q = Quarterly (Jan, Jul, Oct); A = Annual (Apr) SA = Semi-Annual

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711

WISCONSIN
DEPT. OF NATURAL RESOURCES

June 8, 2017

Jeffrey Tracy (Representative for the Ripon FF/NN Landfill Potentially Responsible Party (PRP) Group)
Quantum Management Group, Inc.
216 N. Green Bay Road, Suite 201
Thiensville, WI 53002

SUBJECT: Proposed Second Replacement Sentinel Monitoring Well Work Plan Approval for the Ripon HWY FF/NN Landfill
License #467, Ripon, WI
WDNR BRRTS #02-20-000915

Dear Mr. Tracy:

The Department has reviewed the proposal for second new sentinel monitoring well (P-118) prepared by Tetra Tech and received by email on June 6, 2017. The proposal is approved subject to the following condition:

1. Monitoring well P-117 and new monitoring well P-118 shall follow the same sampling frequency and parameters as P-116. This is quarterly monitoring to include water levels, VOCs, and natural attenuation parameters. The groundwater monitoring plan that was approved in our April 18, 2013 letter approval is hereby amended to include this condition.

The Department will evaluate the need for monitoring of the 2 private wells at a regular frequency at N8851 CTH PP, the Schroeder and Washkovick wells, based on the monitoring results for new well P-118.

The Department appreciates your efforts to restore the environment at this site. Should you have any questions regarding this letter, please call me at (608)267-7563 or email me at gary.edelstein@wisconsin.gov. Thank you for your cooperation.

Sincerely,

Gary A. Edelstein
Waste Management Engineer
Remediation & Redevelopment Program

Attach.

cc: Rick Joslin, DNR - ecopy
Mary Tierney, EPA – ecopy – tierney.mary@epa.gov
Mike Noel, Tetra Tech – ecopy – Mike.Noel@tetratech.com
Lori Rich, City of Ripon – ecopy – lrich@cityofripon.com