Mallard North Update – June 25, 2009 Bi-weekly Meeting
Prepared by RMT, Inc.

1. Landfill Gas Investigation Activities
   - Activities performed since last meeting
     - Performed gas probe (new and existing) and gas vent monitoring on June 17th (see attached data)
     - Surveyed top of PVC casing elevations at new "GP" gas probes
     - Updated cross-sections with new probe data (this work is in progress).
     - Updated map to include new gas probes (see attached)
   - Activities to be performed prior to next meeting
     - Complete cross sections
     - Continue evaluation of LFG and water level data; assess LFG migration pathways
     - Review and refine LFG monitoring schedule presented in work plan
2. Interim Remedial Action Activities
   - Activities performed since last meeting
     - Continued pumping at EW-L2 via vac-truck
     - Installed piping, tank, equipment for pump test at MH-2. Performed and monitored pump test at MH-2
     - Seep/leachate well EW-L2 pumping and solar flare equipment was ordered
     - Searched area near G-115 for the possible existence of a concrete manhole (none found). Surveyed elevation of seep cluster near G-115.
     - Collected samples from MH-2, seep near MH-2 and seep near G-115.
     - Met with electrical contractor and ComEd to coordinate getting power to EW-L2 area. Authorized electrical contractor to run power from ComEd meter location to EW-L2 (scheduled for June 25)
     - Met with contractor to coordinate grading necessary to place frac tank.
     - Begin installation of piping from seeps and EW-L2 to frac tank area.
     - Construct frac tank pad (scheduled for June 25)
     -

- Activities to be performed prior to next meeting
  - Delivery of pneumatic pumps/,compressor (6/29 or 30), solar flares (7/2)
  - Construction of trench/sump near G115 (week of June 29th)
  - Install pneumatic pumps and compressor (week of June 29th)
  - Startup and shakedown of seep/leachate pumping system (week of June 29th)
  - Solar flare installation (late in week of June 29th)
  - Solar flare startup and shakedown (week of July 6th)
  - Gas/liquid level monitoring (related to leachate/seep pumping and solar flare operation)

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: Kucher
Gas Meter: Landtec GEM2000
Serial Number: RMT
Date Calibrated: 6/16/09 PM

Pressure Device: Magnahelics
Water Level Device: Slope Indicator
Ground Conditions: Overcast, wet

Date: 6/17/2009
Weather: 65 deg. F, 29.80"Hg and rising
Comments: 0.5" rain night before

ID	Time	Pressure (" H2O)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Depth to Water (ft BTOC)	Notes/Conditions
GP 1	14:47	0.00	0.2	0.1	19.3	80.4	19.30	
GP 33A	14:44	0.40	62.7	19.5	4.6	13.2	13.84	
GP 33B	14:42	0.00	1.3	0.4	19.1	79.2	12.48	
G 116	14:34	0.00	65.1	24.0	2.7	8.2	11.90	
GP 2A	14:31	0.10	0.6	0.4	19.3	79.7	13.00	
GP 2B	14:28	0.20	0.0	0.0	19.7	80.3	6.90	
GP 34A	14:27	0.20	0.2	1.1	18.5	80.2	12.37	
GP 34B	14:25	0.20	0.3	0.5	19.3	79.9	16.18	
GP 3	14:20	0.40	0.0	0.5	18.9	80.6	5.15	
GP 4A	14:19	0.00	0.0	2.8	17.3	79.9	15.64	
GP 4B	14:15	0.30	0.0	0.1	19.6	80.3	3.62	
GP 4C	14:13	0.90	2.7	3.5	16.9	76.9	18.40	
GP 5	9:10	0.00	0.0	0.0	20.1	79.9	15.97	
P 1A	9:18	1.50	0.0	0.2	20.0	79.8	14.81	
GP 6	9:22	0.0	0.0	0.1	20.1	79.8	10.13	
GP 7A	9:27	0.0	0.0	2.1	17.8	80.1	10.92	
GP 7B	9:25	0.0	0.0	0.1	19.9	80.0	19.44	
GP 8A	9:32	0.0	0.8	2.7	17.8	78.7	8.36	
GP 8B	9:35	0.0	0.0	0.1	20.1	79.8	11.14	
P 3A	9:40	0.0	0.0	2.3	9.2	88.5	17.65	

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ID	Time	Pressure (" H2O)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Depth to Water (ft BTOC)	Notes/Conditions
GP 9A	9:44	0.00	0.0	1.4	18.4	80.2	12.68	
GP 9B	9:46	0.00	0.0	0.3	19.4	80.3	12.44	
P 4C	9:50	0.00	0.0	4.9	14.1	81.0	Dry	
GP 10A	9:53	0.00	0.0	0.3	19.4	80.3	8.70	
GP 10B	9:54	0.20	0.0	0.4	19.5	80.1	11.23	
GP 10C	9:56	0.10	0.0	0.1	19.9	80.0	10.70	
P 5A	9:59	0.00	0.0	0.0	20.0	80.0	8.06	
GP 11A	10:05	0.00	0.0	0.1	20.0	79.9	9.57	
GP 11B	10:03	0.20	0.0	0.1	19.9	80.0	8.62	
P 6C	10:09	0.00	0.0	0.0	20.0	80.0	5.51	
GP 12	10:11	0.40	0.0	0.3	19.6	80.1	4.28	
P 7A	10:15	0.00	0.0	0.0	20.0	80.0	3.99	
P 7B	10:17	0.00	0.0	0.0	19.9	80.1	4.33	
GP 13	10:20	0.10	0.0	0.0	19.4	80.6	5.32	
GP 14	10:22	0.00	0.0	0.0	19.9	80.1	6.58	
G 109	10:30	0.00	0.0	0.0	20.0	80.0	5.22	
GP 15A	10:36	0.25	0.0	0.2	19.5	80.3	3.64	
GP 15B	10:38	0.60	0.0	0.4	19.7	79.9	5.08	
GP 28A	10:40	0.10	0.0	0.1	20.0	79.9	11.80	
GP 28B	10:41	2.90	0.0	0.0	20.0	80.0	3.42	
GP 28C	10:39	0.90	0.0	0.0	19.9	80.1	3.43	
GP 16A	10:44	0.10	0.0	0.0	19.9	80.1	5.39	
GP 16B	10:45	1.40	0.0	0.0	19.4	80.6	3.30	
GP 16C	10:46	0.80	0.0	0.0	19.9	80.1	4.02	
GP 29A	10:49	0.30	0.0	0.0	20.0	80.0	5.57	
GP 29B	10:48	0.40	0.0	0.1	19.4	80.5	12.03	
G110	10:54	NR	0.0	0.0	19.9	80.1	8.16	
GP 17	10:53	0.40	1.1	0.5	19.0	79.4	5.21	

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ID	Time	Pressure (" H2O)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Depth to Water (ft BTOC)	Notes/Conditions
GP 18	11:04	0.20	0.0	0.0	19.9	80.1	7.72	
GP 19	11:07	0.30	0.0	0.0	19.8	80.2	11.75	
GP 20	11:10	0.20	0.0	0.0	19.8	80.2	4.99	
GP 21A	11:12	0.30	0.0	0.0	19.8	80.2	6.70	
GP 21B	11:14	0.20	0.0	0.0	19.8	80.2	13.93	
GP 22A	17:24	0.00	0.3	0.1	19.3	80.3	3.42	
GP 22B	17:27	0.00	0.1	0.9	19.4	79.6	19.19	
GP 30A	11:23	0.20	0.0	1.1	19.9	79.0	8.17	
GP 30B	11:22	0.10	13.2	0.1	17.2	69.5	7.83	
MW 204 D	17:32	0.00	0.4	0.0	19.4	80.2	20.00	
MW 204 S	17:34	0.00	0.0	0.0	19.5	80.5	25.04	
GP 23A	11:26	0.30	0.0	0.0	19.5	80.5	5.23	
GP 23B	11:30	0.20	0.0	0.1	19.4	80.5	10.23	
GP 24A	11:32	0.20	0.0	0.9	19.0	80.1	8.05	
GP 24B	11:34	0.20	0.0	0.0	19.7	80.3	9.62	
GP 25A	17:38	0.00	0.0	0.2	19.1	80.7	4.63	
GP 25B	17:41	0.00	0.0	0.2	18.8	81.0	18.16	
GP 31A	11:40	0.10	0.0	3.2	16.5	80.3	Dry	
GP 31B	11:39	0.10	72.8	0.7	16.8	9.7	15.34	
GP 26A	11:44	0.10	0.0	0.0	19.8	80.2	9.34	
GP 26B	11:46	0.10	0.1	0.0	19.6	80.3	16.67	
GP 27A	17:42	0.00	0.0	0.1	19.4	80.5	8.80	
GP 27B	17:46	0.00	0.0	0.0	19.4	80.6	20.05	
GP 35A	11:53	0.10	0.0	1.1	18.2	80.7	8.36	
GP 35B	11:52	0.20	0.0	0.0	19.7	80.3	10.16	
G 120S	12:11	0.00	0.3	0.8	19.3	79.6	11.68	
G 113	12:17	0.00	0.0	0.0	19.8	80.2	12.00	
G 121	12:19	0.00	0.0	0.0	19.8	80.2	11.97	

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ID	Time	Pressure (" H2O)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Depth to Water (ft BTOC)	Notes/Conditions
GP 32A	15:00	0.20	0.0	0.2	19.3	80.5	10.03	
GP 32B	14:58	0.10	0.0	0.0	19.4	80.6	12.92	
GP 37A	14:54	0.00	0.2	0.0	19.4	80.4	13.03	
GP 37B	14:53	0.20	0.2	0.0	19.3	80.5	12.81	
EWL 10	15:15	0.00	23.3	10.8	12.7	53.2	NR	
EWL 11	15:13	0.00	58.9	30.9	2.1	8.1	NR	
UAV 1	15:23	0.90	68.4	31.4	0.5	0.0	18.49	
DV 1	15:27	0.40	66.8	32.7	0.4	0.1	19.17	
DV 8	15:35	0.20	69.4	30.3	0.3	0.0	6.7 (dry)	
UAV 4	16:04	0.00	60.8	38.7	0.3	0.2	5.2 (dry)	
DV 12	15:46	0.00	64.2	31.6	0.3	3.9	NR	
DV 13	15:52	0.00	27.3	7.0	12.3	53.4	NR	
SV 12	11:59	0.00	74.7	24.8	0.6	0.0	NR	
DV 3	16:14	0.00	77.8	20.7	0.3	1.2	17.51	
DV 6	16:44	0.00	42.5	25.5	6.1	25.9	11.97	

NA=Not applicable
NR=Nor recorded
Created by: B. Zimmerman, 6/18/09
Checked by: J. Schoephoester, 6/18/09

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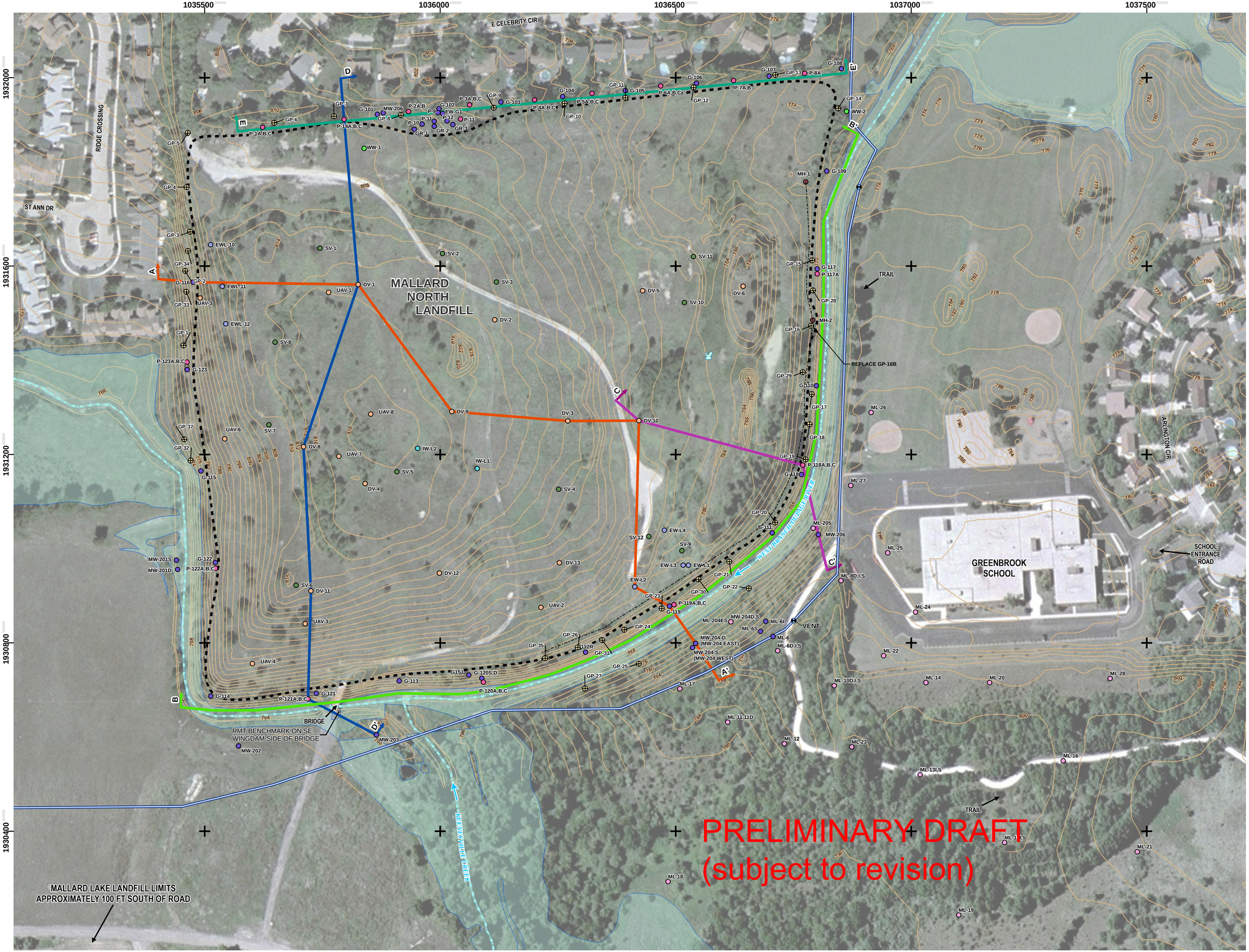

LEGEND

- APPROXIMATE LANDFILL LIMITS
- LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- ELEVATION CONTOUR (2-FT INTERVAL)
- PRIVATE WELLS
- MONITORING WELLS
- PIEZOMETERS
- LEACHATE PIPE
- GAS VENTS
- GAS VENTS (P)
- GAS EXTR HEAD WELLS
- LEACH GAS EXTR WELLS
- GAS PROBES
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION
- POND

CROSS SECTIONS

- A-A'
- B-B'
- C-C'
- D-D'
- E-E'

NOTES:

1. BASE AERIAL IMAGE FROM THE USGS SEAMLESS DATA SERVER, MARCH 2005.
2. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
3. ELEVATION CONTOURS AND FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT VIA CHAPMAN AND CUTLER, LLP.
4. LANDFILL LIMITS AND HYDRO FEATURE CENTERLINES ESTIMATED BY AERIAL PHOTOGRAPH.
5. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
6. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
7. WELL AND PROBE APPROXIMATE LOCATIONS FROM DUPAGE CO FOREST PRESERVE DISTRICT AND BFI.
8. LEACHATE COLLECTION TRENCH LOCATION IS APPROXIMATE BASED ON THE 1995 SITE MAP FROM EMCON.

0 100 200 FEET

1 " = 100 '

1:1,200

WORKING COPY

PROJECT: MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT
DU PAGE COUNTY, ILLINOIS

SHEET TITLE: LANDFILL GAS INVESTIGATION WORK PLAN
BASE MAP

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY:	AS NOTED	FILE NO.	68090306.mxd
APPROVED BY:	DATE PRINTED:	FIGURE 1	
DATE: JUNE 2009	6/24/2009		

RMT

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Table A
Un-ionized Ammonia Evaluation
Mallard North Landfill - June 19, 2009 Sampling Event

Unionized ammonia = $[(\text{Total ammonia})*10^{pH}] / [e^{[6344/(273+T)]} + 10^{pH}]$

	MH-2	MH-2 seep	West Seep (Near G115)
Total ammonia (mg/L) [1]	**161**	**145**	**108**
35 IAC Subpart B Total Ammonia Standard (mg/L)	15	15	15
pH	6.63	6.67	7.01
Temp (C)	11.6	13.7	16.9
Total ammonia)*10^{pH}	686,793,025.27	678,215,954.87	1,105,156,431.66
[6344/(273+T)]	22.29	22.13	21.88
[e[6344/(273+T)]	4,795,384,122.58	4,072,996,027.30	3,190,340,065.97
10^{pH}	4,265,795.19	4,677,351.41	10,232,929.92
Un-ionized Ammonia (mg/L)	**0.1431**	**0.1663**	**0.3453**
35 IAC Subpart D Un-ionized Ammonia Standard (mg/L)	0.1	0.1	0.1

Notes:
1. Final Analytical Report received by RMT via e-mail dated 6/26/09

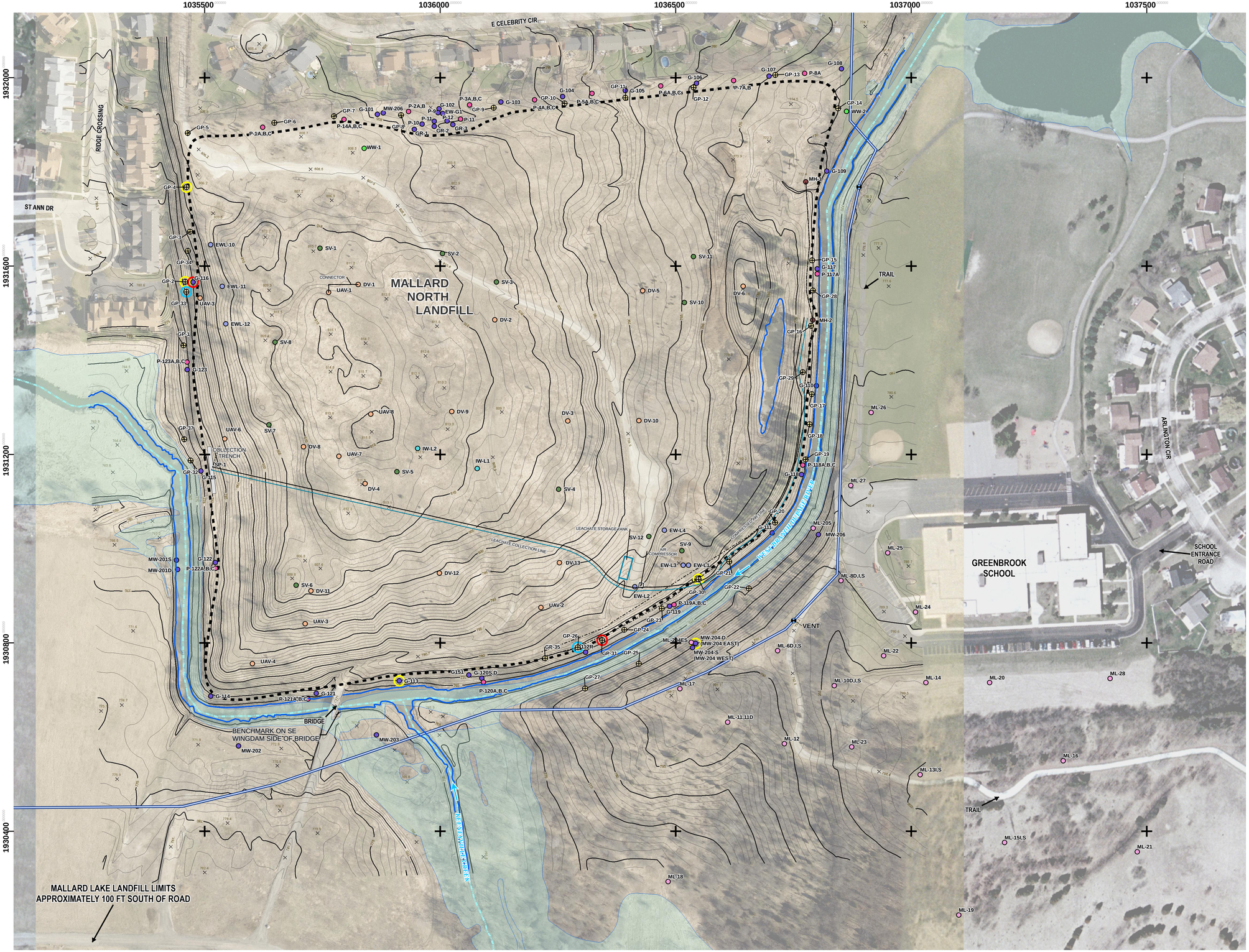
Mallard North Update – September 18, 2009 Meeting
Prepared by RMT, Inc.

1. Completed Activities/Activities In-Progress

- Submitted to U.S. EPA "Response to Comments on the Landfill Cover Repair Workplan" on September 3, 2009. This included graded plan referenced at last meeting.
- Prepared landfill gas control system (LFGCS) air permit application. Also prepared letter explaining why permit is not required for this application. Both documents will be submitted to IEPA BOA on September 21.
- Submitted to U.S. EPA "Response to Comments on the Conceptual Plan for Landfill Gas Collection" on September 12, 2009.
- Prepared "Landfill Gas Collection System Design Report". Document will be submitted to U.S. EPA on September 21, 2009.
- Continued pumping liquid at EWL-2, MH-2 and the western trench sump. Performed routine O&M on the liquid pumping system (repaired check valve at MH-2).
- Continued operation of solar flares.
- Troubleshooting of blower for flare system at SV-12. Recharged battery several times. Discussing with manufacturer possible need to replace certain electrical components.
- Began cover repair work on September 3rd. Removed trees, as needed. Drained pond. Western portion cover repair approximately 85% complete. Pond area is being filled as of 9/16, in anticipation of wetter weather next week.
- Prepared color coded methane detection figure, as discussed at last meeting (see attached).

2. Planned Activities

- Submittal of documents as outlined above.
- Complete cover repair activities, including winterization of leachate collection system.
- Perform full round of landfill gas and liquid level monitoring is tentatively scheduled for September 29 and 30.
- Seal MH-1 and MH-2 so that methane can be monitored in the trench. A plan for accomplishing this has been developed and we anticipate completing it during the week of September 19th so the trench can be monitored when the probes are monitored the week of September 28th.
- Continued O&M on the leachate extraction system and solar flares, as necessary (particularly SV-12)
- Begin ordering equipment for construction of LFGCS.
- Construction of LFGCS.



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- PRIVATE WELLS
- MONITORING WELLS
- PIEZOMETERS
- LEACHATE PIPE
- GAS VENTS
- GAS VENTS (P)
- GAS EXTR HEAD WELLS
- LEACH GAS EXTR WELLS
- GAS PROBES
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.

0 100 200 FEET

1 " = 100 '

1:1,200

WORKING COPY

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(8/17/09 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY:	DATE PRINTED:	FIGURE 3	
DATE: SEPTEMBER 2009	9/17/2009		

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Mallard North Update – October 8, 2009 Meeting
Prepared by RMT, Inc.

1. Completed Activities/Activities In-Progress

- Prepared landfill gas control system (LFGCS) air permit application. Also prepared letter explaining why permit is not required for this application. Both documents were submitted to IEPA BOA on September 29.
- Prepared "Landfill Gas Collection System Design Report". Document was then revised to include changes made subsequent to the September 28 meeting with IEPA and U.S. EPA. Changes included connecting DV-6 to south-central system and adding two new LFG extraction wells to the northwest system.
- Cover repair work status – west is 95 % complete, east is 90% complete. Performed full round of landfill gas and liquid level monitoring on September 29 and 30.
- Continued pumping liquid at EWL-2, MH-2 and the western trench sump.
- Continued operation of solar flares.
- Troubleshooting of blower for flare system at SV-12. Recharged battery several times. Discussing with manufacturer possible need to replace certain electrical components. Determined that the electrical connection between the solar panel and the blower panel was bad. A new connector has been ordered from the manufacturer.
- Prepared color coded methane detection figure, as discussed at last meeting (see attached).
- MH-1 and MH-2 were sealed the week of September 19th and monitored for methane during the September 29-30 gas monitoring round, to determine if methane was present in the collection trench. No methane was detected in the collection trench.

2. Planned Activities

- Complete cover repair activities, including topsoil, seeding, and winterization of leachate collection system.
- Continued O&M on the leachate extraction system and solar flares, as necessary.
- Construction of LFGCS.
- Develop groundwater monitoring plan per Long-Term Goal "D" and Remedial Objective "6".
- Perform groundwater monitoring

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: Roelke, Zimmerman
Gas Meter: Landtec
Date Calibrated: 9/29/2009

Pressure Device: Magnahelics
Water Level Device: Slope Indicator
Ground Conditions: Dry

Date: 9/29/09 - 9/30/09
Weather: 60's; 9/29 cloudy, 9/30 clear
Comments: 9/29: 29.96 rising
9/30: 30.12 steady

ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 1	NR	20.31	0.0	0.2	19.3	80.5	0.0	
GP 33A	NR	15.93	0.0	0.1	19.5	80.4	0.0	
GP 33B	NR	15.01	0.0	0.1	19.6	80.3	0.0	
G 116	NR	13.50	75.3	24.7	0.0	0.0	0.0	
GP 2A	NR	16.91	31.9	12.0	9.1	47.0	0.0	
GP 2B	NR	12.25	0.0	0.1	19.3	80.6	0.0	
GP 34A	NR	16.98	0.1	0.8	19.0	80.1	0.0	
GP 34B	NR	16.53	0.0	0.4	19.4	80.2	0.0	
GP 3	NR	14.22	0.0	1.1	18.7	80.2	0.0	
GP 4A	NR	14.89	0.0	1.0	18.9	80.1	0.0	
GP 4B	NR	13.69	0.0	1.1	18.7	80.2	0.0	
GP 4C	NR	18.68	31.5	11.7	10.6	46.2	0.1	
GP 5	NR	17.61	0.0	0.2	19.2	80.6	0.0	
P 1A	NR	21.08	0.0	0.0	19.5	80.5	-12.0	
GP 6	NR	Dry @ 12.59	0.0	10.1	12.8	77.1	0.0	
GP 7A	NR	14.15	0.0	8.8	12.3	78.9	0.0	
GP 7B	NR	25.45	0.0	0.2	19.3	80.5	0.0	
GP 8A	NR	9.97	0.0	5.7	15.4	78.9	0.0	
GP 8B	NR	12.08	0.0	0.2	19.3	80.5	0.1	
P 3A	NR	22.44	0.0	0.0	19.4	80.6	0.0	

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ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 9A	NR	9.57	0.0	0.6	18.3	81.1	-4.0	
GP 9B	NR	23.02	0.0	0.1	19.3	80.6	0.0	
P 4C	NR	Dry @ 7.10	0.0	0.2	19.3	80.5	-0.2	
GP 10A	NR	Dry @ 9.13	0.0	5.9	16.7	77.4	0.0	
GP 10B	NR	14.05	0.0	0.2	19.3	80.5	0.0	
GP 10C	NR	15.52	0.0	0.3	19.3	80.4	0.1	
P 5A	NR	11.93	0.0	0.0	19.4	80.6	-0.2	
GP 11A	NR	10.18	0.0	2.1	18.4	79.5	0.0	
GP 11B	NR	11.58	0.0	0.2	19.3	80.5	0.0	
P 6C	NR	7.97	0.0	1.8	17.5	80.7	0.0	
GP 12	NR	6.48	0.0	0.1	19.3	80.6	0.2	
P 7A	NR	5.86	0.0	0.0	2.4	97.6	-0.2	
P 7B	NR	6.22	0.0	2.9	17.1	80.0	-0.2	
GP 13	NR	7.11	0.0	0.2	19.3	80.5	0.7	
GP 14	NR	6.70	0.0	0.1	19.3	80.6	0.0	
G 109	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
GP 15A	NR	5.11	0.0	0.5	19.0	80.5	0.5	
GP 15B	NR	5.83	0.0	0.4	19.0	80.6	0.0	
GP 28A	NR	9.35	0.0	0.1	19.3	80.6	0.0	
GP 28B	NR	4.48	0.0	0.1	19.3	80.6	0.3	
GP 28C	NR	4.61	0.0	0.1	19.3	80.6	0.6	
GP 16A	NR	5.82	0.0	0.1	19.4	80.5	0.0	
GP 16B	NR	2.60	0.0	0.1	19.3	80.6	0.1	
GP 16C	NR	5.35	0.0	0.3	19.2	80.5	0.2	
GP 29A	NR	5.78	0.0	0.2	19.2	80.6	0.3	
GP 29B	NR	10.58	0.0	0.1	19.2	80.7	0.4	
G110	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
GP 17	NR	3.67	0.0	0.1	19.3	80.6	0.0	
GP 18	NR	8.77	0.0	0.1	19.3	80.6	0.0	

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ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 19	NR	12.24	0.0	0.1	19.3	80.6	0.2	
GP 20	NR	9.46	0.0	0.1	19.2	80.7	0.0	
GP 21A	NR	8.90	0.0	0.2	19.1	80.7	0.0	
GP 21B	NR	11.72	0.0	0.5	18.9	80.6	0.0	
GP 22A	NR	10.66	0.0	8.0	13.3	78.7	0.0	
GP 22B	NR	21.14	0.0	0.2	19.3	80.5	0.1	
GP 30A	NR	7.05	0.0	0.5	19.0	80.5	0.0	
GP 30B	NR	7.82	7.0	1.5	17.5	74.0	0.5	
MW 204 East	NR	23.86	10.7	3.5	14.7	71.1	0.0	
MW 204 West	NR	27.29	0.0	0.2	19.4	80.4	0.0	
GP 23A	NR	8.49	0.0	0.2	19.0	80.8	0.0	
GP 23B	NR	12.44	0.0	0.2	19.0	80.8	-0.2	
GP 24A	NR	7.43	0.0	0.2	19.0	80.8	-1.3	
GP 24B	NR	19.16	0.0	0.2	19.2	80.6	0.0	
GP 25A	NR	9.11	0.0	2.1	18.3	79.6	0.0	
GP 25B	NR	23.64	0.0	0.2	19.3	80.5	0.0	
GP 31A	NR	Dry @ 9.52	0.0	2.4	18.0	79.6	0.0	
GP 31B	NR	19.07	68.8	6.0	3.1	22.1	0.1	
G 112R	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
GP 26A	NR	12.46	0.3	0.2	18.7	80.8	-0.8	
GP 26B	NR	20.28	3.4	0.8	16.8	79.0	-2.5	
GP 27A	NR	11.86	0.0	6.0	14.9	79.1	0.0	
GP 27B	NR	24.62	0.0	0.6	18.6	80.8	0.0	
GP 35A	NR	Dry @ 11.34	0.0	3.1	17.4	79.5	0.0	
GP 35B	NR	17.26	0.0	0.2	19.1	80.7	0.0	
G 120S	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
G 120D	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
G 113	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
G 121	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.

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ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 32A	NR	12.17	0.0	0.4	18.9	80.7	0.0	
GP 32B	NR	12.93	0.0	0.1	19.3	80.6	0.0	
GP 37A	NR	12.19	0.0	0.1	19.5	80.4	0.0	
GP 37B	NR	15.55	0.0	0.1	19.5	80.4	0.0	
G 115	NR	NR	NR	NR	NR	NR	NR	Will be monitored early Oct.
EWL 10	NR	NR	40.6	23.9	6.8	28.7	0.0	
EWL 11	NR	NR	59.2	29.8	0.0	11.0	-0.2	
UAV 1	NR	NR	70.3	29.7	0.0	0.0	-0.2	
DV 1	NR	NR	70.5	29.5	0.0	0.0	-0.1	
DV 8	NR	NR	69.7	30.3	0.0	0.0	-0.1	
UAV 4	NR	NR	64.0	38.2	0.0	0.0	0.0	
DV 12	NR	NR	68.1	32.5	0.4	0.0	0.0	
DV 13	NR	NR	15.8	6.4	14.9	62.9	-0.1	
SV 12	NR	NR	45.4	19.5	6.7	28.4	0.0	
DV 3	NR	NR	72.4	24.6	0.8	2.2	-0.2	
DV 6	NR	NR	NR	NR	NR	NR	NR	Sample port was missing
UAV 6	NR	NR	68.8	31.8	0.0	0.0	0.0	

NR = not recorded

Created by: B. Zimmerman, 10/1/09
Checked by: J. Schoephoester, 10/1/09

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9/29/2009

	G115	MH2	EWL2
Totalizer	145210	66380	134780
Cycle Coun	492611	39108	694983
DTW	7.88	2.33	12.84

9/30/2009

	G115	MH2	EWL2
Totalizer	145680	69010	136420
Cycle Coun	494466	49539	701168
DTW	7.65	2.74	13.09

Well	DTW	Stickup
DV2	19.94	2.07
DSV1	11.88	5.65
SV2	Dry @ 8.00	6.30
UAV8	14.47	5.40

Well	Diameter
DV6	4"
EWL2	--
UAV2	--
DV13	4"
DV12	4"
DV3	4"
DV1	4"
UAV1	4"
EWL10	6"
EWL11	6"
EWL12	6"
UAV6	6"
DV8	4"
UAV4	6"

LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- AECOM EXTRACTION WELL
- PRIVATE WELLS
- MONITORING WELLS
- PIEZOMETERS
- LEACHATE PIPE
- GAS VENTS
- GAS VENTS (P)
- GAS EXTR HEAD WELLS
- LEACH GAS EXTR WELLS
- GAS PROBES
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. THE ML SERIES PROBE METHANE DATA WAS COLLECTED BY AECOM, SEPTEMBER 8-10, 2009.

0 100 200 FEET

1 " = 100 '

1:1,200

WORKING COPY

MNL data collected on 9/29/09 not 8/17/09. See note 10 for school area data.

MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:

METHANE DETECTIONS (8/17/09 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY:	DATE PRINTED:	FIGURE 3	
DATE: SEPTEMBER 2009	9/17/2009		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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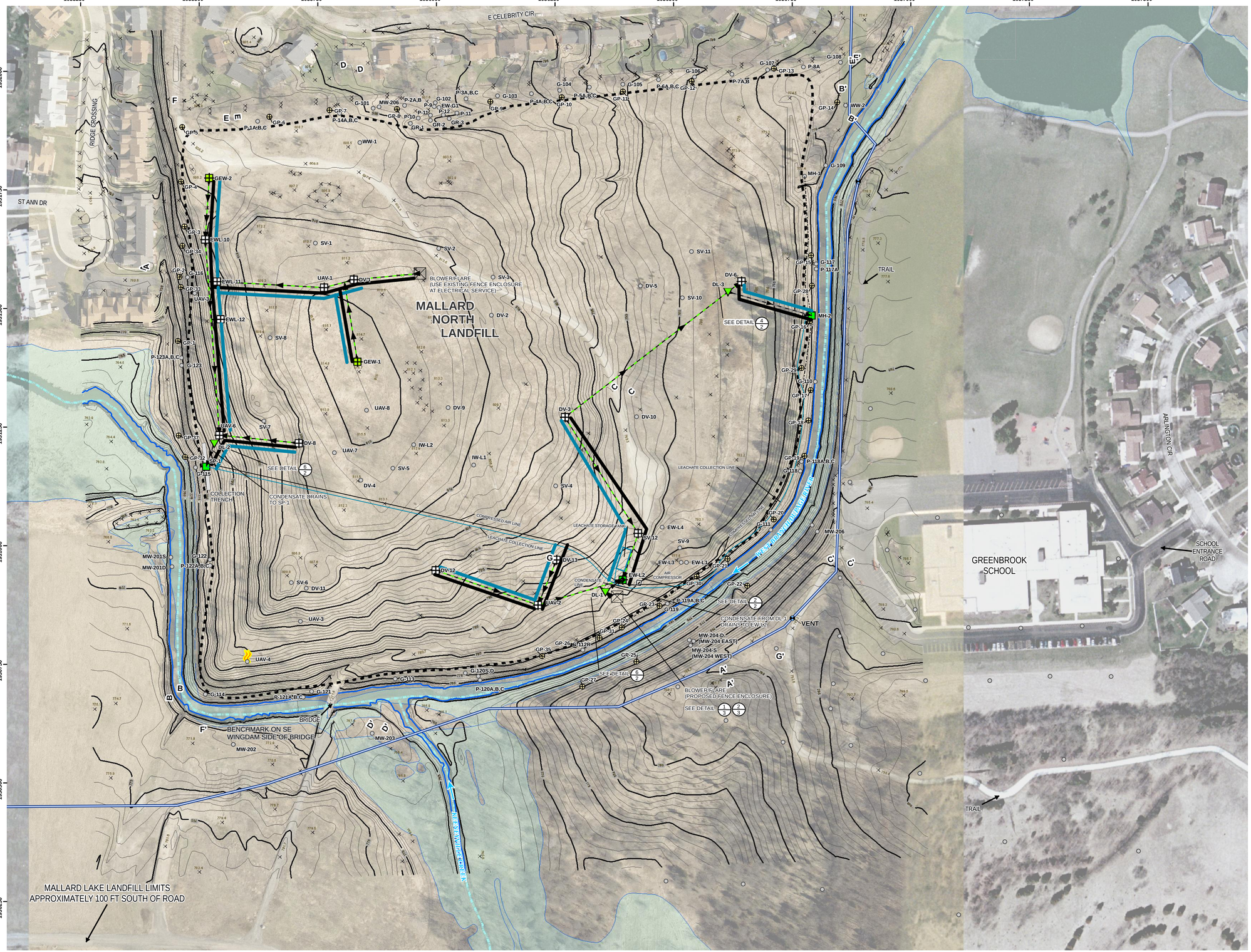

LEGEND

EXISTING

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- GAS EXTRACTION WELL
- LEACHATE EXTRACTION WELL
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- SOLAR FLARE
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE

PROPOSED

- BLOWER/FLARE
- DRIPLEG
- GAS EXTRACTION WELL (PROPOSED)
- GAS HEADER/LATERAL PIPE
- CONDENSATE FLOW DIRECTION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- DRIPLEG DRAIN
- PROPOSED COMPRESSED AIR LINE
- PROPOSED LEACHATE COLLECTION LINE

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. LANDFILL COVER REGRADING IN PROGRESS.

0 100 200 FEET

1 " = 100 '

1:1,200

WORKING COPY

PROJECT:

MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:

LANDFILL GAS COLLECTION SYSTEM DESIGN LAYOUT DRAWING

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER	AS NOTED	FILE NO.	68090315.mxd
APPROVED BY: KUCHER J	DATE PRINTED:	**FIGURE 1**	
DATE: SEPTEMBER 2009	9/14/2009		

RMT

744 Heartland Trail
Madison, WI 53717-1934

P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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Mallard North Update – October 29, 2009 Meeting
Prepared by RMT, Inc.

Completed Activities/Activities In-Progress

- Completed cover repair work, including seeding.
- Winterization of leachate collection system is nearly complete. Tank is yet to be heat-traced and circulation pump installed.
- Submitted to Illinois EPA landfill gas control system (LFGCS) air permit application fee of $1,000 on October 19th. Discussed permit application with reviewer on several occasions. Submitted addendum on October 23rd. Based on discussions with Illinois EPA, we anticipate receiving the permit the week of November 2nd.
- Obtained County of DuPage general building permit to cover LFGCS construction (concrete pads, fencing, and well installation) and electrical work. RMT delivered the permit application to the County on October 28th.
- Reviewed Weston Solutions comments on the landfill gas collection system design report, dated October 16, 2009.
- Prepared internal LFGCS implementation schedule (see below).
- Ordered LFGCS components
- Developed bid package for constructing LFGCS and submitted package to Landmarc. Bid due by October 29th.
- Performed monthly landfill gas and liquid level monitoring on October 19 and 20 (see attached table and figure).
- Continued pumping liquid at EWL-2, MH-2 and G-115 sump (see attached data).
- Continued operation of solar flares.
- Replaced faulty connector between the solar panel and the blower panel at SV-12. This resolved the problem with the battery not charging. Subsequently, a truck hit a guy wire with and knocked the flare over. Landmarc is getting replacement parts so that the flare can be reattached.

Planned Activities

- Continued O&M on the leachate extraction system and solar flares, as necessary.
- Execute subcontract with Landmarc to construct LFGCS
- Construction of LFGCS. Tentative schedule calls for field work to begin on or around November 9th. Construction is anticipated to be completed the first or second week in December. System start-up and monitoring will begin immediately after completion of construction.
- Develop groundwater monitoring plan per Long-Term Goal "D" and Remedial Objective "6".
- Perform groundwater monitoring

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: Zimmerman, Kyrias
Gas Meter: GEM 2000
Date Calibrated: 10/19/2009

Pressure Device: Magnehelics
Water Level Device: Slope Indicator
Ground Conditions: Dry

Date: 10/19/09 - 10/20/09
Weather: 10/19- clear, 55 F, 30.00 "Hg
10/20- clear, 54 F, 30.01 "Hg
Comments: Ground was dry.

ID	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 1	20.00	0.0	0.5	19.5	80.0	0.2	
GP 33A	14.59	0.2	0.6	19.7	79.5	0.3	
GP 33B	13.32	0.0	0.3	19.8	79.9	4.4	
G 116	13.32	72.7	26.8	0.2	0.3	0.2	
GP 2A	14.36	31.1	10.5	10.0	48.4	-0.2	
GP 2B	11.83	0.3	0.3	19.7	79.7	-0.4	
GP 34A	16.76	0.0	0.9	19.3	79.8	0.0	
GP 34B	16.37	0.0	0.5	19.6	79.9	0.1	
GP 3	14.39	0.0	0.5	19.6	79.9	0.1	
GP 4A	15.52	0.2	5.2	16.5	78.1	0.0	
GP 4B	14.89	0.0	1.3	18.8	79.9	-4.7	
GP 4C	18.92	22.0	10.4	11.9	55.7	0.6	
GP 5	18.81	0.0	0.1	19.4	80.5	0.0	
P 1A	22.44	0.0	0.8	18.5	80.7	-0.5	
GP 6	Dry at 12.70	0.0	9.2	13.8	77.0	0.0	
GP 7A	Dry at 14.42	0.0	8.3	13.1	78.6	0.0	
GP 7B	26.15	0.0	0.2	19.4	80.4	0.0	
GP 8A	10.05	0.0	5.9	13.8	80.3	0.0	
GP 8B	Dry at 29.27	0.0	0.0	19.3	80.7	0.2	
P 3A	Dry at 33.45	0.0	11.8	5.0	83.2	0.0	

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ID	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 9A	9.85	0.0	0.4	18.2	81.4	-0.9	
GP 9B	23.47	0.0	0.1	18.8	81.1	-3.1	
P 4C	Dry at 7.27	0.0	4.4	16.8	78.8	0.0	
GP 10A	Dry at 9.22	0.0	3.5	16.8	79.7	0.0	
GP 10B	14.22	0.0	0.1	18.9	81.0	0.0	
GP 10C	15.97	0.0	0.1	19.0	80.9	1.0	
P 5A	11.80	0.0	0.0	19.3	80.7	0.1	
GP 11A	Dry at 10.20	0.0	2.6	18.0	79.4	0.0	
GP 11B	10.80	0.0	0.0	19.3	80.7	0.4	
P 6C	6.98	0.0	1.0	18.6	80.4	0.2	
GP 12	5.25	0.0	0.1	19.2	80.7	0.2	
P 7A	4.90	0.0	0.0	19.3	80.7	0.0	
P 7B	5.38	0.0	1.5	18.5	80.0	0.0	
GP 13	6.29	0.0	0.0	19.2	80.8	0.5	
GP 14	6.87	0.0	0.0	19.2	80.8	0.0	
G 109	6.41	0.0	0.2	19.1	80.7	0.2	
GP 15A	4.41	0.0	0.3	19.1	80.6	0.6	
GP 15B	5.97	0.0	0.2	19.2	80.6	0.0	
GP 28A	9.21	0.0	0.0	19.3	80.7	0.1	
GP 28B	4.26	0.0	0.2	19.2	80.6	0.2	
GP 28C	4.75	0.0	0.4	19.1	80.5	2.3	
GP 16A	5.84	0.0	0.0	18.6	81.4	0.1	
GP 16B	3.00	0.0	0.0	18.6	81.4	0.2	
GP 16C	5.63	0.0	0.0	18.7	81.3	0.0	
GP 29A	5.52	0.0	0.1	18.8	81.1	0.0	
GP 29B	10.54	0.0	0.0	18.9	81.1	0.0	
G110	10.10	0.0	0.7	18.8	80.5	0.0	
GP 17	3.53	0.0	1.4	18.4	80.2	0.3	
GP 18	9.14	0.0	0.0	19.1	80.9	0.1	

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ID	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 19	12.40	0.0	0.0	19.1	80.9	0.4	
GP 20	10.52	0.0	0.0	19.2	80.8	0.2	
GP 21A	9.19	0.0	0.0	19.2	80.8	0.0	
GP 21B	12.00	0.0	0.0	19.2	80.8	0.1	
GP 22A	11.56	0.0	5.5	13.7	80.8	0.0	
GP 22B	20.91	0.0	0.0	19.1	80.9	0.3	
GP 30A	9.97	0.0	0.0	19.1	80.9	0.5	
GP 30B	9.22	16.0	1.3	15.9	66.8	0.2	
MW 204 East	22.80	57.5	9.1	4.8	28.6	0.1	
MW 204 West	27.37	0.2	0.0	19.1	80.7	0.0	
GP 23A	9.72	0.0	0.5	18.6	80.9	0.8	
GP 23B	13.13	0.0	0.2	18.8	81.0	0.0	
GP 24A	7.72	0.0	0.4	18.7	80.9	-0.7	
GP 24B	19.70	0.0	0.0	19.1	80.9	0.1	
GP 25A	10.07	0.0	0.8	18.4	80.8	0.0	
GP 25B	23.90	0.0	0.1	19.0	80.9	0.0	
GP 31A	Dry at 9.60	0.4	1.7	17.7	80.2	0.0	
GP 31B	11.82	38.1	4.8	1.3	55.8	0.0	
GP 26A	13.40	0.2	0.1	18.9	80.8	2.1	
GP 26B	20.65	6.4	0.7	15.3	77.6	3.6	
GP 27A	12.00	0.0	2.4	16.6	81.0	0.1	
GP 27B	24.36	0.0	0.3	18.7	81.0	0.0	
GP 35A	Dry at 11.40	0.0	2.3	17.0	80.7	0.0	
GP 35B	17.74	0.0	0.1	19.0	80.9	0.1	
G 120S	NR	0.2	1.0	19.0	79.6	0.0	
G 113	NR	0.5	7.1	12.6	78.8	0.2	
G 121	NR	0.3	4.5	15.9	79.6	-0.1	

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ID	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 32A	11.81	0.0	0.3	19.6	80.1	0.0	
GP 32B	12.66	0.0	0.1	20.1	79.8	0.1	
GP 37A	12.42	0.0	0.1	20.0	79.9	0.0	
GP 37B	13.11	0.0	0.1	20.0	79.9	0.5	
G 115	4.80	NR	NR	NR	NR	NR	Fixed duct tape
EWL 10	18.25	15.1	9.0	15.5	60.4	0.0	Fixed duct tape
EWL 11	NR	62.8	36.4	0.5	0.3	0.0	
UAV 1	NR	64.0	35.9	0.0	0.1	0.0	
DV 1	NR	64.9	34.6	0.2	0.3	0.0	
DV 8	21.57	64.7	35.2	0.0	0.1	0.1	
UAV 4	Dry	58.8	41.1	0.0	0.0	0.0	
DV 12	NR	63.5	34.9	1.1	0.0	0.0	
DV 13	NR	20.8	8.4	13.7	57.1	0.0	
SV 12	NR	45.4	19.5	6.7	28.4	0.0	Broken well/flare
DV 3	NR	70.5	28.8	0.4	0.3	0.0	
DV 6	NR	NR	NR	NR	NR	NR	
UAV 6	NR	62.9	37.1	0.0	0.0	0.0	

NR = not recorded

Created by: B. Zimmerman, 10/20/09
Checked by: J. Schoephoester, 10/27/09

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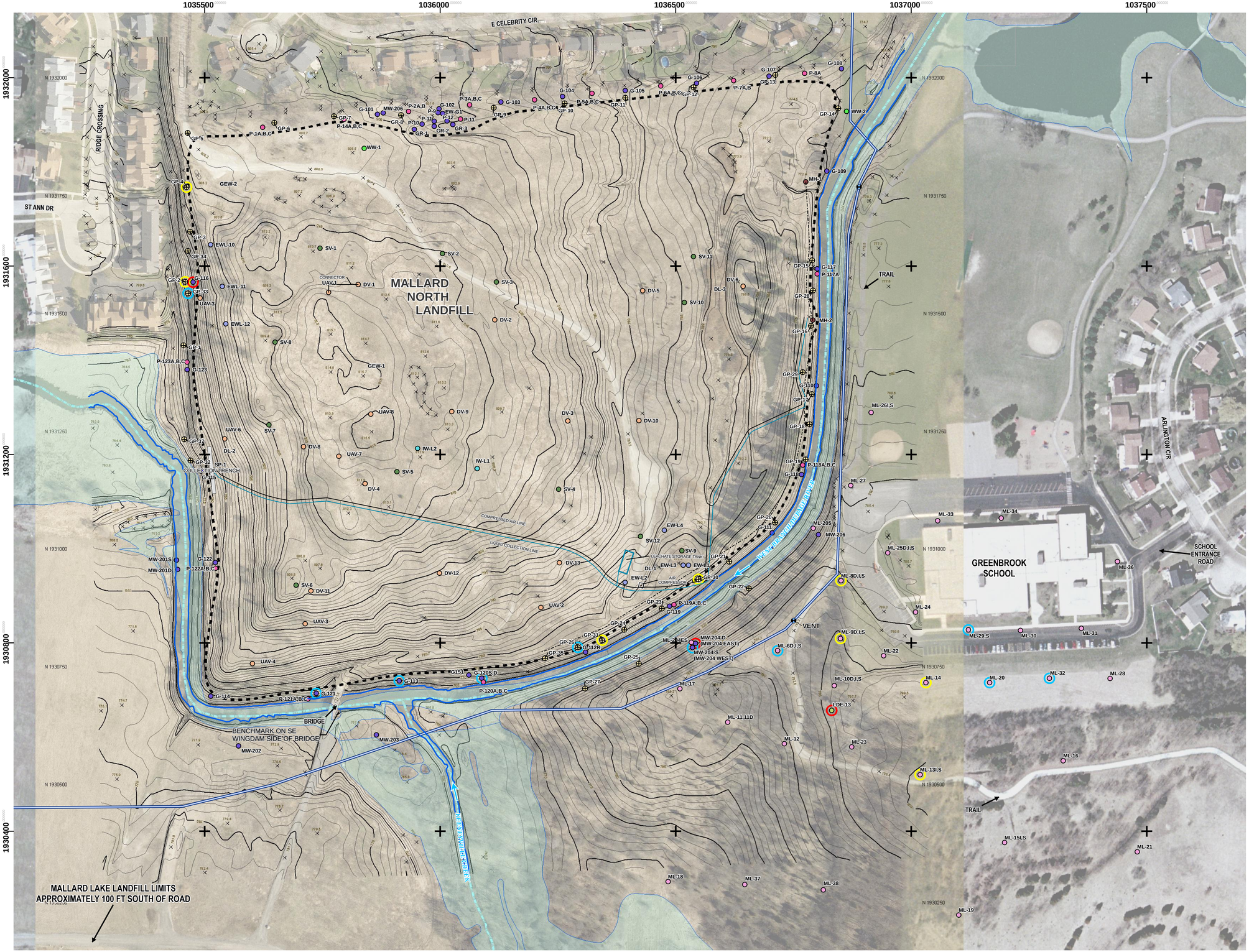


LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- AECOM EXTRACTION WELL
- PRIVATE WELLS
- MONITORING WELLS
- PIEZOMETERS
- LEACHATE PIPE
- GAS VENTS
- GAS VENTS (P)
- GAS EXTR HEAD WELLS
- LEACH GAS EXTR WELLS
- GAS PROBES
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. THE ML SERIES PROBE METHANE DATA WAS COLLECTED BY AECOM, SEPTEMBER 8-10, 2009.

0 100 200 FEET

1 " = 100 '

1:1,200

WORKING COPY

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS (10/19/09 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY:	DATE PRINTED:	FIGURE 3	
DATE: OCTOBER 2009	10/28/2009		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

D:\06809\03\MXD\68090314.mxd 10/28/2009 10:17:12

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
G-115 Sump (SP-1)	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR	NR	24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR	NR	NR	NA	NA	63,058	818	68	
	9/14/2009	NR	NR	NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.43	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.02	49,539	2,608	12,070	69,010	5,591	349	
	10/20/2009	2.42	772.34	92,726	10,797	22,867	79,640	13,260	631	
			Total System Gallons Pumped			**361,235**			**4,555**	**Average Daily Volume (gal/day Since Startup)**
									2,932	**Average Daily Volume (gal/day recent data)**

NA = not applicable
NR= not recorded

Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.

Created by: J. Schoephoester, 10/27/09
Checked by: B. Zimmerman, 10/28/09

Mallard North Update – November 19, 2009 Meeting
Prepared by RMT, Inc.

Completed Activities/Activities In-Progress

- Completed most tasks associated with winterization of leachate collection system. The dryer, heat trace and circulation pump have been installed, and the electrical will be completed next week.
- Obtained final signed Illinois EPA landfill gas control system (LFGCS) construction and operation air permit on November 17. The permit treats MNL as a separate source from MLL.
- Obtained County of DuPage general building permit to cover LFGCS construction (concrete pads, fencing, and well installation) and electrical work. We indicated this had been completed at the last meeting, but some details (including a check for the permit fee) were completed subsequent to the last meeting. The necessary County permits have now been received.
- Selected contractor to install LFG recovery wells. Began well installation on November 18, 2009.
- Performed monthly landfill gas and liquid level monitoring on November 18 and 19 (data tables and figure will be forwarded to U.S. EPA when they are completed).
- Selected contractor to construct LFGCS. Contractor obtained required County of DuPage permit. Work is scheduled to begin on November 30.
- Accepted delivery of most LFGCS components at MLL landfill.
- Continued pumping liquid at EWL-2, MH-2 and G-115 sump (data will be distributed at meeting).
- Restarted solar flare at DV-1 and UAV-1; flare is currently operating. Ordered new blower for solar flare at DV-3. Performed trouble shooting on solar flare at SV-12.

Planned Activities

- Continued O&M on the leachate extraction system and solar flares, as necessary.
- Construction of LFGCS. Extraction well installation should be completed by November 20th. Installation of piping and other components is scheduled to begin on or around November 30. Construction is anticipated to be completed December 20th. System start-up and monitoring will begin immediately after completion of construction.
- Develop groundwater monitoring plan per Long-Term Goal "D" and Remedial Objective "6". Plan is currently being reviewed by the District and will be submitted to U.S. EPA during the week of November 23rd.
- Perform groundwater monitoring after U.S. EPA approval of groundwater monitoring plan.

C:\DOCUMENTS AND SETTINGS\SCHMIDTA\LOCAL SETTINGS\TEMPORARY INTERNET FILES\CONTEN

Mallard North Update – December 17, 2009 Meeting
Prepared by RMT, Inc.

Completed Activities/Activities In-Progress

- Submitted groundwater monitoring plan to U.S. EPA
- Completed winterization of leachate collection system.
- Installed two new LFG recovery wells
- Construction of LFGCS is ongoing. At the end of this week we also anticipate that:
  - Gas system piping will be ~ 80% complete
  - Electrical heat tracing and circulation pump at leachate tank will be 100% complete
  - Vaults at the 3 pump locations will be 100% complete
  - 2 of the 3 driplegs will be installed
- Performed monthly landfill gas and liquid level monitoring on December 10 (see attached data).
- Continued pumping liquid at EWL-2, MH-2 and G-115 sump (see attached data).
- Installed new blower at solar flare DV-3 and at SV-12.

Ongoing or Planned Activities

- Continued O&M on the leachate extraction system and solar flares, as necessary.
- Preparation of LFGCS O&M plan and startup procedures.
- Construction of LFGCS. System start-up and monitoring will begin immediately after completion of construction. System construction is now anticipated to be substantially complete around January 1st. System start- up is anticipated the following week.
- Perform groundwater monitoring after U.S. EPA approval of groundwater monitoring plan.

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: R. Shimko, J. Roelke
Gas Meter: Landtec GEM 2000
Date Calibrated: 12/10/09

Pressure Device: Magnehelics
Water Level Device: Slope Indicator
Ground Conditions: Wet/Snow

Date: 12/10/09
Weather: 0°F, Cold, Windy, 29.98" Hg
Comments:

ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 1	9:48	20.46	0.0	0.2	21.4	78.4	0.00	
GP 33A	9:50	15.02	0.0	0.7	21.1	78.2	0.00	
GP 33B	9:51	14.11	0.0	0.5	21.2	78.3	-0.50	
G 116	9:56	13.88	70.1	29.9	0.0	0.0	0.50	
GP 2A	9:53	14.23	6.1	3.2	19.1	71.6	0.00	
GP 2B	9:54	12.42	2.8	1.1	20.5	75.6	3.40	
GP 34A	10:02	6.17	0.0	0.4	21.2	78.4	0.00	
GP 34B	10:04	8.85	0.0	0.6	21.2	78.2	0.00	
GP 3	10:07	7.03	0.0	0.3	21.0	78.7	0.00	
GP 4A	10:10	9.93	0.0	0.5	20.9	78.6	0.00	
GP 4B	10:12	12.86	0.0	1.0	20.6	78.4	2.20	
GP 4C	10:14	19.96	5.1	2.0	19.8	73.1	0.00	
GP 5	10:18	19.98	0.0	0.0	20.9	79.1	0.00	
P 1A	10:22	22.36	0.0	0.8	20.0	79.2	-2.00	
GP 6	10:25	Dry @ 13.6	0.0	1.4	20.2	78.4	0.00	
GP 7A	10:28	12.70	0.0	6.5	13.5	80.0	0.00	
GP 7B	10:30	20.65	0.0	0.0	21.4	78.6	0.00	
GP 8A	10:35	7.41	0.0	0.1	20.9	79.0	0.00	
GP 8B	10:37	13.56	0.0	0.0	21.2	78.8	0.00	
P 3A	10:40	22.68	0.0	13.1	5.7	81.2	0.00	

ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 9A	10:42	NA	0.0	0.6	20.2	79.2	0.00	
GP 9B	10:44	NR	NR	NR	NR	NR	NR	Sample port frozen
P 4C	10:45	Dry @ 8.1	0.0	4.0	18.7	77.3	0.00	
GP 10A	10:47	NA	0.0	5.2	17.4	77.4	0.00	
GP 10B	10:49	12.78	0.0	0.1	21.1	78.8	0.00	
GP 10C	10:51	14.19	0.0	0.0	21.2	78.8	0.00	
P 5A	10:53	10.23	0.0	0.0	21.3	78.7	0.20	
GP 11A	10:55	10.21	0.0	0.7	20.9	78.4	0.50	
GP 11B	10:57	10.43	0.0	0.0	21.3	78.7	0.00	
P 6C	11:00	7.04	0.0	0.0	21.2	78.8	0.00	
GP 12	11:03	5.24	0.0	4.5	19.8	75.7	0.00	
P 7A	11:05	5.18	0.0	0.0	21.3	78.7	0.00	
P 7B	11:07	5.33	0.0	0.0	21.1	78.9	0.00	
GP 13	11:09	5.48	0.0	0.9	20.9	78.2	-1.20	
GP 14	11:11	6.31	0.0	0.0	21.3	78.7	0.00	
G 109	11:13	NA	0.0	2.6	19.9	77.5	-0.20	
GP 15A	11:15	NA	0.8	16.6	16.5	66.1	-0.20	
GP 15B	11:17	NA	0.0	1.8	20.4	77.8	0.00	
GP 28A	11:19	9.58	0.0	0.2	21.2	78.6	0.00	
GP 28B	11:21	5.02	0.0	0.1	21.4	78.5	0.20	
GP 28C	11:24	NA	0.0	4.5	19.1	76.4	-5.00	
GP 16A	11:26	6.67	0.0	0.0	21.1	78.9	0.00	
GP 16B	11:28	4.12	0.0	0.0	21.2	78.8	0.00	
GP 16C	11:30	NA	0.0	1.5	20.9	77.6	-7.00	
GP 29A	11:32	NR	NR	NR	NR	NR	NR	Sample port frozen
GP 29B	11:33	7.25	0.0	0.0	21.3	78.7	0.00	
G110	11:35	10.06	0.0	2.1	20.2	77.7	0.00	
GP 17	11:37	5.06	0.0	1.3	20.7	78.0	0.00	
GP 18	11:39	9.22	0.0	0.0	21.5	78.5	0.20	

ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 19	11:43	12.82	0.0	0.0	21.5	78.5	0.00	
GP 20	11:55	6.14	0.0	0.0	20.6	79.4	0.00	
GP 21A	11:47	7.61	0.0	0.0	21.7	78.3	-0.20	
GP 21B	11:49	11.66	0.0	0.0	21.6	78.4	0.00	
GP 22A	11:51	4.79	0.0	0.9	20.3	78.8	0.80	
GP 22B	11:53	21.44	0.0	0.0	20.5	79.5	0.00	
GP 30A	11:57	5.77	0.0	0.2	21.2	78.6	0.00	
GP 30B	11:59	9.98	31.5	2.9	13.2	52.4	0.00	
MW 204 East	12:03	21.88	52.8	9.6	8.7	28.9	0.00	
MW 204 West	12:04	NR	NR	NR	NR	NR	NR	No Key
GP 23A	12:01	5.17	0.0	2.2	19.8	78.0	1.00	
GP 23B	12:08	13.89	0.0	0.0	21.3	78.7	0.00	
GP 24A	12:10	NA	0.0	0.1	20.8	79.1	-0.60	
GP 24B	12:12	15.65	0.0	0.0	21.4	78.6	0.00	
GP 25A	12:15	15.84	0.0	2.0	18.7	79.3	-0.50	
GP 25B	12:17	13.49	NR	NR	NR	NR	NR	Sample port frozen
GP 31A	12:18	7.28	0.0	6.8	18.9	74.3	-3.50	
GP 31B	12:20	17.98	55.6	3.3	7.7	33.4	0.00	
GP 26A	12:23	8.61	0.0	0.0	20.4	79.6	1.40	
GP 26B	12:25	17.31	3.9	0.7	17.8	77.6	-4.00	
GP 27A	12:27	7.82	0.0	1.5	20.2	78.3	0.20	
GP 27B	12:29	21.04	0.0	0.5	20.4	79.1	0.00	
GP 35A	12:32	5.61	0.0	1.8	19.9	78.3	-6.20	
GP 35B	12:33	8.94	0.0	0.0	21.0	79.0	0.00	
G 120S	12:36	NM	0.0	0.1	20.6	79.3	0.00	
G 113	12:38	NA	0.0	3.1	19.6	77.3	0.20	
G 121	12:40	NA	0.0	2.8	15.9	81.3	-1.40	

ID	Time	Depth to Water (ft bgs)	CH4 (%)	CO2 (%)	O2 (%)	Balance (%)	Pressure (" H2O)	Notes/Conditions
GP 32A	9:40	12.26	0.0	0.0	21.5	78.5	0.00	
GP 32B	9:42	13.01	0.0	0.0	21.4	78.6	0.00	
GP 37A	9:45	13.35	4.8	1.6	20.0	73.6	0.00	
GP 37B	9:47	13.24	0.0	0.0	21.3	78.7	0.40	
EWL 10	2:00	19.26	31.0	18.0	0.0	51.0	0.00	
EWL 11	2:05	19.77	62.9	37.1	0.0	0.0	0.00	
UAV 1	2:10	NA	64.5	35.5	0.0	0.0	0.00	
DV 1	2:15	NA	5.8	3.7	18.5	72.0	0.00	
DV 8	2:16	NA	65.8	34.2	0.0	0.0	0.00	
UAV 4	2:20	NA	60.2	39.8	0.0	0.0	0.00	
DV 12	2:23	NA	66.8	33.2	0.0	0.0	0.00	
DV 13	2:27	NA	0.2	0.1	19.9	79.8	0.00	
SV 12	2:30	NR	NR	NR	NR	NR	NR	No sample port
DV 3	2:33	NA	6.2	5.8	15.7	72.3	-0.10	
DV 6	NR	NR	NR	NR	NR	NR	NR	No sample port

NR = Not Recorded

Created By: R. Shimko, 12/14/09
Checked By: J. Henning, 12/14/09; J. Schoephoester, 12/15/09

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90	18.40		
	7/22/2009	**12.8**	0.00	18.40		LCT pumps started 7/15
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	**1.8**	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**79.6**	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**7.5**	0.00	15.50		LCT pumps started 7/15
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NR		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NR		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NR		
	11/17/2009	0.0	0.00	NR		
	12/10/2009	0.0	+0.20	NR		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	**73.0**	+0.10	NM		LCT pumps started 7/15
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		

NM= not measured

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09

Updated By: J. Henning 12/14/09
Updates Checked By: J. Schoephoester, 12/15/09

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL
(Working Copy)

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
G-115 Sump (SP-1)	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NA	943,127	38,170	233,801	254,970	33,650	1,530	
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR	NR	24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR	NR	NR	NA	NA	63,058	818	68	
	9/14/2009	NR	NR	NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	
				Total System Gallons Pumped		**587,760**			**4,759**	**Average Daily Volume (gal/day Since Startup)**

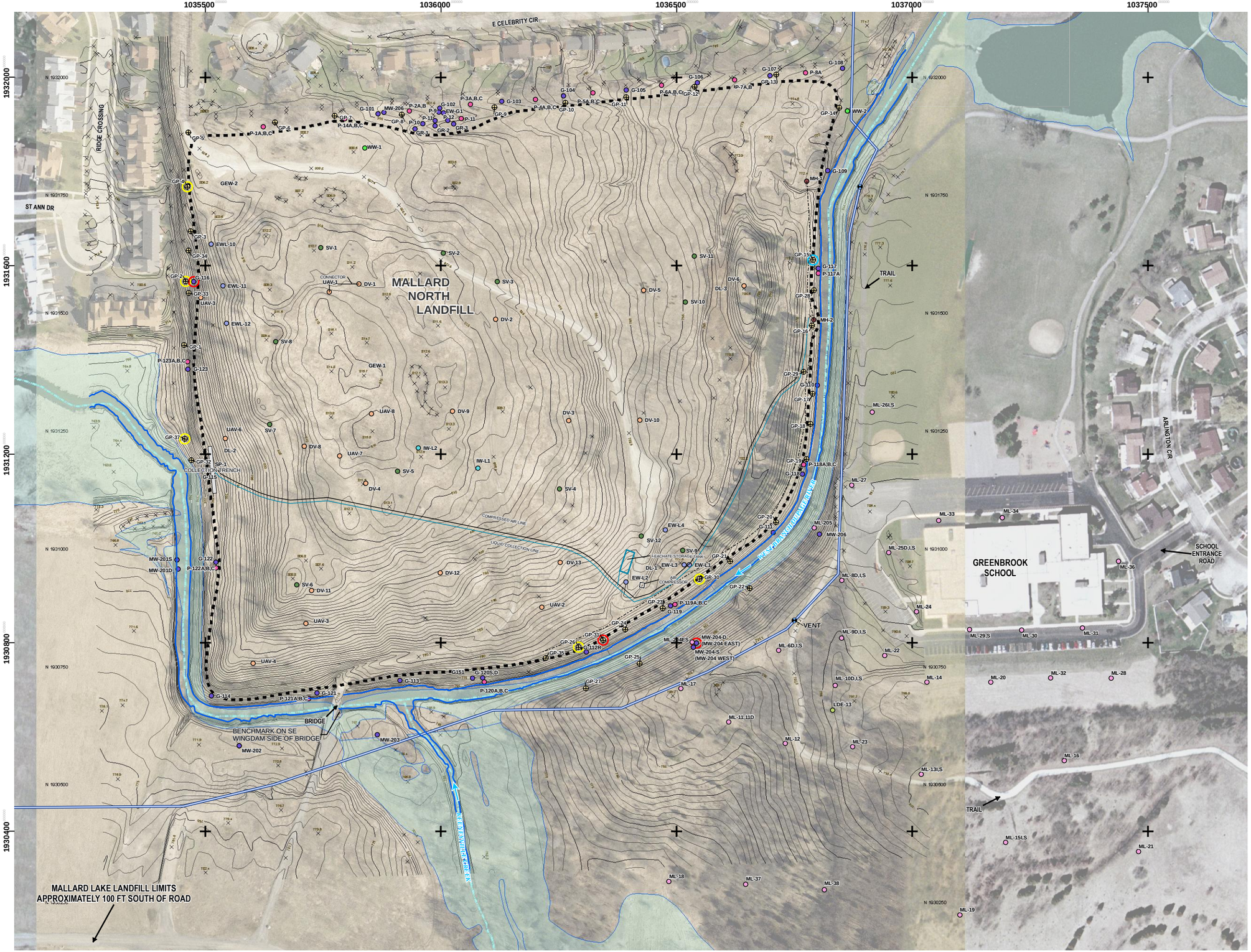
NA = not applicable
NR= not recorded

Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL
(Working Copy)

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments

Created by: J. Schoephoester, 12/15/09
Checked by:



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- AECOM EXTRACTION WELL
- PRIVATE WELLS
- MONITORING WELLS
- PIEZOMETERS
- LEACHATE PIPE
- GAS VENTS
- GAS VENTS (P)
- GAS EXTR HEAD WELLS
- LEACH GAS EXTR WELLS
- GAS PROBES
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.

N

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PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS (12/10/09 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: HENNING J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: DECEMBER 2009	12/15/2009		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

Mallard North Landfill Update – January 14, 2010 Meeting
Prepared by RMT, Inc.

Completed Activities/Activities In-Progress

- Substantial completion of construction – LFGCS
- Draft LFGCS OM&M Plan submitted to U.S. EPA, Illinois EPA, Weston Solutions

Ongoing or Planned Activities

- Startup and shakedown of LFGCS scheduled to begin on Tuesday January 19.
- O&M on the leachate extraction system and LFGCS, as necessary.
- Preparation of documentation report and record drawings
- Preparation of LFGCS O&M plan and startup procedures.
- Discuss U.S. EPA revision to groundwater monitoring plan.

Mallard North Landfill Status Meeting
February 4, 2010

Completed Activities/Activities In-Progress

- Completion of construction – LFGCS.
- Startup and shakedown of LFGCS completed. Balancing and fine-tuning of system continues.
- Addendum No. 1 to Groundwater Monitoring Plan.
- Monthly gas monitoring performed on January 27 and 28.
- Replacement and repositioning of pump at MH-2.
- Sampling of seep near MH-2.

Ongoing or Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary.
- Preparation of documentation report and record drawings
- Groundwater monitoring and subsequent data evaluation

Mallard North Landfill Status Meeting
February 25, 2010

Completed Activities/Activities In-Progress

- Balancing and fine-tuning of LFGCS
- Balancing of leachate collection system
- Monthly gas monitoring performed on February 22 and 23
- Evaluation of options for energy recovery from LFG

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary.
- Preparation of documentation report and record drawings
- Groundwater monitoring and subsequent data evaluation

Attached Data

- Table - Gas Probe Monitoring Results (2/22-23/2010)
- Figure – Methane Detections (February 2010 Monitoring Round)
- Table - Gas probes With Significant Methane Detections
- Table – Landfill Gas/Leachate Monitoring
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary
- Table – Northwest/Blower Flare Summary

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: J. Roelke
Gas Meter: GEM 2000
Serial #: GM08330
Date Calibrated: 2/22 and 2/23/2010

Pressure Device: Magnehelic
Water Level Device: Water Level Indicator
Ground Conditions: Frozen, snow covered

Date: 2/22/10 and 2/23/2010
Weather: 2/22-32°F , 2/23-30°F
Barometric Pressure 2/22-29.79" Hg rising
2/23-29.88" Hg rising

ID	Date	Depth to Water (ft btoc)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Pressure (" H_2O)	Notes/Conditions
GP 1	2/22/2010	19.41	0.0	0.1	19.2	80.7	0.0	
GP 33A	2/22/2010	13.74	0.0	0.9	19.0	80.1	0.2	
GP 33B	2/22/2010	13.11	0.0	2.5	18.7	78.8	0.0	
G 116	2/22/2010	12.55	80.1	19.9	0.0	0.0	0.0	
GP 2A	2/22/2010	13.47	0.0	0.5	19.1	80.4	0.0	
GP 2B	2/22/2010	13.11	0.5	1.1	18.7	79.7	0.6	
GP 34A	2/22/2010	7.34	0.0	0.3	18.6	81.1	0.2	
GP 34B	2/22/2010	15.14	0.0	0.2	19.0	80.8	0.6	
GP 3	2/22/2010	6.23	0.0	0.3	19.1	80.6	0.0	
GP 4A	2/22/2010	NM	0.0	1.1	18.8	80.1	0.0	
GP 4B	2/22/2010	11.24	0.0	2.6	18.2	79.2	10.2	
GP 4C	2/22/2010	18.58	7.5	3.5	16.8	72.2	7.6	
GP 5	2/22/2010	17.68	0.0	0.2	18.8	81.0	0.0	
P 1A	2/22/2010	19.94	0.0	0.0	19.3	80.7	0.0	
GP 6	2/22/2010	10.84	0.0	0.3	19.0	80.7	0.0	
GP 7A	2/22/2010	11.87	0.0	3.1	16.5	80.4	0.0	
GP 7B	2/22/2010	12.42	0.0	0.1	19.1	80.8	0.0	
GP 8A	2/22/2010	6.81	0.0	0.1	19.2	80.7	0.0	
GP 8B	2/22/2010	12.82	0.0	0.0	19.1	80.9	0.4	
P 3A	2/22/2010	4.77	0.0	1.9	18.2	79.9	0.0	
GP 9A	2/22/2010	6.56	0.0	1.2	18.3	80.5	-1.4	
GP 9B	2/22/2010	20.08	0.0	0.1	19.0	80.9	0.8	
P 4C	2/22/2010	6.34	0.0	2.1	16.2	81.7	0.0	
GP 10A	2/22/2010	9.20	0.0	3.9	13.4	82.7	0.0	
GP 10B	2/22/2010	10.05	0.0	2.7	18.0	79.3	-0.4	

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ID	Date	Depth to Water (ft btoc)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Pressure (" H_2O)	Notes/Conditions
GP 10C	2/22/2010	11.46	0.0	1.0	18.7	80.3	-1.2	
P 5A	2/22/2010	8.67	0.0	0.0	19.3	80.7	0.0	
GP 11A	2/22/2010	8.76	0.0	0.0	19.3	80.7	0.0	
GP 11B	2/22/2010	9.41	0.0	0.0	19.2	80.8	0.6	
P 6C	2/22/2010	6.98	0.0	0.1	19.2	80.7	0.0	
GP 12	2/22/2010	4.41	0.0	2.7	18.1	79.2	0.8	
P 7A	2/22/2010	4.33	0.0	0.4	19.0	80.6	0.0	
P 7B	2/22/2010	4.45	0.0	0.7	18.8	80.5	0.0	
GP 13	2/22/2010	5.68	0.0	0.1	19.3	80.6	0.2	
GP 14	2/22/2010	6.56	0.0	0.1	19.2	80.7	0.0	
G 109	2/22/2010	6.05	0.0	1.1	18.2	80.7	0.0	
GP 15A	2/22/2010	4.92	0.3	6.2	17.7	75.8	0.0	
GP 15B	2/22/2010	NM	0.0	5.6	18.1	76.3	0.0	could not remove cap
GP 28A	2/22/2010	8.49	0.0	0.6	18.8	80.6	0.0	
GP 28B	2/22/2010	4.18	0.0	0.1	19.3	80.6	0.2	
GP 28C	2/22/2010	4.32	0.0	2.1	18.4	79.5	0.2	
GP 16A	2/22/2010	5.71	0.0	0.2	19.1	80.7	-0.8	
GP 16B	2/22/2010	3.91	0.0	0.0	19.3	80.7	-0.6	
GP 16C	2/22/2010	6.46	0.0	0.0	19.3	80.7	0.0	
GP 29A	2/22/2010	5.54	0.0	0.4	18.9	80.7	-0.4	
GP 29B	2/22/2010	9.91	0.0	0.2	19.0	80.8	0.0	
G110	2/22/2010	8.92	0.0	1.4	17.5	81.1	0.0	
GP 17	2/22/2010	5.14	0.0	0.1	19.2	80.7	0.0	
GP 18	2/22/2010	8.37	0.0	0.3	19.0	80.7	0.0	
GP 19	2/23/2010	11.44	0.2	0.8	18.6	80.4	1.1	
GP 20	2/23/2010	5.02	0.0	0.2	19.8	80.0	1.0	
GP 21A	2/23/2010	7.07	0.0	0.1	19.9	80.0	0.0	
GP 21B	2/23/2010	10.72	0.0	0.1	20.0	79.9	0.2	
GP 22A	2/23/2010	NM	0.0	0.0	20.2	79.8	0.2	Probe pulls up
GP 22B	2/23/2010	19.59	0.0	0.1	20.0	79.9	0.6	
GP 30A	2/23/2010	3.67	0.0	0.3	20.0	79.7	-1.6	
GP 30B	2/23/2010	8.14	5.5	1.9	18.2	74.4	0.0	

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ID	Date	Depth to Water (ft btoc)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Pressure (" H_2O)	Notes/Conditions
MW 204 East	2/23/2010	19.42	42.2	6.3	4.2	47.3	0.0	
MW 204 West	2/23/2010	25.08	0.0	0.0	19.6	80.4	0.0	
GP 23A	2/23/2010	4.51	0.0	0.4	19.8	79.8	0.2	
GP 23B	2/23/2010	12.26	0.3	1.3	19.1	79.3	1.8	
GP 24A	2/23/2010	6.52	0.0	0.1	20.1	79.8	-0.2	
GP 24B	2/23/2010	14.86	0.0	0.4	19.9	79.7	0.0	
GP 25A	2/23/2010	5.02	0.0	0.4	18.7	80.9	2.4	
GP 25B	2/23/2010	19.50	0.0	0.2	19.1	80.7	-1.2	
GP 31A	2/23/2010	6.68	0.0	0.1	19.4	80.5	0.0	
GP 31B	2/23/2010	5.42	12.1	0.9	16.7	70.3	0.2	
GP 26A	2/23/2010	7.21	0.0	1.2	19.0	79.8	2.8	
GP 26B	2/23/2010	16.57	0.0	0.1	19.5	80.4	0.6	
GP 27A	2/23/2010	5.38	0.0	0.0	19.7	80.3	1.0	
GP 27B	2/23/2010	20.02	0.0	0.1	19.2	80.7	1.0	
GP 35A	2/23/2010	4.98	0.0	0.0	19.6	80.4	5.6	
GP 35B	2/23/2010	8.68	0.0	0.0	19.6	80.4	0.0	
G 113	2/23/2010	NM	0.0	4.6	17.9	77.5	0.2	could not remove cap
G 121	2/23/2010	NM	0.0	0.6	18.5	80.9	0.0	could not remove cap
GP 32A	2/22/2010	11.58	0.0	0.2	19.0	80.8	0.0	
GP 32B	2/22/2010	12.77	0.0	0.6	19.0	80.4	0.4	
GP 37A	2/22/2010	12.42	12.0	3.8	16.2	68.0	0.0	
GP 37B	2/22/2010	12.93	0.0	0.6	18.2	81.2	0.0	

NR = Not recorded.
NA=Not applicable.

Updated By: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10

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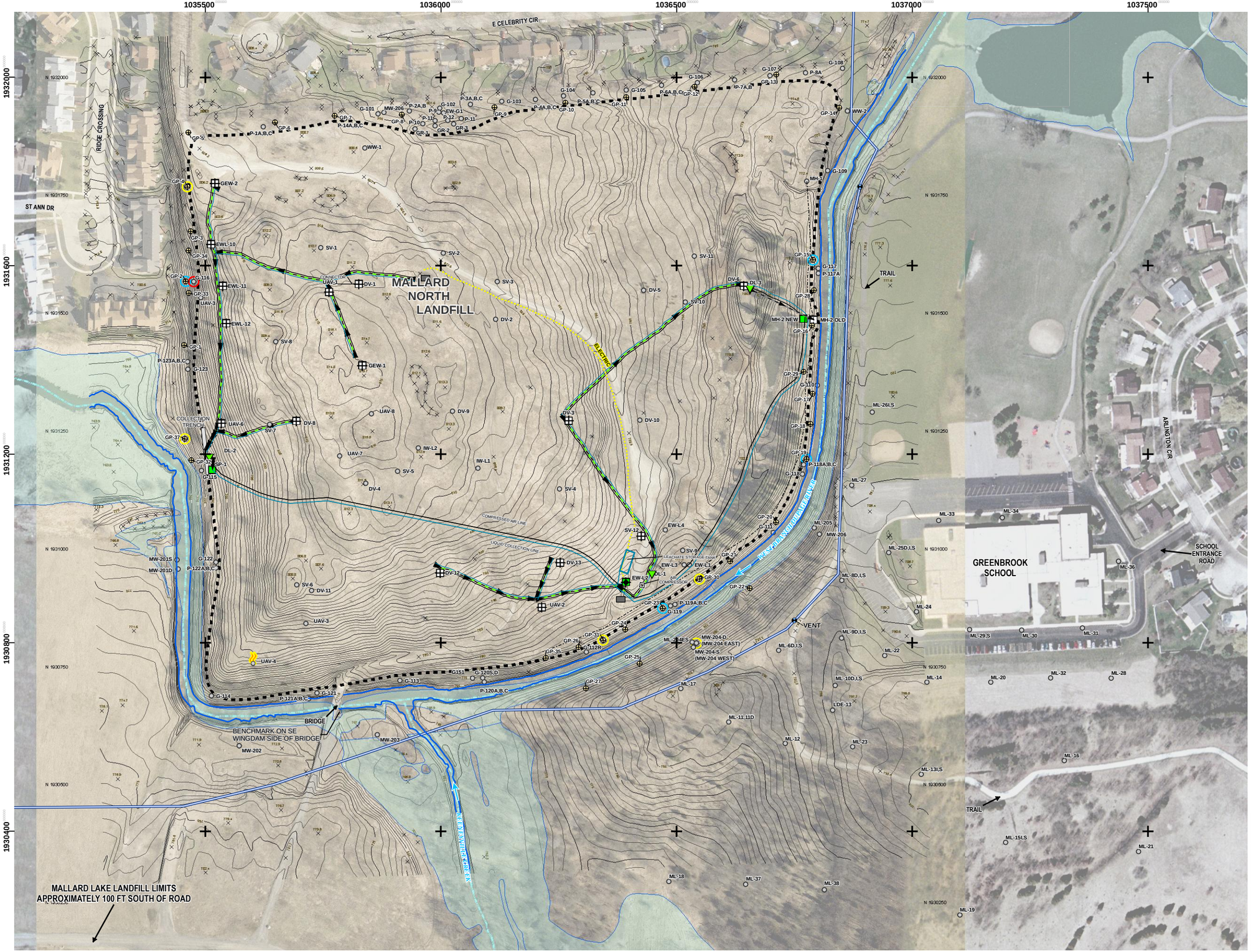

LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. GAS PROBE READINGS WERE TAKEN BY RMT ON FEBRUARY 22-23, 2010.

0 100 200 FEET

WORKING COPY

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(FEBRUARY 2010 GAS MONITORING ROUND)

DRAWN BY:	MCKEEFRY J	SCALE:		PROJ. NO.	00-06809.03
CHECKED BY:	BRAUN N	AS NOTED		FILE NO.	68090314.mxd
APPROVED BY:		DATE PRINTED:		FIGURE 1	
DATE:	FEBRUARY 2010	2/24/2010			

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	0.2	NM	9.57	15.37	1st monitoring round
	6/17/2009	0.6	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	3.0	+0.10	14.53		
	8/4/2009	2.9	0.00	15.65		
	8/17/2009	13.8	+0.10	13.45		
	9/29/2009	31.9	0.00	16.91		
	10/19/2009	31.1	-0.20	14.36		
	11/17/2009	13.5	0.00	15.78		
	12/10/2009	6.1	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
GP-2B	6/3/2009	0.6	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	0.2	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	0.3	-0.40	11.83		
	11/17/2009	1.6	0.00	13.09		
	12/10/2009	2.8	+3.40	12.42		
	1/27/2010	0.4	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	0.5	+0.6	13.11		
GP-4C	6/3/2009	0.5	NM	dry	30.14	1st monitoring round
	6/17/2009	2.7	+0.90	18.40		
	7/22/2009	12.8	0.00	18.40		LCT pumps started 7/15
	7/29/2009	24.2	+0.20	18.24		
	8/4/2009	19.7	0.00	18.19		
	8/17/2009	24.3	0.00	18.30		
	9/29/2009	31.5	+0.10	18.68		
	10/19/2009	22.0	+0.60	18.92		
	11/17/2009	25.4	0.00	19.93		
	12/10/2009	5.1	0.00	19.96		
	1/27/2010	7.7	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	7.5	+7.6	18.58		
GP-15A	1/27/2010	2.4	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	0.3	0.00	4.92		
GP-17	6/3/2009	10.7	NM	NM	13.25	1st monitoring round
	6/17/2009	1.1	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
GP-19	2/23/2010	0.2	+1.1	11.44	30.33	LFGCS started 1/22/10
GP-23B	2/23/2010	0.3	+1.8	12.26	20.75	LFGCS started 1/22/10
GP-26B	6/3/2009	0.6	NM	16.76	27.45	1st monitoring round
	6/17/2009	0.1	+0.10	16.67		
	7/22/2009	1.8	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	2.0	-0.50	18.90		
	8/4/2009	1.9	-0.10	19.42		
	8/17/2009	1.1	0.00	20.32		
	9/29/2009	3.4	-2.50	20.28		
	10/19/2009	6.4	+3.60	20.65		
	11/17/2009	4.6	+0.10	18.56		
	12/10/2009	3.9	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	13.2	+0.10	7.83		
	7/22/2009	17.3	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	11.8	-0.10	8.15		
	8/4/2009	13.8	+0.10	7.46		
	8/17/2009	11.2	0.00	6.76		
	9/29/2009	7.0	+0.50	7.82		
	10/19/2009	16.0	+0.20	9.22		
	11/17/2009	80.0	+0.10	10.21		
	12/10/2009	31.5	0.00	9.98		
	1/27/2010	13.6	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	5.5	0.00	8.14		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	72.8	+0.10	15.34		
	7/22/2009	79.6	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	41.7	+0.10	16.72		
	8/4/2009	86.6	+0.10	17.39		
	8/17/2009	87.9	0.00	18.21		
	9/29/2009	68.8	+0.10	19.07		
	10/19/2009	38.1	0.00	11.82		
	11/17/2009	90.1	0.00	19.34		
	12/10/2009	55.6	0.00	17.98		
	1/27/2010	1.1	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	12.1	+0.20	5.42		
GP-33A	6/17/2009	62.7	+0.40	13.84	16.13	
	7/22/2009	7.5	0.00	15.50		LCT pumps started 7/15
	7/29/2009	4.1	+0.20	15.47		
	8/4/2009	1.8	0.00	15.65		
	8/17/2009	0.6	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	0.2	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
GP-37A	6/17/2009	0.2	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	0.1	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	2.7	0.00	13.23		
	12/10/2009	4.8	0.00	13.35		
	1/27/2010	9.1	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	12.0	0.00	12.42		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NR		LCT pumps started 7/15
	8/17/2009	12.3	-0.10	NR		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	0.5	+0.20	NR		
	11/17/2009	0.0	0.00	NR		
	12/10/2009	0.0	+0.20	NR		
	1/27/2010	0.0	0.40	NR		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NR		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	76.1	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	80.0	+9.50	12.26		casing likely cracked at
	6/17/2009	65.1	0.00	11.90		~12' B/TOC
	7/22/2009	73.0	+0.10	NM		LCT pumps started 7/15
	7/29/2009	73.4	+0.10	12.72		
	8/4/2009	73.9	NM	12.93		
	8/17/2009	67.6	0.00	13.28		
	9/29/2009	75.3	0.00	13.50		
	10/19/2009	72.7	+0.20	13.32		
	11/17/2009	79.8	0.00	14.31		
	12/10/2009	70.1	+0.50	13.88		
	1/27/2010	75.6	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	80.1	0.00	12.55		
MW-204D East (Shallow)	2/9/2009	30.3	0.00	21.49	22.02	
	3/5/2009	15.0	0.00	21.09		
	3/11/2009	8.6	0.00	20.44		
	4/8/2009	12.8	0.00	20.07		
	5/7/2009	23.3	0.00	19.65		
	6/3/2009	19.1	0.00	18.20		
	6/17/2009	0.4	0.00	20.00		
	7/22/2009	60.0	0.00	20.65		LCT pumps started 7/15
	7/29/2009	48.3	0.00	20.72		
	8/4/2009	37.8	0.00	21.00		
	8/17/2009	17.7	0.00	21.91		
	9/29/2009	10.7	0.00	23.86		
	10/19/2009	57.5	+0.10	22.80		
	11/17/2009	35.2	0.00	18.26		
	12/10/2009	52.8	0.00	21.88		
	1/27/2010	34.2	0.00	NR		LFGCS started 1/22/10
	2/23/2010	42.2	0.00	19.42		

NM= not measured
NR = not recorded

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois
Sheet 1 / 3

Date:	2/8/2010					
Person (s) sampling	Jason Schoephoester		Weather Conditions:	Partly Cloudy		
Ambient Temperature:	34	°F	Ground Conditions:	Some snow cover, soft		
Barometric Pressure:	30.2	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM08700
Trend in barometric pressure:	falling		Date Last Calibrated:	2/8/2010		

Notes: Both flares were restarted @ 8 am on 2/8/10. A full leachate tank had shut the flares down over the weekend. EWL-2 had been frozen, so liquid was backed up in the drain from DL-1. The backed up liquid was blocking header vacuum to wells EWL-2, SV-12, DV-3, and DV-6. Vacuum has been restored to these eastern wells and a full round a well monitoring is being performed on 2/24/10.

	Blower/Flare Data					
	Southcentral	Southcentral		Northwest	Northwest	Northwest
Date / Time / Location	9:30 AM	9:45 AM		12:45 PM	1:00 PM	2:10 PM
Blower Inlet Vacuum (in H_2O)	3	4		1.8	3	3.6
Inlet Valve (Turns) Open / 6	6/6	6/6		6/6	6/6	6/6
Gas Inlet Temperature (°F)	NR	NR		85	NR	NR
Blower Outlet Pressure (in H_2O)	NR	NR		NR	NR	NR
Orifice Plate DP (in H_2O)	0.05	0.06		0.09	NR	0.13
Approximate Flow (scfm)	12	13		16	NR	19
% CH_4	59.1	NR		66.1	NR	NR
% CO_2	23.4	NR		26.7	NR	NR
% O_2	3.1	NR		3	NR	NR
% Balance Gas	14.4	NA		4.2	NA	NA
Combustion Temperature(°F)	826	NR		1070	NR	NR
Blower SPD%	30	35		30	40	45
Blower Hours	156	NR		237.5	NR	NR
Blower Cycles	60	NR		15	NR	NR
Air Compressor Pressure (psi)	140	NR		NR	NR	NR
Well Field Air Pressure (psi)	78	NR		NR	NR	NR
Approx. Leachate Tank Level						
Comments						

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/3

Date: 2/8/10

Location	Well Side Pressure[1]		Header Side Pressure [1]	% CH_4	%CO_2	%O_2	%Balance	Temperature (°F)	Orifice Plate DP[1]		Approx. Post-Adjustment Flow Rate (cfm)	Valve Turns Open		Liquid Level (ft BTOC)
	I	P	I						I	P		I	P	
NORTHWEST WELLS														
DV-1	-2.8	NR	-2.8	68.6	30.1	0	1.3	43	0.9	1	3	2.5	3.5	NR
DV-8	-2.5	NR	-2.6	72.5	26.8	0	0.7	40	1.3	1.45	3.5	2.5	3	NR
EWL-10	-2.7	-2.8	-2.8	46.2	20	4	29.8	40	0.1	0.15	1	2.75	3.5	NR
EWL-11	-2.4	-2.7	-2.8	53.2	24.5	1.2	21.1	38	0.25	0.4	2	0.75	1.5	NR
EWL-12	-0.35	NR	-2.8	24.8	12.4	11	51.8	38	0.1	0.05	1	0.75	0.5	NR
GEW-1	-2.6	NR	-2.6	74.1	23	0	2.9	45	1.5	1.65	3.5	3	3.5	NR
GEW-2	-2.6	NR	-2.8	71.1	28	0	0.9	40	0.1	0.15	1	2.75	3.5	NR
UAV-1	-2.8	NR	-2.8	63.5	30.9	0	5.6	40	1.8	2.1	4	3	3.5	NR
UAV-6	-1.2	NR	-2.6	43.5	17.9	6.8	31.8	44	1	0.15	1	1	0.5	NR
SOUTHCENTRAL WELLS														
DV-3[1]	NR	NR	0.35	70.1	28.2	0	1.7	NR	NR	NR	NR	NR	NR	NR
DV-6[1]	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
DV-12	-3.8	NR	-3.9	59.3	23.6	2.6	14.5	44	0.08	NC	1	2.5	NC	NR
DV-13	-4	NR	-4	63.4	17.6	4	15	36	0.02	NR	1	2.25	2.5	NR
EWL-2[1]	0	NR	-0.8	2.4	1.1	19.4	77.1	NR	0	NR	0	0	NC	NR
SV-12[1]	NR	NR	0.2	68.1	27.4	0	4.5	NR	NR	NR	NR	NR	NR	NR
UAV-2	0.1	-3	-4	68.4	28.1	0	3.5	38	0	0.02	1	0	0.25	NR

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded
[1] Header vacuum was blocked to these well locations due to a condensate backup at EWL-2/DL-1. A complete round of well readings will be performed later in February when vacuum is restored to all well locations.

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois
Sheet 3/3

Date:		2/8/2010							
Location	Time	Cumulative Cycles	Air Pressure (psi)	Exhaust Air Valve (% Open)	Air Valve (% Open)	Discharge Valve (% Open)	Depth to Liquid (ft. BTOC)	Liquid Level Elevation	Comments (Pump cleaned, inlet elev. change, etc.)
EWL-2 (1)	AM	693,075	60	25	NR	100	4.7	778.53	
MH-2 (2)	AM	251,841	60	50	NR	100	3.2	771.74	
SP-1 (3)	AM	381,457	60	50	NR	100	1.6	775.74	

Notes:

1 Top of ball valve elevation at EWL-2 = 783.23
2 Top of concrete at New MH-2 = 774.94, top of concrete old MH-2 = 772.58
3 Top of PVC at SP-1 is calculated to be 777.34, based on the known sump bottom elevation. The new top of casing elevation will be surveyed.

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft. BTOC)	Liquid Elevation (ft. MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
G-115 Sump (SP-1)	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NA	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR	NR	24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR	NR	NR	NA	NA	63,058	818	68	
	9/14/2009	NR	NR	NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR	NR	247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR	NR	281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
					Total System Gallons Pumped	908,761			4,922	Average Daily Volume (gal/day Since Startup)

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.

Created by: J. Schoephoester, 2/1/10 Updated by: J. Schoephoester, 2/24/10
Checked by: N. Braun, 2/3/10 Updates checked by: N. Braun, 2/24/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010
Time		9:30	9:45	13:15	7:30	8:50	10:45	11:55	12:12
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	Frozen	2.9	NR	2.8	2.4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (°F)	32	38	NR	38	30	36	NR	48	45
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.5	0.4	NR	0.65	0.5
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.03	0.03	NR	0.03	0.04
Approximate Flow (scfm)	10	12	13	9	9	9	NR	9	11
% CH_4	49.7	59.1	NR	52.3	24	24.9	21.3	30.1	21.4
% CO_2	24.3	23.4	NR	24.7	15.1	14.5	11.1	15.9	11.4
% O_2	2.7	3.1	NR	2.7	6.3	7.9	10.4	6.6	9.7
% Balance Gas	23.3	14.4	NA	20.3	54.6	52.7	57.2	47.4	57.5
Combustion Temperature(°F)	491	826	NR	1045	804	946	1151	1104	1009
Blower SPD%	NR	30	35	35	30	30	NR	30	30
Blower Hours	134	156	NR	180	235	252	NR	58[1]	73
Blower Cycles	58	60	NR	61	78	86	NR	26	4
Air Compressor Pressure (psi)	NR	140	NR	155	150	160	NR	150	85 (flux.)
Well Field Air Pressure (psi)	NR	78	NR	80	80	75	NR	80	78
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.
Comments					Blower outlet pressure fluctuating.				

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010
Time		13:20	12:45	13:00	14:10	14:00	8:10	11:10	8:13	12:15	12:45
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	Frozen	3.8	NR	3.8	3.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	82	84	85	NR	NR	72	81	84	84	88	88
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.3	1	NR	1.65	1.4
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.02	0.06	NR	0.13	0.1
Approximate Flow (scfm)	10	8	16	NR	19	15	8	13	NR	19	16
% CH_4	47.7	52.5	66.1	NR	NR	53.7	57.6	47.3	48.0	44.1	44.0
% CO_2	27.8	32.9	26.7	NR	NR	29.1	33.7	26.7	28.6	27.0	27.2
% O_2	2.5	2.5	3	NR	NR	1.6	0	1.2	0.6	2.8	2.4
% Balance Gas	22	12.1	4.2	NA	NA	15.6	8.7	24.8	22.8	26.1	26.4
Combustion Temperature(°F)	1124	1130	1070	NR	NR	1080	724	1128	980	945	1042
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	324	341	354	48[1]	62
Blower Cycles	14	14	15	NR	NR	15	17	17	17	3	3
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	150	NR	160	NR	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	80	NR	75	NR	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	28
Comments							Blower outlet pressure fluctuating.			Opened EWL-11 2 turns to support G-116; opened UAV-6 1 turn to support GP-37A; opened GEW-2 2 turns to support GP-4C.	

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10

Mallard North Landfill Status Meeting
March 25, 2010

Completed Activities/Activities In-Progress

- Continued balancing and fine-tuning of LFGCS
- Continued balancing of leachate collection system
- Monthly gas monitoring performed on March 17 and 18, 2010.

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary.

Attached Data

- Table - Gas Probe Monitoring Results (March 17 and 18, 2010)
- Figure – Methane Detections (March 2010 Monitoring Round)
- Table - Gas Probes With Significant Methane Detections
- Table – Landfill Gas/Leachate Monitoring
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary
- Table – Northwest/Blower Flare Summary
- Table – Summary of LFG Operational Data

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By:	J. Kucher	Pressure Device:	Magnahelics	Date:	3/17 & 3/18
Gas Meter:	GEM 2000	Water Level Device:	Water Level Indicator	Weather:	Clear
Serial #:	GM08330	Ground Conditions:	Moist	Barometric	3/17 - 29.92" Hg, falling
Date Calibrated:	3/17/10 and 3/18/10			Pressure	3/18 - 29.92" Hg, falling

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.00	0.0	0.0	21.0	79.0	18.69	
GP-33A	0.00	0.0	0.2	20.6	79.2	13.47	
GP-33B	0.00	0.0	1.7	19.9	78.4	12.91	
G-116	0.15	78.3	21.7	0.0	0.0	12.69	
GP-2A	1.50	0.0	0.4	20.5	79.1	13.18	
GP-2B	0.40	0.0	0.2	20.6	79.2	11.22	
GP-34A	0.00	0.0	0.0	20.5	79.5	5.86	
GP-34B	0.00	0.0	0.0	20.5	79.5	5.87	
GP-3	0.00	0.0	0.0	20.5	79.5	8.92	
GP-4A	NA	0.0	0.0	20.6	79.4	7.91	
GP-4B	0.00	0.0	0.1	20.5	79.4	6.61	
GP-4C	5.20	6.0	1.9	18.6	73.5	17.62	
GP-5	0.00	0.0	0.0	20.6	79.4	16.76	
P-1A	0.00	0.0	0.2	20.3	79.5	15.51	
GP-6	0.00	0.0	0.0	20.4	79.6	6.44	
GP-7A	0.00	0.0	0.2	20.4	79.4	8.42	
GP-7B	0.00	0.0	0.0	20.7	79.3	17.06	
GP-8A	-0.06	0.0	0.0	20.4	79.6	6.23	
GP-8B	0.02	0.0	0.1	20.3	79.6	12.92	
P-3A	-1.80	0.0	2.0	18.7	79.3	1.95	
GP-9A	-0.04	0.0	0.8	19.3	79.9	5.58	
GP-9B	0.74	0.0	0.2	17.4	82.4	19.02	
P-4C	0.02	0.0	0.0	20.1	79.9	5.17	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.70	0.0	2.9	15.3	81.8	6.14	
GP-10B	0.26	0.0	0.6	20.1	79.3	6.54	
GP-10C	0.82	0.0	0.8	19.4	79.8	9.81	
P-5A	0.00	0.0	0.0	20.2	79.8	6.75	
GP-11A	0.02	0.0	0.0	20.2	79.8	6.86	
GP-11B	0.10	0.0	0.1	20.2	79.7	8.22	
P-6C	0.00	0.0	0.0	20.9	79.1	6.21	
GP-12	-3.80	0.0	0.8	18.8	80.4	4.29	
P-7A	0.00	0.0	0.2	20.4	79.4	8.42	
P-7B	0.00	0.0	0.0	20.7	79.3	17.06	
GP-13	0.00	0.0	0.0	19.2	80.8	5.37	
GP-14	0.00	0.0	0.0	19.5	80.5	5.21	
G-109	0.02	0.0	0.3	19.6	80.1	5.63	
GP-15A	0.02	0.3	7.6	17.4	74.7	3.81	
GP-15B	0.00	0.0	1.7	19.6	78.7	6.34	
GP-28A	0.00	0.0	1.1	20.1	78.8	8.61	
GP-28B	0.00	0.0	0.0	20.1	79.9	3.96	
GP-28C	0.04	0.0	0.4	19.9	79.7	3.90	
GP-16A	0.80	0.0	0.3	20.1	79.6	4.86	
GP-16B	0.04	0.0	0.0	20.5	79.5	2.49	
GP-16C	0.46	0.0	0.0	20.4	79.6	6.65	
GP-29A	0.10	0.0	0.0	20.4	79.6	4.86	
GP-29B	0.00	0.0	0.0	20.4	79.6	9.23	
G-110	0.00	0.0	1.6	17.1	81.3	8.14	
GP-17	0.08	0.0	0.0	20.5	79.5	3.75	
GP-18	0.06	0.0	0.0	20.4	79.6	8.15	
GP-19	0.00	0.0	0.4	20.0	79.6	11.78	
GP-20	0.12	0.0	0.0	20.5	79.5	4.92	
GP-21A	0.06	0.0	0.0	20.4	79.6	6.32	
GP-21B	0.00	0.0	0.0	20.4	79.6	10.61	
GP-22A	0.04	0.0	0.2	20.6	79.2	NM	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.06	0.0	0.1	20.7	79.2	19.74	
GP-30A	-0.06	0.0	0.0	20.3	79.7	4.31	
GP-30B	-0.20	82.8	5.3	2.2	9.7	8.73	
MW-204 East	0.00	41.4	5.9	9.1	43.6	17.21	
MW-204 West	0.00	0.0	0.1	20.9	79.0	24.73	
GP-23A	-0.09	0.0	0.4	19.9	79.7	4.51	
GP-23B	0.00	0.2	0.6	19.7	79.5	12.05	
GP-24A	-0.30	0.0	0.3	20.3	79.4	5.17	
GP-24B	0.00	0.0	0.2	20.4	79.4	12.37	
GP-25A	-4.20	0.0	0.4	20.8	78.8	4.45	
GP-25B	0.08	0.0	0.2	21.0	78.8	15.74	
GP-31A	0.60	0.0	0.1	20.4	79.5	6.72	
GP-31B	0.02	1.2	0.3	20.1	78.4	12.48	
GP-26A	0.00	0.0	0.0	20.5	79.5	6.23	
GP-26B	0.00	0.0	0.0	20.5	79.5	16.12	
GP-27A	0.04	0.0	0.1	21.0	78.9	4.04	
GP-27B	0.06	0.0	0.2	21.0	78.8	17.64	
GP-35A	-6.00	0.0	0.2	20.3	79.5	4.52	
GP-35B	0.00	0.0	0.1	20.4	79.5	7.65	
G-113	0.00	0.0	5.5	18.4	76.1	NM	
G-121	0.00	0.0	0.4	20.2	79.4	NM	
GP-32A	0.00	0.0	0.4	20.8	78.8	10.26	
GP-32B	0.05	0.0	0.3	20.8	78.9	11.41	
GP-37A	0.20	14.4	3.3	17.7	64.6	12.35	
GP-37B	0.00	0.0	0.1	20.8	79.1	12.10	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: N. Braun, 3/22/10
Checked by: S. Inman, 3/23/10

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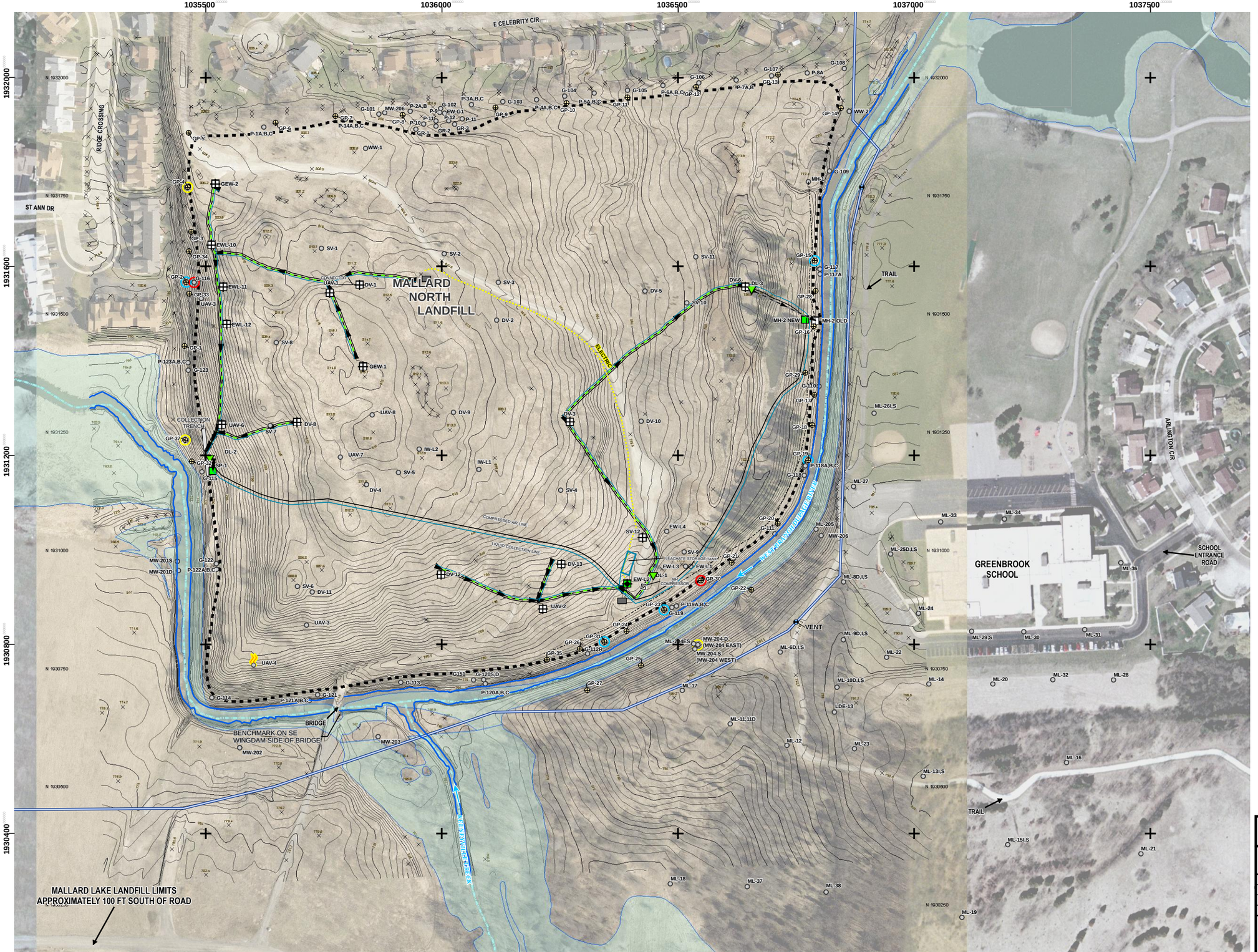

LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. GAS PROBE READINGS WERE TAKEN BY RMT ON MARCH 17-18, 2010.

0 100 200 FEET

WORKING COPY

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(MARCH 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: BRAUN N	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: MARCH 2010	3/24/2010		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90	18.40		
	7/22/2009	**12.8**	0.00	18.40		LCT pumps started 7/15
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6**	+5.2	17.62		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	**1.8**	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**79.6**	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**7.5**	0.00	15.50		LCT pumps started 7/15
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NR		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NR		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NR		
	11/17/2009	0.0	0.00	NR		
	12/10/2009	0.0	+0.20	NR		
	1/27/2010	0.0	0.40	NR		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NR		
	3/17/2010	0.0	0	NR		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	**73.0**	+0.10	NM		LCT pumps started 7/15
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NR		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		

NM= not measured
NR = not recorded

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10
Updated by: N. Braun, 3/24/10; update checked by E. Watruba, 3/24/10

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/3

Date: 3/1/2010

Gas Extraction Wells

Location	Header Side Pressure	Well Side Pressure		Orifice Plate DP		Approx. Post-Adjustment Flow Rate (cfm)	% CH_4	%CO_2	%O_2	%Balance	Temperature (^oF)	Valve Turns Open		Liquid Level (ft BTOC)	Depth to Top of Screen (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	-3.8	-3.7	-3.7	1.40	1.50	3.5	62.5	29.5	0.4	7.6	48	4	5	NR	NA
DV-8	-3.5	-3.2	-2.0	1.60	1.00	3.0	36.0	27.5	0.0	36.5	46	2	1	NR	NA
EWL-10	-3.8	-3.8	NC	0.05	NC	<0.5	12.5	13.0	7.3	67.2	40	4	NC	NR	NA
EWL-11	-3.8	-3.7	-3.8	0.65	0.70	2.5	11.5	15.5	5.7	67.3	42	5.75	6.5	NR	NA
EWL-12	-3.8	-0.5	-0.8	0.05	0.10	1.0	19.8	14.0	9.5	56.7	40	0	0.25	NR	NA
GEW-1	-3.5	-3.5	-3.5	1.30	1.40	3.5	66.8	31.9	0.0	1.3	48	3	4.5	NR	NA
GEW-2	-3.8	-3.8	-3.8	0.10	0.10	1.0	37.1	23.1	3.9	35.9	46	5	6	NR	NA
UAV-1	-3.7	-3.3	-3.5	2.40	2.60	5.0	57.6	32.3	0.0	10.1	48	3	3.5	NR	NA
UAV-6	-3.6	-3.2	-0.5	2.70	0.60	2.5	18.1	11.9	10.5	59.5	46	3	1.75	NR	NA
SOUTHCENTRAL WELLS															
DV-3	-2.7	-2.6	-2.7	0.50	0.65	2.5	69.1	22.9	1.5	6.5	40	1	1.75	NR	NA
DV-6	-2.7	0.0	-0.6	0.00	0.05	<0.5	64.4	33.7	0.5	1.4	36	0	0.5	NR	NA
DV-12	-2.8	-2.4	-2.0	0.21	0.16	1.0	38.1	20.4	5.1	36.4	42	3	2	NR	NA
DV-13	-2.8	-2.8	NC	0.03	NC	<0.5	51.9	17.9	4.7	25.5	38	3	NC	NR	NA
EWL-2	-2.8	0.0	NC	0.00	NC	0.0	9.1	3.6	14.8	72.5	36	0	NC	NR	NA
SV-12	-2.8	0.0	NC	0.00	NC	0.0	29.8	11.9	9.1	49.2	34	0	NC	NR	NA
UAV-2	-2.8	0.0	-1.0	0.00	0.04	<0.5	73.7	22.7	0.0	3.6	36	0	0.25	NR	NA

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded
EWL-11, EWL-12, GEW-2: increased flow due to proximity to nearby structures and monitoring probes with methane detections.

Location	Well Pressure	% CH_4	%CO_2	%O_2	%Balance	Flame Present (yes/no)	Blower Operating (yes/no)	Sparking Unit Operating (yes/no)	Comments
	I								
UAV-4	NR	NR	NR	NR	NR	Yes	Yes	Yes	

River Walk / Seep Checks

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA		Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA		
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR		419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR		NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR		NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR		1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR		1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR		1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA		Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA		
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA		
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA		counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA		Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA		
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR		300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR		NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR		NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR		943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR		1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR		1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	775.12	1,710,384	12,361	425,615	NA	NA	3,090	
					Total System Gallons Pumped	**1,155,620**			**6,717**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.

Created by: J. Schoephoester, 2/1/10 Updated by: J. Schoephoester, 2/24/10 Updated by: E. Watruba, 3/24/10
Checked by: N. Braun, 2/3/10 Updates checked by: N. Braun, 2/24/10 Checked by: N. Braun, 3/24/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010	3/5/2010
Time		9:30	9:45	13:15	12:00 PM	7:30	8:50	10:45	11:55	12:12	9:55 AM	11:30 AM	8:45 AM	11:35 AM	7:40 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR	42
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR	0.3
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR	0.01
Approximate Flow (scfm)	10	12	13	9	7.5	9	9	NR	9	11	10	12	8.0	NR	6.0
% CH_4	49.7	59.1	NR	52.3	20.2	24	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5	23.9
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5	11.7
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6	10.8
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4	53.6
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR	493
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR	30
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR	146
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR	14
Blower Amps															
Blower RPMs															
Air Compressor Pressure (psi)	NR	140	NR	155		150	160	NR	150	85 (flux.)	80	NR	90	NR	150
Well Field Air Pressure (psi)	NR	78	NR	80		80	75	NR	80	78	80	NR	75	NR	80
Approx. Leachate Tank Level	NR	NR	NR	NR		NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR	39 in
Comments						Blower outlet									Pre-blower:
						pressure					Pre-blower:	Pre-blower:		Pre-blower:	38.8% CH4
						fluctuating.					58.1% CH4	45.9% CH4		42.6% CH4	18.0% CO2
											31.0% CO2	21.1% CO2		18.7% CO2	6.2% O2
											3.4% 02	4.5% O2		5.2% O2	Blower amps-3.0
															Blower RPM-1093
															Two leachate loads
															hauled offsite.

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010
Time	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM
Blower Inlet Vacuum (in H_2O)	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	51	55	60	50	54	65	51	56	38	NR	70	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01
Approximate Flow (scfm)	5.0	5	5	5.0	12	7	3	5	5	NR	9	5
% CH_4	27.9	28.4	30.4	31.7	58.1	30.6	12.0	10.3	10.2	NR	14.2	22.1
% CO_2	11.8	12.7	12.9	12.8	22.6	12.8	7.5	6.4	7.6	NR	6.9	9.6
% O_2	10.9	10.6	10.1	10.2	2.4	10.3	15.2	16.2	15.0	NR	15.3	13.0
% Balance Gas	49.4	48.3	46.6	45.3	16.9	46.3	65.3	67.1	67.2	NR	63.6	55.3
Combustion Temperature(^oF)	661	727	670	771	846	654	530	191	404	465	808	1013
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30
Blower Hours	192	207	210	221	238.5	253	297	297	301	321	333	412
Blower Cycles	14	14	14	14	14	14	14	14	16	17	19	19
Blower Amps	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0
Blower RPMs	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093
Air Compressor Pressure (psi)	160	140	NR	150	140	NR	0	0	160	160	160	160
Well Field Air Pressure (psi)	80	80	NR	80	80	NR	0	0	80	79	80	80
Approx. Leachate Tank Level	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR
Comments	Flare on	Pre-blower	Pre-blower	Pre-blower	Post Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower
	Access roads need	48.9 CH4	51 CH4	56.7 CH4	33.7 CH4	47.0	arrival.		Pre blower:			CH4-39.2%
	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	14.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%
		5.5 O2	3.3 O2	2.1 O2	7.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%
	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5	
							6.6 O2	6.7 O2			5.6	
	Vac Side	Water present in									37.9	
	CH4=48%	air valve vault					Ray said a leachate					
	CO2=19.8%	south of compressor					load was hauled out					
	O2=4.0%	building. No air leaks.					on Saturday.					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		13:20	12:45	13:00	14:10	14:00	11:30 AM	8:10	11:10	8:13	12:15	12:45	8:45	14:30
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	10	8	16	NR	19	15	15	8	13	NR	19	16	21	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24	25.6
% O_2	2.5	2.5	3	NR	NR	1.6	0.4	0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010	3/22/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM	8:32 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR	4.0
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80	76
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2	1.9
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17	0.17
Approximate Flow (scfm)	18.0	NR	15.0	14.0	17	17	15.0	20	19	NR	NR	22	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9	45.3
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8	26.1
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8	2.3
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5	26.3
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840	1118
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313	376
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14	114
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3	3.2
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468	1467
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"	NA
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side	Blower/flare off upon
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5	arrival. Restarted
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2	and kept shutting down
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0	when flare temp reached
					23.5 BAL	23.6 BAL	22.2 BAL					22.3	1100F (after 3 min).
									No flame				
													Changed preset for
									Sparker on				normal operating
													temp range to
													200-1500F.
													Blower/flare stayed
													running.

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(^oF)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^oF)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(^oF)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(^oF)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(^oF)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^oF)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(^oF)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(^oF)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7		+0.2	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR	+0.2	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR	0.00	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3		77.7	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2		22.3	
% O_2	0		NR		0		0		0.4		1.5		0.1		0.0	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5		0.0	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48		52	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8		+0.04	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR	+0.01	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR	0.00	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2		9.8	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2		4.4	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2		18.0	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6		67.8	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50		46	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6	
Gas Temperature(^oF)	44		44		42		42		49		48	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8	
% O_2	5.1		4		6.1		4.7		8.7		15.6	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8	
Gas Temperature(^oF)	34		36		24		38		52		50	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR		-0.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR	0.0	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR	0.00	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2		0.4	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3		0.2	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4		20.5	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5		78.9	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45		44	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR	CL	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8		+0.15	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR	+0.03	-0.01
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR	0.00	0.005
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7		76.5	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4		22.9	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4		0.1	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5		0.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50		44	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR	CL	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8	
Gas Temperature(^oF)	36		38		24		36		54	54	48	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
[1] Based on initial reading.

Mallard North Landfill Status Meeting
April 22, 2010

Completed Activities/Activities In-Progress

- Continued operation/balancing and fine-tuning of LFGCS
- Continued operation/balancing of leachate collection system
- Review of U.S. EPA/WESTON comments on Groundwater Monitoring Plan (ongoing)
- Monitoring of LFGCS per IEPA air permit completed on April 14
- Preparation of IEPA BOW permit applications for hookup to Village of Hanover Park (ongoing)

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary
- Monthly gas monitoring scheduled for April 27 and 28
- Road repairs will likely be performed in next two weeks

Attached Data

- Table - Gas Probes With Significant Methane Detections
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary
- Table – Northwest/Blower Flare Summary
- Table – Summary of LFG Operational Data

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90	18.40		
	7/22/2009	**12.8**	0.00	18.40		LCT pumps started 7/15
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6**	+5.2	17.62		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	**1.8**	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**79.6**	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**7.5**	0.00	15.50		LCT pumps started 7/15
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NR		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NR		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NR		
	11/17/2009	0.0	0.00	NR		
	12/10/2009	0.0	+0.20	NR		
	1/27/2010	0.0	0.40	NR		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NR		
	3/17/2010	0.0	0	NR		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	**73.0**	+0.10	NM		LCT pumps started 7/15
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NR		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NR		
	4/5/2010	**12.7**	-3.30	NR		
	4/9/2010	**14.9**	-3.60	NR		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NR		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		

NM= not measured
NR = not recorded

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09

Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10

Updated by: N. Braun, 3/24/10; update checked by E. Watruba, 3/24/10
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR	NR	24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR	NR	NR	NA	NA	63,058	818	68	
	9/14/2009	NR	NR	NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR	NR	247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR	NR	281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
				Total System Gallons Pumped		**1,441,535**			**8,070**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.
3. EWL-2 cycle count reading on 3/24/10 is average of 3/29/10 and 3/22/10.

Created by: J. Schoephoester, 2/1/10 Updated by: J. Schoephoester, 2/24/10 Updated by: E. Watruba, 3/24/10 Updated by: J. Schoephoester, 4/14/10
Checked by: N. Braun, 2/3/10 Updates checked by: N. Braun, 2/24/10 Checked by: N. Braun, 3/24/10 Checked by: S. Inman 4/19/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010	3/5/2010
Time		9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM	7:40 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR	42
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR	0.3
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR	0.01
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR	5
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5	23.9
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5	11.7
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6	10.8
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4	53.6
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR	493
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR	30
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR	146
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR	14
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR	150
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR	80
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR	39 in
Comments						Blower outlet									Pre-blower:
						pressure					Pre-blower:	Pre-blower:		Pre-blower:	38.8% CH4
						fluctuating.					58.1% CH4	45.9% CH4		42.6% CH4	18.0% CO2
											31.0% CO2	21.1% CO2		18.7% CO2	6.2% O2
											3.4% 02	4.5% O2		5.2% O2	Blower amps-3.0
															Blower RPM-1093
															Two leachate loads
															hauled offsite.

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010
Time	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM	9:40 AM	9:30 AM
Blower Inlet Vacuum (in H_2O)	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0	2.9	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	51	55	60	50	54	65	51	56	38	NR	70	58	58	50	68
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4	0.40	0.50
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07	0.03	0.03
Approximate Flow (scfm)	5	5	5	5	12	7	4	5	5	NR	8	5	13	9	9
% CH_4	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6	23.4	25.2
% CO_2	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0	9.3	9.9
% O_2	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4	13.0	12.1
% Balance Gas	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0	54.3	52.8
Combustion Temperature(^oF)	661	727	670	771	846	654	530	191	404	465	808	1013	518	523	952
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	0.3	30	30
Blower Hours	192	207	210	221	238.5	253	297	297	301	321	333	412	452	552	592
Blower Cycles	14	14	14	14	14	14	14	14	16	17	19	19	19	19	19
Blower Amps	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1	3.0	3.1
Blower RPMs	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093	1093	1093
Air Compressor Pressure (psi)	160	140	NR	150	140	NR	0	0	160	160	160	160	160	140	150
Well Field Air Pressure (psi)	80	80	NR	80	80	NR	0	0	80	79	80	80	80	75	75
Approx. Leachate Tank Level	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"	NA	6"
Comments	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower			
	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%			
	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%			
		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%			
	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5				
							6.6 O2	6.7 O2			5.6				
	Vac Side	Water present in									37.9				
	CH4=48%	air valve vault					Ray said a leachate								
	CO2=19.8%	south of compressor					load was hauled out								
	O2=4.0%	building. No air leaks.					on Saturday.								

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010
Time	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	2.8	2.8	3.0	2.9	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	70	82	NR	84	64	NR
Blower Outlet Pressure (in H_2O)	0.50	0.40	NR	0.30	0.20	0.30
Orifice Plate DP (in H_2O)	0.03	0.05	0.04	0.03	0.03	0.05
Approximate Flow (scfm)	8	11	11	9	9	12
% CH_4	24.7	26.5	17.3	33.1	25.7	32.1
% CO_2	9.8	10.8	9.2	12.2	10.1	12.2
% O_2	12.4	11.3	11.3	10.0	12.7	10.1
% Balance Gas	53.1	51.4	62.2	44.7	51.5	45.6
Combustion Temperature(^oF)	933	761	453	770	663	750
Blower SPD%	30	30	30	30	30	30
Blower Hours	630	692.8	37.2	0	14	36.7
Blower Cycles	19	20	1	1	1	1
Blower Amps	3.1	NR	NR	3.1	3.1	NR
Blower RPMs	1093	NR	NR	1093	1093	NR
Air Compressor Pressure (psi)	150	140	140	150	150	140
Well Field Air Pressure (psi)	75	80	80	80	80	80
Approx. Leachate Tank Level	4"	NA	NR	34"	4"	2" @ 10:12
Comments	Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower
	CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4
	CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3
	O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4
			Blower hours reset	blower down approx		
			after storm damage	1.3 hrs, gas readings		
				after system running		
				for approx 1 hr		

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare	
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.	
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2				
					2.3 O2	2.2 O2	2.2 O2		Blower on		
					23.5 BAL	23.6 BAL	22.2 BAL				
									No flame		
									Sparker on		

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010
Time	10:40 AM	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM
Blower Inlet Vacuum (in H_2O)	NR	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	80	76	74	74	70	70	84	NR	72	68	NR
Blower Outlet Pressure (in H_2O)	0.2	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00
Orifice Plate DP (in H_2O)	0.17	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22
Approximate Flow (scfm)	22	22	20	19	20	23	22	24	24	23	25
% CH_4	44.9	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1
% CO_2	23.8	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5
% O_2	3.8	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2
% Balance Gas	27.5	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1
Combustion Temperature(^oF)	202-840	1118	862	594	1021	1043	760	940	834	680	442
Blower SPD%	40	40	40	40	40	40	40	40	45	45	45
Blower Hours	313	376	417	516	555	595	658.1	737.6	800	814	837.4
Blower Cycles	14	114	120	120	120	120	120	121	121	121	121
Blower Amps	3.3	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR
Blower RPMs	1468	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR
Air Compressor Pressure (psi)	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	80	NA	80	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	29"	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA
Comments	Inlet side	Blower/flare off upon						Pre-blower:	-plug on EWL-2 well needed		Pre-blower:
	49.5	arrival. Restarted						CH4=43.0	3 loads today		CH_4 43.6
	26.2	and kept shutting down						CO2=25.4			CO_2 25.1
	2.0	when flare temp reached						O2=2.8			O_2 2.3
	22.3	1100F (after 3 min).									
		Changed preset for									
		normal operating									
		temp range to									
		200-1500F.									
		Blower/flare stayed									
		running.									

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(^oF)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	-3.1
Orifice Plate DP (in H_2O)	1.30	1.50	NR	1.60
% CH_4	59.1		58.3	
% CO_2	28.0		28.7	
% O_2	0.0		0.0	
% Balance Gas	12.9		13.0	
Gas Temperature(^oF)	NR		NR	
Valve Turns Open	5	6.5	6.5	9.5
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8	
Well Side Pressure (in H_2O)	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	1.20	0.50	NR	NC
% CH_4	29.4		34.9	
% CO_2	23.2		24.2	
% O_2	0.4		1.8	
% Balance Gas	47.0		39.1	
Gas Temperature(^oF)	NR		NR	
Valve Turns Open	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^oF)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010	
	I	P
Header Side Pressure[1] (in H_2O)	-3.7	
Well Side Pressure (in H_2O)	-3.7	-3.7
Orifice Plate DP (in H_2O)	NR	NR
% CH_4	18.2	
% CO_2	16.2	
% O_2	3.6	
% Balance Gas	62.0	
Gas Temperature(^oF)	NR	
Valve Turns Open	4	4
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(^oF)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010		3/31/2010		4/2/2010		4/5/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-3.7	
Well Side Pressure (in H_2O)	-3.7	0.2	-3.7	NR	-3.8	NR	-3.3	-3.4
Orifice Plate DP (in H_2O)	0.20	NR	0.50	NR	0.60	NR	0.60	0.65
% CH_4	11.3		12.1		12.1		11.2	
% CO_2	12.2		13.3		12.8		14.3	
% O_2	8.0		6.4		7.2		6.4	
% Balance Gas	68.5		68.2		67.9		68.1	
Gas Temperature(^oF)	NR		70		60		NR	
Valve Turns Open	7	7	7	7	7	7	6.5	7
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(^oF)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010	
	I	P
Header Side Pressure[1] (in H_2O)	-3.7	
Well Side Pressure (in H_2O)	-3.5	NC
Orifice Plate DP (in H_2O)	NR	NC
% CH_4	21.1	
% CO_2	15.8	
% O_2	8.6	
% Balance Gas	54.5	
Gas Temperature(^oF)	NR	
Valve Turns Open	0.25	NR
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(^oF)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	1.50	1.80	NR	1.60
% CH_4	67.2		59.3	
% CO_2	31.8		31.0	
% O_2	0.0		0.0	
% Balance Gas	1.0		9.7	
Gas Temperature(^oF)	0		0	
Valve Turns Open	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^oF)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010	
	I	P
Header Side Pressure[1] (in H_2O)	-3.7	
Well Side Pressure (in H_2O)	-3.7	NR
Orifice Plate DP (in H_2O)	0.15	0.20
% CH_4	47.9	
% CO_2	26.0	
% O_2	1.3	
% Balance Gas	24.8	
Gas Temperature(^oF)	NR	
Valve Turns Open	6	7
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(^oF)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-4	
Well Side Pressure (in H_2O)	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	2.30	2.40	NR	2.70
% CH_4	55.2		56.0	
% CO_2	30.9		31.8	
% O_2	0.0		0.0	
% Balance Gas	13.9		12.2	
Gas Temperature(^oF)	NR		NR	
Valve Turns Open	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(^oF)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010	
	I	P
Header Side Pressure[1] (in H_2O)	NR	
Well Side Pressure (in H_2O)	NR	NC
Orifice Plate DP (in H_2O)	NR	NC
% CH_4	28.2	
% CO_2	14.5	
% O_2	9.4	
% Balance Gas	47.9	
Gas Temperature(^oF)	NR	
Valve Turns Open	1.75	NC
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC
% CH_4	75.5		NR		70.1		79.9		71.6	
% CO_2	24.5		NR		28.2		25.9		28.0	
% O_2	0		NR		0		0		0.4	
% Balance Gas	0.0		NR		1.7		0		0.0	
Gas Temperature(^oF)	34		38		NR		NR		32	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.7		+0.2		NR		NR	
Well Side Pressure (in H_2O)	-2.6	-2.7	-2.7	NR	+0.2	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.50	0.65	0.20	NR	0.00	NR	NR	NR	NR	NR
% CH_4	69.1		72.3		77.7		NR		73.1	
% CO_2	22.9		23.2		22.3		NR		22.3	
% O_2	1.5		0.1		0.0		NR		0.0	
% Balance Gas	6.5		4.5		0.0		NR		4.6	
Gas Temperature(^oF)	40		48		52		NR		NR	
Valve Turns Open	1	1.75	NR	NR	1.75	NC	1.75	NC	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	61.3		NR		NR		65.7		58.2	
% CO_2	30.4		NR		NR		34.9		35.2	
% O_2	2.5		NR		NR		0		2.5	
% Balance Gas	5.8		NR		NR		0		4.1	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.8		+0.04		NR		NR	
Well Side Pressure (in H_2O)	0.0	-0.6	-2.8	NR	+0.01	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.05	0.01	NR	0.00	NR	NR	NR	NR	NR
% CH_4	64.4		0.2		9.8		NR		0.5	
% CO_2	33.7		0.2		4.4		NR		0.6	
% O_2	0.5		21.2		18.0		NR		19.2	
% Balance Gas	1.4		99.6		67.8		NR		79.7	
Gas Temperature(^oF)	36		50		46		NR		NR	
Valve Turns Open	0	0.5	NR	NR	0.5	NC	0.5	NC	0.25	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR
% CH_4	36.3		59.3		20.3		38.1		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7	
Gas Temperature(^oF)	44		44		42		42		49	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR	
Well Side Pressure (in H_2O)	-1.0	-0.8	-0.7	NC	NR	NR
Orifice Plate DP (in H_2O)	0.70	0.60	0.50	NC	NR	NR
% CH_4	31.9		43.2		43.5	
% CO_2	20.2		22.1		22.3	
% O_2	4.3		3.0		4.0	
% Balance Gas	43.6		31.7		30.2	
Gas Temperature(^oF)	48		NR		NR	
Valve Turns Open	2	1.75	1.75	NC	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR
% CH_4	56.5		63.4		52.0		51.9		43.3	
% CO_2	19.1		17.6		19.0		17.9		14.1	
% O_2	5.1		4		6.1		4.7		8.7	
% Balance Gas	19.3		15		22.9		25.5		42.6	
Gas Temperature(^oF)	34		36		24		38		52	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR	
Well Side Pressure (in H_2O)	-0.2	-0.2	-2.8	-2.8	NR	NR
Orifice Plate DP (in H_2O)	0.01	0.01	0.15	0.10	NR	NR
% CH_4	19.8		32.6		0.2	
% CO_2	5.8		8.7		0.6	
% O_2	15.6		11.4		19.0	
% Balance Gas	58.8		47.3		80.2	
Gas Temperature(^oF)	50		NR		NR	
Valve Turns Open	3	2.5	2.5	2	2	0.5
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC
% CH_4	9.0		NR		2.4		NR		3.4	
% CO_2	1.9		NR		1.1		NR		2.0	
% O_2	18.9		NR		19.4		NR		16.7	
% Balance Gas	70.2		NR		77.1		NR		77.9	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		NR		-0.7		NR	
Well Side Pressure (in H_2O)	0.0	NC	NR	NR	0.0	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	0.00	NR	NR	NR
% CH_4	9.1		11.2		0.4		NR	
% CO_2	3.6		1.3		0.2		NR	
% O_2	14.8		18.4		20.5		NR	
% Balance Gas	72.5		87.5		78.9		NR	
Gas Temperature(^oF)	36		45		44		NR	
Valve Turns Open	0	NC	NR	NR	CL	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	75.5		NR		68.1		48.2		17.0	
% CO_2	23.8		NR		27.4		17.6		6.7	
% O_2	0.4		NR		0		5.2		13.2	
% Balance Gas	0.3		NR		4.5		29		63.1	
Gas Temperature(^oF)	32		NR		NR		30		28	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		-2.8		+0.15		NR	
Well Side Pressure (in H_2O)	0.0	NC	-0.02	NR	+0.03	-0.01	NR	NR
Orifice Plate DP (in H_2O)	0.00	NC	0.02	NR	0.00	0.005	NR	NR
% CH_4	29.8		41.7		76.5		NR	
% CO_2	11.9		13.4		22.9		NR	
% O_2	9.1		9.4		0.1		NR	
% Balance Gas	49.2		35.5		0.5		NR	
Gas Temperature(^oF)	34		50		44		NR	
Valve Turns Open	0	NC	NR	NR	CL	0.125	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8
% O_2	19.4		0		16.7		0.0		0.3	0.3
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4
Gas Temperature(^oF)	36		38		24		36		54	54
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		NR		NR	
Well Side Pressure (in H_2O)	+0.07	-0.2	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.01	NR	NR	NR	NR
% CH_4	78.9		NR		62.2	
% CO_2	13.8		NR		4.3	
% O_2	1.5		NR		0.8	
% Balance Gas	5.8		NR		32.7	
Gas Temperature(^oF)	48		NR		NR	
Valve Turns Open	0.25	0.375	0	NC	0	0.125
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
May 13, 2010

Completed Activities/Activities In-Progress

- Presentation of proposed 2010 MNL activities to District Board of Commissioners on May 11, 2010.
- Monthly gas probe monitoring (April 28 and 29), weekly LFGCS monitoring, and non-LFGCS vent monitoring (May 11, 2010)
- Respond to U.S. EPA/WESTON comments on Groundwater Monitoring Plan (May 3, 2010 letter to U.S. EPA)
- Revised Groundwater Monitoring Plan in accordance with RMT/District Response, referenced above
- Results of LFGCS monitoring per IEPA air permit transmitted on May 6, 2010.
- Continued negotiations between District and Village of Hanover Park regarding leachate forcemain hookup
- Preparation of IEPA BOW permit applications for hookup to Village of Hanover Park (drafts completed)
- Road repairs initiated (estimated 50% complete)
- Evaluation of U.S. EPA request for Ecological Risk Assessment
- Evaluation of investigation/remedial approach to Manhole MH-2 situation.
- Continued operation/balancing and fine-tuning of LFGCS
- Continued operation/balancing of leachate collection system

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary
- Monthly gas monitoring scheduled for May 26 and 27.
- Planning for installation of two replacement wells and first round of groundwater sampling is underway.
- Preparing QAPP

Attached Data

- Table – Gas Probe Monitoring (April 28 and 29, 2010)
- Table – Landfill Gas/Leachate Monitoring
- Figure 1 – Methane Detections (April 2010)
- Table - Gas Probes With Significant Methane Detections
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary
- Table – Northwest/Blower Flare Summary
- Table – Summary of LFG Operational Data
- Table – Gas Vent Monitoring

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: J. Roelke
Gas Meter: GEM 2000
Serial #: GM08330
Date Calibrated: 4/28 & 29/2010

Pressure Device: Magnahelics
Water Level Device: Water Level Indicator
Ground Conditions: Moist

Date: 4/28-29/10
Weather: Clear, breezy
Temp and Pressure: 4/28- 60°F; 29.82" Hg, falling
4/29- 65°F; 29.70" Hg, falling

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.00	0.0	0.1	21.1	78.8	20.11	
GP-33A	+0.04	0.0	0.1	21.0	78.9	14.12	
GP-33B	+0.05	0.0	0.5	20.8	78.7	12.84	
G-116	-4.60	24.7	8.7	12.5	54.1	NA	
GP-2A	0.00	0.6	0.3	20.1	79.0	14.15	
GP-2B	0.00	0.0	0.0	21.1	78.9	10.87	
GP-34A	0.00	0.0	0.0	21.0	79.0	14.01	
GP-34B	+0.04	0.0	0.0	21.0	79.0	14.85	
GP-3	+0.1	0.0	0.2	20.9	78.9	12.51	
GP-4A	0.00	0.0	0.2	20.9	78.9	13.05	
GP-4B	+0.04	0.0	0.1	21.0	78.9	11.34	
GP-4C	+0.5	2.5	1.5	19.8	76.2	17.84	
GP-5	+0.02	0.0	0.0	21.0	79.0	15.37	
P-1A	-1.50	0.0	0.0	20.6	79.4	16.89	
GP-6	0.00	0.0	0.0	20.7	79.3	9.41	
GP-7A	0.00	0.0	3.1	14.4	82.5	11.47	
GP-7B	0.00	0.0	0.0	20.9	79.1	18.89	
GP-8A	0.00	0.0	0.1	20.8	79.1	7.24	
GP-8B	0.00	0.0	0.0	21.0	79.0	13.01	
P-3A	-9.40	0.0	0.5	20.7	78.8	4.53	
GP-9A	+0.03	0.0	0.1	20.9	79.0	6.20	
GP-9B	0.00	0.0	0.0	21.0	79.0	19.04	
P-4C	0.00	0.0	1.4	16.7	81.9	6.45	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	+0.04	0.0	1.2	20.2	78.6	8.36	
GP-10B	+0.2	0.0	0.1	20.9	79.0	9.77	
GP-10C	+0.25	0.0	0.3	20.2	79.5	10.68	
P-5A	0.00	0.0	0.0	21.0	79.0	8.41	
GP-11A	0.00	0.0	0.1	21.0	78.9	8.17	
GP-11B	+0.05	0.0	0.0	21.0	79.0	9.34	
P-6C	0.00	0.0	0.0	21.0	79.0	6.25	
GP-12	0.00	0.0	0.1	21.0	78.9	5.08	
P-7A	0.00	0.0	0.0	21.0	79.0	4.81	
P-7B	0.00	0.0	0.0	21.0	79.0	5.26	
GP-13	+0.2	0.0	0.1	21.0	78.9	6.08	
GP-14	+0.4	0.0	0.0	21.0	79.0	6.31	
G-109	0.00	0.0	0.1	21.0	78.9	6.26	
GP-15A	+0.15	0.0	0.2	20.9	78.9	4.81	
GP-15B	0.00	0.0	0.2	20.9	78.9	6.88	
GP-28A	+0.02	0.1	0.1	20.8	79.0	8.56	
GP-28B	+0.04	0.0	0.0	20.9	79.1	4.32	
GP-28C	+0.2	0.0	0.0	20.9	79.1	4.34	
GP-16A	+0.02	0.0	0.0	21.0	79.0	5.70	
GP-16B	+0.05	0.0	0.0	21.0	79.0	3.26	
GP-16C	+0.05	0.0	0.0	21.0	79.0	6.98	
GP-29A	+0.5	0.0	0.2	20.8	79.0	5.52	
GP-29B	+0.25	0.0	0.1	20.8	79.1	9.18	
G-110	0.00	0.0	0.4	20.8	78.8	8.73	
GP-17	+0.15	0.0	0.0	20.8	79.2	4.72	
GP-18	0.00	0.0	0.0	20.7	79.3	8.21	
GP-19	+0.1	0.0	0.1	20.7	79.2	11.17	
GP-20	+0.25	0.0	0.1	20.6	79.3	5.98	
GP-21A	+0.2	0.0	0.1	20.5	79.4	7.08	
GP-21B	0.00	0.0	0.1	20.6	79.3	10.37	
GP-22A	0.00	0.0	0.0	20.8	79.2	11.97	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.00	0.0	0.0	20.8	79.2	19.21	
GP-30A	+0.8	0.0	0.1	20.5	79.4	4.35	
GP-30B	+0.5	3.1	0.7	19.7	76.5	7.51	
MW-204 East	0.00	41.0	6.2	8.7	44.1	19.09	
MW-204 West	0.00	0.0	0.1	20.8	79.1	24.64	
GP-23A	0.00	0.0	0.5	20.4	79.1	4.93	
GP-23B	+0.15	0.0	0.1	20.7	79.2	10.71	
GP-24A	+0.08	0.4	0.4	20.4	78.8	5.98	
GP-24B	+0.04	0.0	0.3	20.7	79.0	15.04	
GP-25A	-1.50	0.0	0.1	20.7	79.2	10.71	
GP-25B	0.00	0.0	0.4	20.4	79.2	5.98	
GP-31A	+0.03	0.0	0.2	20.9	78.9	7.47	
GP-31B	+0.10	42.6	2.0	10.2	45.2	14.88	
GP-26A	+1.0	0.0	0.1	21.0	78.9	9.07	
GP-26B	0.00	0.0	0.1	21.0	78.9	16.33	
GP-27A	+0.25	0.0	0.1	21.0	78.9	5.26	
GP-27B	0	0.0	0.1	21.0	78.9	8.58	
GP-35A	+0.03	0.0	0.2	21.1	78.7	6.89	
GP-35B	+0.01	0.0	0.1	21.1	78.8	10.92	
G-113	0.00	0.0	2.4	19.9	77.7	NR	
G-121	0.00	0.0	2.1	16.8	81.1	NR	
GP-32A	0.00	0.0	0.4	20.8	78.8	11.68	
GP-32B	-1.20	0.0	0.6	20.8	78.6	12.25	
GP-37A	0.00	16.5	4.1	16.8	62.6	12.38	
GP-37B	+0.02	0.0	0.2	21.0	78.8	12.74	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: J. Schoephoester, 4/30/10
Checked by: S. Inman, 5/3/10

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois
Sheet 1 / 3

Form update 3-26-10

Date:	4/22/2010					
Person (s) sampling	J. Roelke		Weather Conditions:	Clear		
Ambient Temperature:	40	°F	Ground Conditions:	dry		
Barometric Pressure:	29.85	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM08330
Trend in barometric pressure:	steady		Date Last Calibrated:	4/22/2010		
Notes:	Both flares were burning on arrival					

	Blower/Flare Data					
	Southcentral	Southcentral	Southcentral	Northwest	Northwest	Northwest
Date / Time / Location	4/22/2010 10:00	4/22/2010 12:00	4/23/2010 8:00	4/22/2010 13:00	4/22/2010 16:00	4/23/2010 8:30
Blower Inlet Vacuum (in H_2O)	-2.8	-2.6	-2.6	-4.6	-4.6	-4.6
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	68	78	72	72	74	72
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	2.0	2.0	2.0
Orifice Plate DP (in H_2O)	0.01	0.02	0.02	0.20	0.20	0.20
Approximate Flow (scfm)	5	8	8	23	23	23
% CH_4	59.0	54.8	51.8	43.3	43.5	42.1
% CO_2	21.5	20.3	19.9	25.5	25.4	25.8
% O_2	3.0	4.1	4.5	2.4	2.4	2.7
% Balance Gas	16.5	20.8	23.8	28.8	28.7	29.4
Combustion Temperature(°F)	680	NR	NR	573	NR	NR
Blower SPD%	30	30	35	45	45	45
Blower Hours	196	NR	NR	999	NR	NR
Blower Cycles	1	NR	NR	121	NR	NR
Blower Amps	NR	NR	NR	NR	NR	NR
Blower RPM	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	145	NR	NR	NA	NA	NA
Air Compressor Hours	NR	NR	NR	NA	NA	NA
Well Field Air Pressure (psi)	75	NR	NR	NA	NA	NA
Approx. Leachate Tank Level	NR	NR	NR	NA	NA	NA
Comments	Gas readings were taken pre-blower	Gas readings were taken pre-blower	Blower speed increased to 35%			
	Compressor oil level is OK					

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/3

Date: 4/22/2010

Gas Extraction Wells

Location	Header Side Pressure	Well Side Pressure		Orifice Plate DP		Approx. Post-Adjustment Flow Rate (cfm)	% CH_4	%CO_2	%O_2	%Balance	Temperature (°F)	Valve Turns Open		Liquid Level (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-4.4	-4.4	-4.4	1.80	1.80	4.0	51.3	27.2	0.4	21.1	82	8	10	NR
DV-8	-4.4	-1.3	NC	0.50	NC	2.0	35.2	24.0	0.4	40.4	66	0.5	NC	19.5
EWL-10	-4.4	-4.4	-4.4	0.02	0.02	<0.5	17.3	16.8	3.4	62.5	74	4.5	2	16.4
EWL-11	-4.4	-4.4	NC	0.50	NC	2.0	12.2	14.0	6.3	67.5	58	7.0	NC	16.1
EWL-12	-4.4	-1.0	-0.8	0.20	0.15	1.0	22.9	14.4	10.3	52.4	64	0.75	0.5	12.8
GEW-1	-4.4	-4.4	-4.4	2.00	2.00	4.5	62.2	31.8	0.3	5.7	62	8.5	10	NR
GEW-2	-4.4	-4.4	-4.4	0.05	0.08	0.5	48.9	26.7	1.4	23.0	68	7.5	10	17.3
UAV-1	-4.4	-4.4	NC	3.00	NC	5.5	48.7	29.5	0.6	21.2	56	6.5	NC	NR
UAV-6	-4.4	-0.8	-0.9	0.65	0.85	3.0	34.4	16.5	8.8	40.3	74	1	1.25	12.8
SOUTHCENTRAL WELLS														
DV-3	-2.4	-2.4	NC	0.70	NC	2.5	69.1	22.1	0.1	8.7	50	12	NC	NR
DV-6	-2.4	0.0	NC	0.00	NC	0.0	4.0	2.5	18.8	74.7	58	0.125	NC	NR
DV-12	-2.6	-0.1	-0.5	0.10	0.30	1.5	66.3	28.7	1.1	3.9	50	1	1.5	NR
DV-13	-2.6	-2.2	-1.3	0.02	0.01	<0.5	27.2	7.3	13.5	52.0	62	1	0.75	NR
EWL-2	-2.6	0.0	NC	0.00	NC	0.0	2.2	1.0	20.1	76.7	70	0	NC	5.8
SV-12	-2.4	0.0	-0.8	0.15	0.05	0.5	58.3	19.3	4.1	18.3	56	0	0.125	NR
UAV-2	-2.6	0.0	0.0	0.01	0.00	0.0	1.8	2.0	18.4	77.8	64	0.125	0	NR

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

Location	Well Pressure	% CH_4	%CO_2	%O_2	%Balance	Flame Present (yes/no)	Blower Operating (yes/no)	Sparking Unit Operating (yes/no)	Comments
	I								
UAV-4	NR	NR	NR	NR	NR	Y	Y	Y	

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois
Sheet 3/3

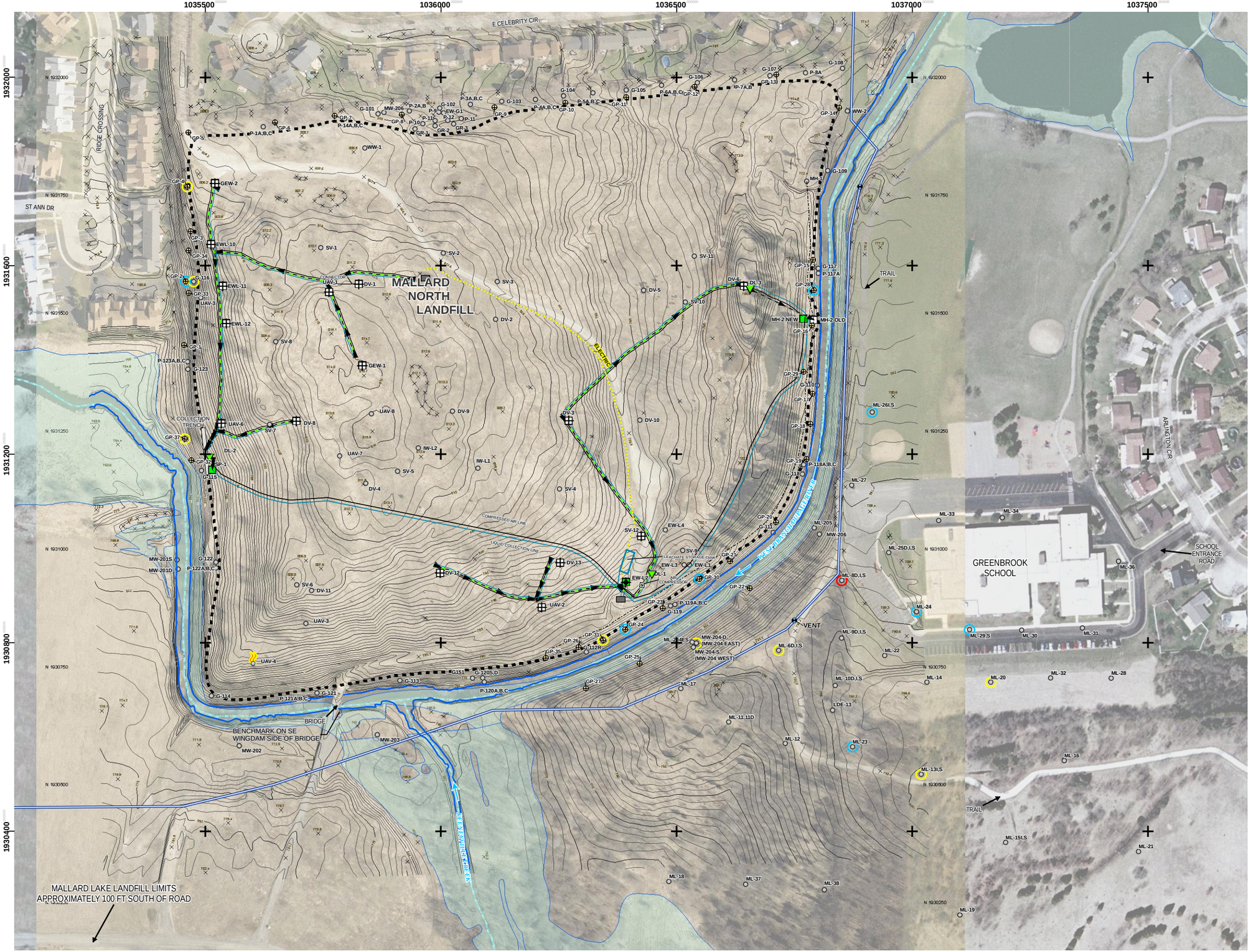
Date:	4/22/2010						
Location	**Time**	**Cumulative Cycles**	**Air Pressure (psi)**	**Exhaust Air Valve (% Open)**	**Depth to Liquid (ft. BTOC)**	**Water Level Elevation**	**Comments (Pump cleaned, inlet elev. change, etc.)**
EWL-2 (2)	9:30 AM	536,461	75	50	5.76	777.47	Pumping
MH-2 (3)	9:40 AM	601,244	75	100	2.85	772.09	pumping
SP-1 (4)	9:50 AM	94,199	75	100	3.67	772.84	Pumping

Estimated Flow to Leachate Tank:

Time	**Measured Depth (inches)**	**Gallons**	**Delta Gallons**	**Delta Time (minutes)**	**Estimated Flow (gpm)**	**Comments**
9:00 AM	10.2	1,403				
			1,052	120	8.8	
11:00 AM	16.2	2,455				

Notes:

1	Use tank stick and strapping table for gallon estimate			
2	Top of ball valve elevation at EWL-2 =	783.23		
3	Top of concrete at New MH-2 =,	774.94	Top of concrete old MH-2=	772.99
4	Top of PVC at SP-1 =	776.51		
5	Top of concrete at MH-1	773.51		



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT ON APRIL 28-29, 2010. THE ML-SERIES PROBE READINGS WERE TAKEN BY AECOM ON APRIL 29, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(APRIL 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: MAY 2010	5/4/2010		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90	18.40		
	7/22/2009	**12.8**	0.00	18.40		LCT pumps started 7/15
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
	4/28/2010	0.0	+0.15	4.81		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	**1.8**	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**79.6**	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**7.5**	0.00	15.50		LCT pumps started 7/15
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	0.40	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	**73.0**	+0.10	NM		LCT pumps started 7/15
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		

NM= not measured
NR = not recorded

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated by: J. Schoephoester, 4/30/10; update checked by S. Inman, 5/3/10

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
				Total System Gallons Pumped		**1,552,529**			**8,529**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid
2. Gallons pumped based on the flowmeter totalizer reading.
3. EWL-2 cycle count reading on 3/24/10 is average of 3/29/10 and 3/22/10.

Created by: J. Schoephoester, 2/1/10
Checked by: N. Braun, 2/3/10

Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10

P:\6809\04\2010 Gas Monitoring\PDF\Liquid Pumping Volumes 4-22-10.xlsx

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10

Southcentral Blower/Flare Sun
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010
Time	8:45 AM	11:35 AM	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM
Blower Inlet Vacuum (in H_2O)	2.8	NR	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	60	NR	42	51	55	60	50	54	65	51	56	38	NR	70
Blower Outlet Pressure (in H_2O)	0.3	NR	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2
Orifice Plate DP (in H_2O)	0.02	NR	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03
Approximate Flow (scfm)	7	NR	5	5	5	5	5	12	7	4	5	5	NR	8
% CH_4	NR	27.5	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2
% CO_2	NR	12.5	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9
% O_2	NR	10.6	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3
% Balance Gas	NR	49.4	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6
Combustion Temperature(^oF)	518	NR	493	661	727	670	771	846	654	530	191	404	465	808
Blower SPD%	30	NR	30	30	30	30	30	30	30	30	30	30	30	30
Blower Hours	134	NR	146	192	207	210	221	238.5	253	297	297	301	321	333
Blower Cycles	10	NR	14	14	14	14	14	14	14	14	14	16	17	19
Blower Amps	NR	NR	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1
Blower RPMs	NR	NR	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093
Air Compressor Pressure (psi)	90	NR	150	160	140	NR	150	140	NR	0	0	160	160	160
Well Field Air Pressure (psi)	75	NR	80	80	80	NR	80	80	NR	0	0	80	79	80
Approx. Leachate Tank Level	NR	NR	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"
Comments			Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81
		Pre-blower:	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:		
		42.6% CH4	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side
		18.7% CO2	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0
		5.2% O2	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5
			Blower RPM-1093							6.6 O2	6.7 O2			5.6
			Two leachate loads	Vac Side	Water present in									37.9
			hauled offsite.	CH4=48%	air valve vault					Ray said a leachate				
				CO2=19.8%	south of compressor					load was hauled out				
				O2=4.0%	building. No air leaks.					on Saturday.				

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10

Southcentral Blower/Flare Sun
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010
Time	9:30 AM	10:23 AM	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.0	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	58	58	50	68	70	82	NR	84	64	NR	75	86	68
Blower Outlet Pressure (in H_2O)	0.3	0.4	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3
Orifice Plate DP (in H_2O)	0.01	0.07	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01
Approximate Flow (scfm)	5	13	9	9	8	11	11	9	9	12	9	6	5
% CH_4	22.1	21.6	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0
% CO_2	9.6	9.0	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5
% O_2	13.0	13.4	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0
% Balance Gas	55.3	56.0	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5
Combustion Temperature(^oF)	1013	518	523	952	933	761	453	770	663	750	807	798	680
Blower SPD%	30	0.3	30	30	30	30	30	30	30	30	30	30	30
Blower Hours	412	452	552	592	630	692.8	37.2	0	14	36.7	77	157	196
Blower Cycles	19	19	19	19	19	20	1	1	1	1	1	41	1
Blower Amps	3.0	3.1	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR
Blower RPMs	1093	1093	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR
Air Compressor Pressure (psi)	160	160	140	150	150	140	140	150	150	140	160	152	145
Well Field Air Pressure (psi)	80	80	75	75	75	80	80	80	80	80	60	65	75
Approx. Leachate Tank Level	NR	11"	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR
Comments	Pre-blower				Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:	
	CH4-39.2%				CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were
	CO2-16.6%				CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower
	O2-7.1%				O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1	
											LO LO 200		Compressor oil
							Blower hours reset	blower down approx					level is OK
							after storm damage	1.3 hrs, gas readings			Pre-blower:		
								after system running			CH_4 31.8		
								for approx 1 hr			CO_2 21.7		
											O_2 2.5		

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
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Updated by: J. Schoephoester, 4/27/10
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Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
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Northwest Blower/Flare Summ
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare	
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.	
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2				
					2.3 O2	2.2 O2	2.2 O2		Blower on		
					23.5 BAL	23.6 BAL	22.2 BAL				
									No flame		
									Sparker on		

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Northwest Blower/Flare Summ
Mallard North Landfill
Hanover Park, Illinois

Date	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010
Time	10:40 AM	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM
Blower Inlet Vacuum (in H_2O)	NR	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	80	76	74	74	70	70	84	NR	72	68	NR	70	72	72
Blower Outlet Pressure (in H_2O)	0.2	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0
Orifice Plate DP (in H_2O)	0.17	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20
Approximate Flow (scfm)	22	22	20	19	20	23	22	24	24	23	25	24	23	24
% CH_4	44.9	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3
% CO_2	23.8	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5
% O_2	3.8	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4
% Balance Gas	27.5	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8
Combustion Temperature(^oF)	202-840	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573
Blower SPD%	40	40	40	40	40	40	40	40	45	45	45	45	45	45
Blower Hours	313	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999
Blower Cycles	14	114	120	120	120	120	120	121	121	121	121	121	22	121
Blower Amps	3.3	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR
Blower RPMs	1468	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR
Air Compressor Pressure (psi)	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA
Well Field Air Pressure (psi)	80	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA
Approx. Leachate Tank Level	29"	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA
Comments	Inlet side	Blower/flare off upon						Pre-blower:			Pre-blower:	HI 1500	*Low value due to	Gas readings
	49.5	arrival. Restarted						CH4=43.0	3 loads today		CH_4 43.6	LO 200	position of thermo-	are pre-blower
	26.2	and kept shutting down						CO2=25.4			CO_2 25.1	HI HI 1900	couple.	values.
	2.0	when flare temp reached						O2=2.8			O_2 2.3	LO LO 200		
	22.3	1100F (after 3 min).											Pre-blower:	
													CH_4 43.6	
		Changed preset for											CO_2 25.6	
		normal operating											O_2 2.3	
		temp range to												
		200-1500F.												
		Blower/flare stayed												
		running.												

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(^oF)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	-3.1	-4.4	-4.4
Orifice Plate DP (in H_2O)	1.30	1.50	NR	1.60	1.80	1.80
% CH_4	59.1		58.3		51.3	
% CO_2	28.0		28.7		27.2	
% O_2	0.0		0.0		0.4	
% Balance Gas	12.9		13.0		21.1	
Gas Temperature(^oF)	NR		NR		82	
Valve Turns Open	5	6.5	6.5	9.5	8	10
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4	
Well Side Pressure (in H_2O)	-2.4	-1.0	NR	NC	-1.25	NC
Orifice Plate DP (in H_2O)	1.20	0.50	NR	NC	0.50	NC
% CH_4	29.4		34.9		35.2	
% CO_2	23.2		24.2		24.0	
% O_2	0.4		1.8		0.4	
% Balance Gas	47.0		39.1		40.4	
Gas Temperature(^oF)	NR		NR		66	
Valve Turns Open	1	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		19.49	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^oF)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4	
Well Side Pressure (in H_2O)	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.02
% CH_4	18.2		17.3	
% CO_2	16.2		16.8	
% O_2	3.6		3.4	
% Balance Gas	62.0		62.5	
Gas Temperature(^oF)	NR		74	
Valve Turns Open	4	4	4	2
Liquid Level (ft BTOC)	NR		16.4	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(^oF)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010		3/31/2010		4/2/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-3.7		-4.4	
Well Side Pressure (in H_2O)	-3.7	0.2	-3.7	NR	-3.8	NR	-3.3	-3.4	-4.4	NC
Orifice Plate DP (in H_2O)	0.20	NR	0.50	NR	0.60	NR	0.60	0.65	0.50	NC
% CH_4	11.3		12.1		12.1		11.2		12.2	
% CO_2	12.2		13.3		12.8		14.3		14.0	
% O_2	8.0		6.4		7.2		6.4		6.3	
% Balance Gas	68.5		68.2		67.9		68.1		67.5	
Gas Temperature(^oF)	NR		70		60		NR		58	
Valve Turns Open	7	7	7	7	7	7	6.5	7	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		16.1	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(^oF)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4	
Well Side Pressure (in H_2O)	-3.5	NC	-1.0	-0.8
Orifice Plate DP (in H_2O)	NR	NC	0.20	0.15
% CH_4	21.1		22.9	
% CO_2	15.8		14.4	
% O_2	8.6		10.3	
% Balance Gas	54.5		52.4	
Gas Temperature(^oF)	NR		64	
Valve Turns Open	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		12.8	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(^oF)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	1.50	1.80	NR	1.60	2.00	2.00
% CH_4	67.2		59.3		62.2	
% CO_2	31.8		31.0		31.8	
% O_2	0.0		0.0		0.3	
% Balance Gas	1.0		9.7		5.7	
Gas Temperature(^oF)	NR		NR		62	
Valve Turns Open	5%	6.5	6.5	8.5	8.5	10
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^oF)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4	
Well Side Pressure (in H_2O)	-3.7	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.15	0.20	0.05	0.08
% CH_4	47.9		48.9	
% CO_2	26.0		26.7	
% O_2	1.3		1.4	
% Balance Gas	24.8		23.0	
Gas Temperature(^oF)	NR		68	
Valve Turns Open	6	7	7.5	10
Liquid Level (ft BTOC)	NR		17.3	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(^oF)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-4		-4.4	
Well Side Pressure (in H_2O)	-3.8	-3.8	NR	NR	-4.4	NC
Orifice Plate DP (in H_2O)	2.30	2.40	NR	2.70	3.00	NC
% CH_4	55.2		56.0		48.7	
% CO_2	30.9		31.8		29.5	
% O_2	0.0		0.0		0.6	
% Balance Gas	13.9		12.2		21.2	
Gas Temperature(^oF)	NR		NR		56	
Valve Turns Open	3.5	4.5	4.5	6.5	6.5	NC
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(^oF)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-4.4	
Well Side Pressure (in H_2O)	NR	NC	-0.8	-0.9
Orifice Plate DP (in H_2O)	NR	NC	0.65	0.85
% CH_4	28.2		34.4	
% CO_2	14.5		16.5	
% O_2	9.4		8.8	
% Balance Gas	47.9		40.3	
Gas Temperature(^oF)	NR		74	
Valve Turns Open	1.75	NC	1	1.25
Liquid Level (ft BTOC)	NR		12.8	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC
% CH_4	75.5		NR		70.1		79.9		71.6	
% CO_2	24.5		NR		28.2		25.9		28.0	
% O_2	0		NR		0		0		0.4	
% Balance Gas	0.0		NR		1.7		0		0.0	
Gas Temperature(^oF)	34		38		NR		NR		32	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.7		+0.2		NR		NR	
Well Side Pressure (in H_2O)	-2.6	-2.7	-2.7	NR	+0.2	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.50	0.65	0.20	NR	0.00	NR	NR	NR	NR	NR
% CH_4	69.1		72.3		77.7		NR		73.1	
% CO_2	22.9		23.2		22.3		NR		22.3	
% O_2	1.5		0.1		0.0		NR		0.0	
% Balance Gas	6.5		4.5		0.0		NR		4.6	
Gas Temperature(^oF)	40		48		52		NR		NR	
Valve Turns Open	1	1.75	NR	NR	1.75	NC	1.75	NC	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010	
	I	P
Header Side Pressure[1] (in H_2O)	-2.4	
Well Side Pressure (in H_2O)	-2.4	NC
Orifice Plate DP (in H_2O)	0.70	NC
% CH_4	69.1	
% CO_2	22.1	
% O_2	0.1	
% Balance Gas	8.7	
Gas Temperature(^oF)	50	
Valve Turns Open	10	NC
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	61.3		NR		NR		65.7		58.2	
% CO_2	30.4		NR		NR		34.9		35.2	
% O_2	2.5		NR		NR		0		2.5	
% Balance Gas	5.8		NR		NR		0		4.1	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.8		+0.04		NR		NR	
Well Side Pressure (in H_2O)	0.0	-0.6	-2.8	NR	+0.01	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.05	0.01	NR	0.00	NR	NR	NR	NR	NR
% CH_4	64.4		0.2		9.8		NR		0.5	
% CO_2	33.7		0.2		4.4		NR		0.6	
% O_2	0.5		21.2		18.0		NR		19.2	
% Balance Gas	1.4		99.6		67.8		NR		79.7	
Gas Temperature(^oF)	36		50		46		NR		NR	
Valve Turns Open	0	0.5	NR	NR	0.5	NC	0.5	NC	0.25	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010	
	I	P
Header Side Pressure[1] (in H_2O)	-2.4	
Well Side Pressure (in H_2O)	-2.4	NC
Orifice Plate DP (in H_2O)	0.00	NC
% CH_4	4.0	
% CO_2	2.5	
% O_2	18.8	
% Balance Gas	74.7	
Gas Temperature(^oF)	58	
Valve Turns Open	0.125	NC
Liquid Level (ft BTOC)	NR	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR
% CH_4	36.3		59.3		20.3		38.1		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7	
Gas Temperature(^oF)	44		44		42		42		49	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6	
Well Side Pressure (in H_2O)	-1.0	-0.8	-0.7	NC	NR	NR	-0.1	-0.5
Orifice Plate DP (in H_2O)	0.70	0.60	0.50	NC	NR	NR	0.10	0.30
% CH_4	31.9		43.2		43.5		66.3	
% CO_2	20.2		22.1		22.3		28.7	
% O_2	4.3		3.0		4.0		1.1	
% Balance Gas	43.6		31.7		30.2		3.9	
Gas Temperature(^oF)	48		NR		NR		50	
Valve Turns Open	2	1.75	1.75	NC	0.75	0.5	1	1.5
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR
% CH_4	56.5		63.4		52.0		51.9		43.3	
% CO_2	19.1		17.6		19.0		17.9		14.1	
% O_2	5.1		4		6.1		4.7		8.7	
% Balance Gas	19.3		15		22.9		25.5		42.6	
Gas Temperature(^oF)	34		36		24		38		52	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6	
Well Side Pressure (in H_2O)	-0.2	-0.2	-2.8	-2.8	NR	NR	-2.2	-1.3
Orifice Plate DP (in H_2O)	0.01	0.01	0.15	0.10	NR	NR	0.02	0.01
% CH_4	19.8		32.6		0.2		27.2	
% CO_2	5.8		8.7		0.6		7.3	
% O_2	15.6		11.4		19.0		13.5	
% Balance Gas	58.8		47.3		80.2		52.0	
Gas Temperature(^oF)	50		NR		NR		62	
Valve Turns Open	3	2.5	2.5	2	2	0.5	1	0.75
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC
% CH_4	9.0		NR		2.4		NR		3.4	
% CO_2	1.9		NR		1.1		NR		2.0	
% O_2	18.9		NR		19.4		NR		16.7	
% Balance Gas	70.2		NR		77.1		NR		77.9	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		NR		-0.7		NR		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	NR	NR	0.0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	0.00	NR	NR	NR	0.00	NC
% CH_4	9.1		11.2		0.4		NR		2.2	
% CO_2	3.6		1.3		0.2		NR		1.0	
% O_2	14.8		18.4		20.5		NR		20.1	
% Balance Gas	72.5		87.5		78.9		NR		76.7	
Gas Temperature(^oF)	36		45		44		NR		70	
Valve Turns Open	0	NC	NR	NR	CL	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		5.8	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	75.5		NR		68.1		48.2		17.0	
% CO_2	23.8		NR		27.4		17.6		6.7	
% O_2	0.4		NR		0		5.2		13.2	
% Balance Gas	0.3		NR		4.5		29		63.1	
Gas Temperature(^oF)	32		NR		NR		30		28	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		-2.8		+0.15		NR		-2.4	
Well Side Pressure (in H_2O)	0.0	NC	-0.02	NR	+0.03	-0.01	NR	NR	0.0	-0.80
Orifice Plate DP (in H_2O)	0.00	NC	0.02	NR	0.00	0.005	NR	NR	0.15	0.05
% CH_4	29.8		41.7		76.5		NR		58.3	
% CO_2	11.9		13.4		22.9		NR		19.3	
% O_2	9.1		9.4		0.1		NR		4.1	
% Balance Gas	49.2		35.5		0.5		NR		18.3	
Gas Temperature(^oF)	34		50		44		NR		56	
Valve Turns Open	0	NC	NR	NR	CL	0.125	0.125	NC	0	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8
% O_2	19.4		0		16.7		0.0		0.3	0.3
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4
Gas Temperature(^oF)	36		38		24		36		54	54
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		NR		NR		-2.6	
Well Side Pressure (in H_2O)	+0.07	-0.2	NR	NR	NR	NR	0.0	0.0
Orifice Plate DP (in H_2O)	0.00	0.01	NR	NR	NR	NR	0.01	0.00
% CH_4	78.9		NR		62.2		1.8	
% CO_2	13.8		NR		4.3		2.0	
% O_2	1.5		NR		0.8		18.4	
% Balance Gas	5.8		NR		32.7		77.8	
Gas Temperature(^oF)	48		NR		NR		64	
Valve Turns Open	0.25	0.375	0	NC	0	0.125	0.125	0
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GAS VENT MONITORING
MALLARD NORTH LANDFILL

Date:	5/11/2010				
Person(s) sampling	Scott Inman		Weather Conditions:	steady rain and cloudy, wind from east 5-7mph	
Ambient Temperature:	45-50	°F	Ground Conditions:	wet/saturated	
Barometric Pressure:	28.85	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #: GM08330
Trend in barometric pressure:	steady		Date Last Calibrated:	5/11/2010	
Notes:					

Gas Vent	$\%CH_4$	$\%CO_2$	$\%O_2$	Balance	Pressure, (in.H_20)	Comments
IWL-1	82.0	12.2	0.1	5.7	(1)	Noticeable positive pressure
IWL-2	61.3	23.9	0.0	14.8	(1)	no, noticeable pressure
SV-5	1.1	6.2	13.1	79.6	(1)	no, noticeable pressure
SV-10	72.5	27.5	0.0	0.0	(1)	no, noticeable pressure
DV-2	48.3	17.3	0.0	34.4	(1)	no, noticeable pressure
DV-4	70.4	29.5	0.0	0.1	(1)	no, noticeable pressure
DV-10	7.5	8.7	12.6	71.2	(1)	no, noticeable pressure
UAV-3	64.2	35.7	0.0	0.1	(1)	no, noticeable pressure
UAV-4	61.3	38.7	0.0	0.0	(1)	no, noticeable pressure
UAV-7	65.3	34.4	0.0	0.3	(1)	no, noticeable pressure
UAV-8	64.0	36.0	0.0	0.0	(1)	no, noticeable pressure

(1) Pressure not monitored, pressures will be recorded the week of May 17th.

Mallard North Landfill Status Meeting
May 27, 2010

Completed Activities/Activities In-Progress

- Presentation of proposed 2010 MNL activities to District Board of Commissioners on May 11, 2010.
- Weekly LFGCS monitoring on May 26 and 27, 2010.
- Continued negotiations between District and Village of Hanover Park regarding leachate forcemain hookup
- Hooked up probes GP-4C, BP-30B, GP-31B and GP-37A to blower system via hoses on May 19, 2010.
- Replacement wells installed at G-116 and G-120D
- Continued operation/balancing and fine-tuning of LFGCS
- Continued operation/balancing of leachate collection system

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary
- First round of groundwater sampling is scheduled for the week of June 14th.
- Preparing QAPP
- Preparation of Ecological Risk Assessment (Steps 1 and 2)
- Completion of road repairs anticipated in next several weeks.
- Manhole MH-2 area investigation

Attached Data

- Table - Gas Probes With Significant Methane Detections
- Table – Liquid Pumping Volumes and Rates

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NR		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NR		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90	18.40		
	7/22/2009	**12.8**	0.00	18.40		LCT pumps started 7/15
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NR		Increased vacuum
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
	4/28/2010	0.0	+0.15	4.81		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	**1.8**	-3.00	18.54		LCT pumps started 7/15
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**79.6**	+0.20	16.57		LCT pumps started 7/15
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**7.5**	0.00	15.50		LCT pumps started 7/15
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NR		Increased vacuum
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	0.40	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	**73.0**	+0.10	NM		LCT pumps started 7/15
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		

NM= not measured

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated by: J. Schoephoester, 5/25/10

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
					Total System Gallons Pumped	**1,349,954**			**8,793**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Created by: J. Schoephoester, 2/1/10 Updated by: J. Schoephoester, 5/25/10
Checked by: N. Braun, 2/3/10

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: J. Roelke
Gas Meter: GEM 2000
Serial #: GM11209
Date Calibrated: 5/26/2010

Pressure Device: Magnahelics
Water Level Device: Water Level Indicator
Ground Conditions: Moist

Date: 5/26/2010
Weather: Clear
Temp and Pressure: 75-85°F; 30.01" Hg, steady

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.00	0.0	0.1	20.2	79.7	19.70	
GP-33A	0.00	0.0	0.0	20.4	79.6	13.93	
GP-33B	0.00	0.0	0.0	20.4	79.6	13.14	
G-116	-5.00	12.1	3.4	16.4	68.1	NA	
GP-2A	0.00	0.0	0.0	20.4	79.6	14.23	
GP-2B	0.00	0.0	0.0	20.5	79.5	13.55	
GP-34A	0.00	0.0	0.1	20.4	79.5	11.10	
GP-34B	0.00	0.0	0.0	20.5	79.5	15.34	
GP-3	0.00	0.0	0.4	19.9	79.7	11.92	
GP-4A	0.00	0.0	0.3	20.2	79.5	11.72	
GP-4B	0.00	0.0	0.4	20.1	79.5	9.81	
GP-4C	-6.00	0.0	0.0	20.6	79.4	17.91	
GP-5	0.00	0.0	0.0	20.5	79.5	14.71	
P-1A	0.00	0.0	0.0	20.7	79.3	16.08	
GP-6	0.00	0.0	0.0	20.8	79.2	9.48	
GP-7A	0.00	0.0	0.0	20.9	79.1	17.91	Sample port hits protective casing cover
GP-7B	0.00	0.0	2.3	16.1	81.6	11.09	Sample port hits protective casing cover
GP-8A	0.00	0.0	0.0	20.6	79.4	7.33	
GP-8B	0.00	0.0	0.0	20.8	79.2	13.08	
P-3A	0.00	0.0	0.0	20.8	79.2	6.18	
GP-9A	0.00	0.0	0.0	20.9	79.1	6.58	
GP-9B	0.00	0.0	0.0	21.0	79.0	18.87	
P-4C	0.00	0.0	0.6	19.8	79.6	6.15	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.00	0.0	0.8	19.9	79.3	8.06	
GP-10B	0.00	0.0	0.0	20.9	79.1	9.61	
GP-10C	0.00	0.0	0.0	20.9	79.1	10.82	
P-5A	0.00	0.0	0.0	20.9	79.1	8.28	
GP-11A	0.00	0.0	0.0	20.9	79.1	7.88	
GP-11B	0.00	0.0	0.0	20.9	79.1	9.18	
P-6C	0.00	0.0	0.0	20.9	79.1	6.14	
GP-12	0.00	0.0	0.0	20.9	79.1	5.06	
P-7A	0.00	0.0	0.0	20.9	79.1	4.64	Broken port
P-7B	0.00	0.0	0.0	20.9	79.1	5.14	
GP-13	0.00	0.0	0.0	20.9	79.1	6.04	
GP-14	0.00	0.0	0.0	20.9	79.1	5.08	
G-109	0.00	0.0	0.0	20.8	79.2	6.24	
GP-15A	+0.6	0.0	0.1	20.4	79.5	4.89	
GP-15B	+0.4	0.0	0.0	20.8	79.2	6.88	
GP-28A	0.00	0.0	0.0	20.8	79.2	8.44	
GP-28B	0.00	0.0	0.0	20.9	79.1	4.24	
GP-28C	+0.4	0.0	0.0	20.8	79.2	4.31	
GP-16A	0.00	0.0	0.0	20.7	79.3	5.39	
GP-16B	+0.5	0.0	0.0	20.7	79.3	3.08	
GP-16C	+0.2	0.0	0.0	20.7	79.3	7.11	
GP-29A	+0.5	0.0	0.0	20.7	79.3	5.06	
GP-29B	+0.2	0.0	0.6	20.7	78.7	8.96	
G-110	0.00	0.0	0.0	20.7	79.3	8.63	
GP-17	+0.4	0.0	0.0	20.7	79.3	4.52	
GP-18	0.00	0.0	0.0	20.7	79.3	7.86	
GP-19	0.00	0.0	0.0	20.7	79.3	11.35	
GP-20	0.00	0.0	0.0	20.7	79.3	4.58	
GP-21A	+0.2	0.0	0.0	20.7	79.3	6.64	
GP-21B	+0.2	0.0	0.0	20.7	79.3	10.08	
GP-22A	0.00	0.0	0.0	20.7	79.3	5.02	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.00	0.0	0.0	20.7	79.3	18.16	
GP-30A	0.00	0.0	0.0	20.1	79.9	5.17	
GP-30B	-3.7	0.5	0.0	20.0	79.5	7.18	Induced vacuum
MW-204 East	0.00	52.5	7.8	3.8	35.9	18.47	
MW-204 West	0.00	0.0	0.0	20.6	79.4	24.78	
GP-23A	-4.2	0.0	0.5	19.7	79.8	4.52	
GP-23B	0.00	0.0	0.0	20.1	79.9	10.44	
GP-24A	0.00	0.0	0.0	20.1	79.9	5.54	
GP-24B	0.00	0.0	0.0	20.1	79.9	14.76	
GP-25A	+0.1	0.0	0.3	20.3	79.4	4.73	
GP-25B	+0.1	0.0	0.0	20.7	79.3	16.51	
GP-31A	0.00	0.0	0.0	21.1	78.9	7.41	
GP-31B	-3.7	6.2	0.2	18.9	74.7	14.49	Induced vacuum
GP-26A	0.00	0.0	0.0	20.2	79.8	7.74	
GP-26B	0.00	0.0	0.2	19.9	79.9	16.14	
GP-27A	+0.2	0.0	0.0	20.7	79.3	3.51	
GP-27B	0.00	0.0	0.0	20.7	79.3	19.27	
GP-35A	0.00	0.0	0.2	20.1	79.7	6.49	
GP-35B	0.00	0.0	0.1	20.1	79.8	9.91	
G-113	+0.5	0.0	3.1	18.2	78.7	NA	
G-121	0.00	0.0	1.6	16.0	82.4	NA	
GP-32A	0.00	0.0	0.0	20.2	79.8	11.45	
GP-32B	0.00	0.0	0.0	20.1	79.9	12.38	
GP-37A	-5.0	4.1	1.7	18.8	75.4	12.34	Induced vacuum
GP-37B	0.00	0.0	0.0	20.3	79.7	12.96	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: E. Watruba, 6/1/10
Checked by: N. Braun, 6/1/10

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Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NR		
	5/26/2010	0.0	0.00	14.23		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NR		
	5/26/2010	0.0	0.00	13.55		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NR		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
	4/28/2010	**0**	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2**	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**6.2**	-3.70	14.49		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1**	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0	13.93		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NR		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	0.40	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East	2/9/2009	**30.3**	0.00	21.49	22.02	
(Shallow)	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		

NM= not measured

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
	6/1/2010	NR	NA	2,357,977	15,814	589,179	NA	NA	3,163	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
				Total System Gallons Pumped		**1,964,915**			**8,830**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Created by: J. Schoephoester, 2/1/10 Updated by: J. Schoephoester, 5/25/10 Updated by: N. Braun, 6/1/10
Checked by: N. Braun, 2/3/10 Checked by: E. Watruba, 6/1/10

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/4

Date: 5/27/2010

Gas Extraction Wells

Location	Header Side Pressure	Well Side Pressure		Orifice Plate DP		Approx. Post-Adjustment Flow Rate (cfm)	% CH_4	%CO_2	%O_2	%Balance	Temperature (^oF)	Valve Turns Open		Liquid Level (ft BTOC)	Depth to Top of Screen (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	-6.0	-5.8	NR	2.60	NC	5.0	50.7	26.5	0.0	22.8	64	10	NC	NR	
DV-8	-6.0	-1.5	NR	0.40	NC	2.0	37.8	25.2	0.0	37.0	70	0.5	NC	19.43	
EWL-10	-6.0	-6.0	-5.0	0.10	0.08	<1	24.1	19.5	1.6	54.8	76	2	NR	16.62	
EWL-11	-6.0	-6.0	NR	0.50	NC	2.2	12.8	15.3	5.3	66.6	80	7	NC	15.05	
EWL-12	-6.0	-1.2	NR	0.15	NC	1.2	25.2	17.7	7.7	49.4	78	0.5	NC	NR	
GEW-1	-6.0	-5.4	NR	2.80	NC	5.2	56.4	31.6	0.0	12.0	62	10	NC	17.54	
GEW-2	-6.0	-6.0	NR	0.02	NC	<1	56.1	29.4	0.0	14.5	74	10	NC	NR	
UAV-1	-6.0	-5.4	NR	3.80	NC	6.0	51.9	29.9	0.4	17.8	78	6.5	NC	NR	
UAV-6	-6.0	-5.6	NR	5.00	NC	6.5	21.1	12.9	10.5	55.5	72	1.25	NC	11.95	
SOUTHCENTRAL WELLS															
DV-3	-2.6	-2.6	NR	0.70	NC	2.5	70.6	22.6	0.0	6.8	68	12	NC	NR	
DV-6	-2.6	-1.8	-0.25	0.02	0.01	<1	0.4	0.2	20.2	79.2	76	0.125	0	NR	
DV-12	-2.6	-0.5	NR	0.35	NC	2.0	55.2	25.1	2.5	17.2	72	1.5	NC	NR	
DV-13	-2.6	-2.5	-0.5	0.40	0.03	<1	0.3	0.3	20.1	79.3	88	0.75	0.625	NR	
EWL-2	-2.6	0.0	NR	0.00	NC	0.0	7.0	2.2	18.7	72.1	72	0	NC	6.79	
SV-12	-2.60	-0.04	NR	0.01	NC	<1	47.8	17.7	6.5	28.0	76	0.125	NC	NR	
UAV-2	-2.6	+0.02	-0.5	0.01	0.02	<1	77.4	20.4	0.1	2.1	82	0	NC	NR	

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

Location	Well Pressure	% CH_4	%CO_2	%O_2	%Balance	Flame Present (yes/no)	Blower Operating (yes/no)	Sparking Unit Operating (yes/no)	Comments
	I								
UAV-4	NR	NR	NR	NR	NR	NR	NR	NR	Blower was not operating - will be checked.

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(^oF)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	-3.1	-4.4	-4.4	-5.8	NR
Orifice Plate DP (in H_2O)	1.30	1.50	NR	1.60	1.80	1.80	2.60	NC
% CH_4	59.1		58.3		51.3		50.7	
% CO_2	28.0		28.7		27.2		26.5	
% O_2	0.0		0.0		0.4		0.0	
% Balance Gas	12.9		13.0		21.1		22.8	
Gas Temperature(^oF)	NR		NR		82		64	
Valve Turns Open	5	6.5	6.5	9.5	8	10	10	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6	
Well Side Pressure (in H_2O)	-2.4	-1.0	NR	NC	-1.25	NC	-1.50	NR
Orifice Plate DP (in H_2O)	1.20	0.50	NR	NC	0.50	NC	0.40	NC
% CH_4	29.4		34.9		35.2		37.8	
% CO_2	23.2		24.2		24.0		25.2	
% O_2	0.4		1.8		0.4		0.0	
% Balance Gas	47.0		39.1		40.4		37.0	
Gas Temperature(^oF)	NR		NR		66		70	
Valve Turns Open	1	0.5	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		19.49		19.43	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^oF)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	-4.4	-4.4	-6.0	-5.0
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.02	0.10	0.08
% CH_4	18.2		17.3		24.1	
% CO_2	16.2		16.8		19.5	
% O_2	3.6		3.4		1.6	
% Balance Gas	62.0		62.5		54.8	
Gas Temperature(^oF)	NR		74		76	
Valve Turns Open	4	4	4	2	2	NR
Liquid Level (ft BTOC)	NR		16.4		16.62	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(^oF)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010		3/31/2010		4/2/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	0.2	-3.7	NR	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NR
Orifice Plate DP (in H_2O)	0.20	NR	0.50	NR	0.60	NR	0.60	0.65	0.50	NC	0.50	NC
% CH_4	11.3		12.1		12.1		11.2		12.2		12.8	
% CO_2	12.2		13.3		12.8		14.3		14.0		15.3	
% O_2	8.0		6.4		7.2		6.4		6.3		5.3	
% Balance Gas	68.5		68.2		67.9		68.1		67.5		66.6	
Gas Temperature(^oF)	NR		70		60		NR		58		80	
Valve Turns Open	7	7	7	7	7	7	6.5	7	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		16.1		15.05	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(^oF)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.5	NC	-1.0	-0.8	-1.2	NR
Orifice Plate DP (in H_2O)	NR	NC	0.20	0.15	0.15	NC
% CH_4	21.1		22.9		25.2	
% CO_2	15.8		14.4		17.7	
% O_2	8.6		10.3		7.7	
% Balance Gas	54.5		52.4		49.4	
Gas Temperature(^oF)	NR		64		78	
Valve Turns Open	0.25	NR	0.75	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		12.8		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(^oF)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	NR	-4.4	-4.4	-5.4	NR
Orifice Plate DP (in H_2O)	1.50	1.80	NR	1.60	2.00	2.00	2.80	NC
% CH_4	67.2		59.3		62.2		56.4	
% CO_2	31.8		31.0		31.8		31.6	
% O_2	0.0		0.0		0.3		0.0	
% Balance Gas	1.0		9.7		5.7		12.0	
Gas Temperature(^oF)	NR		NR		62		62	
Valve Turns Open	5%	6.5	6.5	8.5	8.5	10	10.0	NC
Liquid Level (ft BTOC)	NR		NR		NR		17.54	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^oF)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	NR	-4.4	-4.4	-6.0	NR
Orifice Plate DP (in H_2O)	0.15	0.20	0.05	0.08	0.02	NC
% CH_4	47.9		48.9		56.1	
% CO_2	26.0		26.7		29.4	
% O_2	1.3		1.4		0.0	
% Balance Gas	24.8		23.0		14.5	
Gas Temperature(^oF)	NR		68		74	
Valve Turns Open	6	7	7.5	10	10	NC
Liquid Level (ft BTOC)	NR		17.3		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(^oF)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-4		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.8	-3.8	NR	NR	-4.4	NC	-5.4	NR
Orifice Plate DP (in H_2O)	2.30	2.40	NR	2.70	3.00	NC	3.80	NC
% CH_4	55.2		56.0		48.7		51.9	
% CO_2	30.9		31.8		29.5		29.9	
% O_2	0.0		0.0		0.6		0.4	
% Balance Gas	13.9		12.2		21.2		17.8	
Gas Temperature(^oF)	NR		NR		56		78	
Valve Turns Open	3.5	4.5	4.5	6.5	6.5	NC	6.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(^oF)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-4.4		-6.0	
Well Side Pressure (in H_2O)	NR	NC	-0.8	-0.9	-5.6	NR
Orifice Plate DP (in H_2O)	NR	NC	0.65	0.85	5.00	NC
% CH_4	28.2		34.4		21.1	
% CO_2	14.5		16.5		12.9	
% O_2	9.4		8.8		10.5	
% Balance Gas	47.9		40.3		55.5	
Gas Temperature(^oF)	NR		74		72	
Valve Turns Open	1.75	NC	1	1.25	1.25	NC
Liquid Level (ft BTOC)	NR		12.8		11.95	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC
% CH_4	75.5		NR		70.1		79.9		71.6	
% CO_2	24.5		NR		28.2		25.9		28.0	
% O_2	0		NR		0		0		0.4	
% Balance Gas	0.0		NR		1.7		0		0.0	
Gas Temperature(^oF)	34		38		NR		NR		32	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.7		+0.2		NR		NR	
Well Side Pressure (in H_2O)	-2.6	-2.7	-2.7	NR	+0.2	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.50	0.65	0.20	NR	0.00	NR	NR	NR	NR	NR
% CH_4	69.1		72.3		77.7		NR		73.1	
% CO_2	22.9		23.2		22.3		NR		22.3	
% O_2	1.5		0.1		0.0		NR		0.0	
% Balance Gas	6.5		4.5		0.0		NR		4.6	
Gas Temperature(^oF)	40		48		52		NR		NR	
Valve Turns Open	1	1.75	NR	NR	1.75	NC	1.75	NC	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6	
Well Side Pressure (in H_2O)	-2.4	NC	-2.6	NC
Orifice Plate DP (in H_2O)	0.70	NC	0.70	NC
% CH_4	69.1		70.6	
% CO_2	22.1		22.6	
% O_2	0.1		0.0	
% Balance Gas	8.7		6.8	
Gas Temperature(^oF)	50		68	
Valve Turns Open	10	NC	12	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	61.3		NR		NR		65.7		58.2	
% CO_2	30.4		NR		NR		34.9		35.2	
% O_2	2.5		NR		NR		0		2.5	
% Balance Gas	5.8		NR		NR		0		4.1	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.8		+0.04		NR		NR	
Well Side Pressure (in H_2O)	0.0	-0.6	-2.8	NR	+0.01	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.05	0.01	NR	0.00	NR	NR	NR	NR	NR
% CH_4	64.4		0.2		9.8		NR		0.5	
% CO_2	33.7		0.2		4.4		NR		0.6	
% O_2	0.5		21.2		18.0		NR		19.2	
% Balance Gas	1.4		99.6		67.8		NR		79.7	
Gas Temperature(^oF)	36		50		46		NR		NR	
Valve Turns Open	0	0.5	NR	NR	0.5	NC	0.5	NC	0.25	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6	
Well Side Pressure (in H_2O)	-2.4	NC	-1.8	-0.3
Orifice Plate DP (in H_2O)	0.00	NC	0.02	0.01
% CH_4	4.0		0.4	
% CO_2	2.5		0.2	
% O_2	18.8		20.2	
% Balance Gas	74.7		79.2	
Gas Temperature(^oF)	58		76	
Valve Turns Open	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR
% CH_4	36.3		59.3		20.3		38.1		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7	
Gas Temperature(^oF)	44		44		42		42		49	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-1.0	-0.8	-0.7	NC	NR	NR	-0.1	-0.5	-0.5	NR
Orifice Plate DP (in H_2O)	0.70	0.60	0.50	NC	NR	NR	0.10	0.30	0.35	NC
% CH_4	31.9		43.2		43.5		66.3		55.2	
% CO_2	20.2		22.1		22.3		28.7		25.1	
% O_2	4.3		3.0		4.0		1.1		2.5	
% Balance Gas	43.6		31.7		30.2		3.9		17.2	
Gas Temperature(^oF)	48		NR		NR		50		72	
Valve Turns Open	2	1.75	1.75	NC	0.75	0.5	1	1.5	1.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR
% CH_4	56.5		63.4		52.0		51.9		43.3	
% CO_2	19.1		17.6		19.0		17.9		14.1	
% O_2	5.1		4		6.1		4.7		8.7	
% Balance Gas	19.3		15		22.9		25.5		42.6	
Gas Temperature(^oF)	34		36		24		38		52	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-0.2	-0.2	-2.8	-2.8	NR	NR	-2.2	-1.3	-2.5	-0.5
Orifice Plate DP (in H_2O)	0.01	0.01	0.15	0.10	NR	NR	0.02	0.01	0.40	0.03
% CH_4	19.8		32.6		0.2		27.2		0.3	
% CO_2	5.8		8.7		0.6		7.3		0.3	
% O_2	15.6		11.4		19.0		13.5		20.1	
% Balance Gas	58.8		47.3		80.2		52.0		79.3	
Gas Temperature(^oF)	50		NR		NR		62		88	
Valve Turns Open	3	2.5	2.5	2	2	0.5	1	0.75	0.75	0.625
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC
% CH_4	9.0		NR		2.4		NR		3.4	
% CO_2	1.9		NR		1.1		NR		2.0	
% O_2	18.9		NR		19.4		NR		16.7	
% Balance Gas	70.2		NR		77.1		NR		77.9	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		NR		-0.7		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	NR	NR	0.0	NR	NR	NR	0.0	NC	0.0	NR
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	0.00	NR	NR	NR	0.00	NC	0.00	NC
% CH_4	9.1		11.2		0.4		NR		2.2		7.0	
% CO_2	3.6		1.3		0.2		NR		1.0		2.2	
% O_2	14.8		18.4		20.5		NR		20.1		18.7	
% Balance Gas	72.5		87.5		78.9		NR		76.7		72.1	
Gas Temperature(^oF)	36		45		44		NR		70		72	
Valve Turns Open	0	NC	NR	NR	CL	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		5.8		6.79	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	75.5		NR		68.1		48.2		17.0	
% CO_2	23.8		NR		27.4		17.6		6.7	
% O_2	0.4		NR		0		5.2		13.2	
% Balance Gas	0.3		NR		4.5		29		63.1	
Gas Temperature(^oF)	32		NR		NR		30		28	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		-2.8		+0.15		NR		-2.4		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	-0.02	NR	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NR
Orifice Plate DP (in H_2O)	0.00	NC	0.02	NR	0.00	0.005	NR	NR	0.15	0.05	0.01	NR
% CH_4	29.8		41.7		76.5		NR		58.3		47.8	
% CO_2	11.9		13.4		22.9		NR		19.3		17.7	
% O_2	9.1		9.4		0.1		NR		4.1		6.5	
% Balance Gas	49.2		35.5		0.5		NR		18.3		28.0	
Gas Temperature(^oF)	34		50		44		NR		56		76	
Valve Turns Open	0	NC	NR	NR	CL	0.125	0.125	NC	0	0.125	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8
% O_2	19.4		0		16.7		0.0		0.3	0.3
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4
Gas Temperature(^oF)	36		38		24		36		54	54
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		NR		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	+0.07	-0.2	NR	NR	NR	NR	0.0	0.0	0.02	-0.5
Orifice Plate DP (in H_2O)	0.00	0.01	NR	NR	NR	NR	0.01	0.00	0.01	0.02
% CH_4	78.9		NR		62.2		1.8		77.4	
% CO_2	13.8		NR		4.3		2.0		20.4	
% O_2	1.5		NR		0.8		18.4		0.1	
% Balance Gas	5.8		NR		32.7		77.8		2.1	
Gas Temperature(^oF)	48		NR		NR		64		82	
Valve Turns Open	0.25	0.375	0	NC	0	0.125	0.125	0	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by:

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010	3/22/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM	8:32 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR	4.0
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80	76
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2	1.9
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9	45.3
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8	26.1
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8	2.3
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5	26.3
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840	1118
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313	376
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14	114
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3	3.2
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468	1467
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"	NA
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side	Blower/flare off upon
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5	arrival. Restarted
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2	and kept shutting down
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0	when flare temp reached
					23.5 BAL	23.6 BAL	22.2 BAL					22.3	1100F (after 3 min).
									No flame				
													Changed preset for
									Sparker on				normal operating
													temp range to
													200-1500F.
													Blower/flare stayed
													running.

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by:

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010
Time	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM	10:00 AM	
Blower Inlet Vacuum (in H_2O)	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9	NR	6.4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70	NR	64
Blower Outlet Pressure (in H_2O)	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8	NR	2.6
Orifice Plate DP (in H_2O)	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14	NR	NR
Approximate Flow (scfm)	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20	NR	NA
% CH_4	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0	NR	39.5
% CO_2	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2	NR	23.8
% O_2	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2	NR	3.4
% Balance Gas	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6	NR	33.3
Combustion Temperature(^oF)	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602	460	761
Blower SPD%	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45	50	50
Blower Hours	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535	107	NR
Blower Cycles	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127	1	NR
Blower Amps	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3	3.6	NR
Blower RPMs	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652	1838	NR
Air Compressor Pressure (psi)	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160	NR	NR
Well Field Air Pressure (psi)	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA	NR	NR
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA	NR	NR
Comments						Pre-blower:			Pre-blower:	HI 1500	*Low value due to	Gas readings						
						CH4=43.0	3 loads today		CH_4 43.6	LO 200	position of thermo-	are pre-blower						
						CO2=25.4			CO_2 25.1	HI HI 1900	couple.	values.						
						O2=2.8			O_2 2.3	LO LO 200								
											Pre-blower:		Pre-blower:	Pre-blower:	Post-blower:	Post-blower:	Post-blower:	Gas reading
											CH_4 43.6		CH_4 40.4	CH_4 40.5	CH_4 46.1	CH_4 43.5	CH_4 43.6	was taken
											CO_2 25.6		CO_2 25.2	CO_2 25.3	CO_2 27.4	CO_2 25.2	CO_2 25.3	pre-blower.
											O_2 2.3		O_2 2.2	O_2 2.3	O_2 2.0	O_2 2.9	O_2 2.10	No post-
																		blower reading
																		was recorded.

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by:

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010
Time	8:45 AM	11:35 AM	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM
Blower Inlet Vacuum (in H_2O)	2.8	NR	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	60	NR	42	51	55	60	50	54	65	51	56	38	NR	70
Blower Outlet Pressure (in H_2O)	0.3	NR	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2
Orifice Plate DP (in H_2O)	0.02	NR	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03
Approximate Flow (scfm)	7	NR	5	5	5	5	5	12	7	4	5	5	NR	8
% CH_4	NR	27.5	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2
% CO_2	NR	12.5	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9
% O_2	NR	10.6	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3
% Balance Gas	NR	49.4	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6
Combustion Temperature(^oF)	518	NR	493	661	727	670	771	846	654	530	191	404	465	808
Blower SPD%	30	NR	30	30	30	30	30	30	30	30	30	30	30	30
Blower Hours	134	NR	146	192	207	210	221	238.5	253	297	297	301	321	333
Blower Cycles	10	NR	14	14	14	14	14	14	14	14	14	16	17	19
Blower Amps	NR	NR	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1
Blower RPMs	NR	NR	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093
Air Compressor Pressure (psi)	90	NR	150	160	140	NR	150	140	NR	0	0	160	160	160
Well Field Air Pressure (psi)	75	NR	80	80	80	NR	80	80	NR	0	0	80	79	80
Approx. Leachate Tank Level	NR	NR	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"
Comments			Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81
		Pre-blower:	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:		
		42.6% CH4	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side
		18.7% CO2	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0
		5.2% O2	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5
			Blower RPM-1093							6.6 O2	6.7 O2			5.6
			Two leachate loads	Vac Side	Water present in									37.9
			hauled offsite.	CH4=48%	air valve vault					Ray said a leachate				
				CO2=19.8%	south of compressor					load was hauled out				
				O2=4.0%	building. No air leaks.					on Saturday.				

Notes:
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NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

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Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010
Time	9:30 AM	10:23 AM	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.0	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	58	58	50	68	70	82	NR	84	64	NR	75	86	68	80
Blower Outlet Pressure (in H_2O)	0.3	0.4	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3
Orifice Plate DP (in H_2O)	0.01	0.07	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03
Approximate Flow (scfm)	5	13	9	9	8	11	11	9	9	12	9	6	5	9
% CH_4	22.1	21.6	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9
% CO_2	9.6	9.0	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0
% O_2	13.0	13.4	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8
% Balance Gas	55.3	56.0	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3
Combustion Temperature(^oF)	1013	518	523	952	933	761	453	770	663	750	807	798	680	651
Blower SPD%	30	0.3	30	30	30	30	30	30	30	30	30	30	30	35
Blower Hours	412	452	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315
Blower Cycles	19	19	19	19	19	20	1	1	1	1	1	41	1	1
Blower Amps	3.0	3.1	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1
Blower RPMs	1093	1093	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280
Air Compressor Pressure (psi)	160	160	140	150	150	140	140	150	150	140	160	152	145	150
Well Field Air Pressure (psi)	80	80	75	75	75	80	80	80	80	80	60	65	75	NR
Approx. Leachate Tank Level	NR	11"	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am
Comments	Pre-blower				Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:		
	CH4-39.2%				CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were	
	CO2-16.6%				CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower	
	O2-7.1%				O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1		
											LO LO 200		Compressor oil	
							Blower hours reset	blower down approx					level is OK	
							after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:
								after system running			CH_4 31.8			CH_4 50.9
								for approx 1 hr			CO_2 21.7			CO_2 20.2
											O_2 2.5			O_2 4.3

Notes:
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Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010
Time	12:15 PM	10:38 AM	9:35 AM	9:40 AM	
Blower Inlet Vacuum (in H_2O)	4.0	4.5	4.1	NR	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	66	88	NR	88
Blower Outlet Pressure (in H_2O)	0.3	0.0	0.0	NR	0
Orifice Plate DP (in H_2O)	0.03	0.08	0.00	NR	0
Approximate Flow (scfm)	9	15	0	NR	8
% CH_4	25.8	19.3	21.8	21.9	61.8
% CO_2	10.7	9.7	10.7	10.8	23.0
% O_2	12.2	14.5	12.9	12.1	1.8
% Balance Gas	51.3	56.5	54.6	NR	13.4
Combustion Temperature(^oF)	795	542	806	593	740
Blower SPD%	35	35	35	35	35
Blower Hours	457	576	730	107	NR
Blower Cycles	4	4	4	1	NR
Blower Amps	3.1	3.1	3.1	3.1	NR
Blower RPMs	1279	1280	1279	1279	NR
Air Compressor Pressure (psi)	160	140	160	160	NR
Well Field Air Pressure (psi)	75	75	75	75	NR
Approx. Leachate Tank Level	NR	12"	3"	8.5"	NR
Comments					
					Gas reading
					was taken
	Pre-blower:	Pre-blower:	Pre-blower:		pre-blower.
	CH_4 53.0	CH_4 65.2	CH_4 51.7		No post-
	CO_2 21.6	CO_2 30.2	CO_2 22.2		blower reading
	O_2 3.9	O_2 0	O_2 4.5		was recorded.

Notes:
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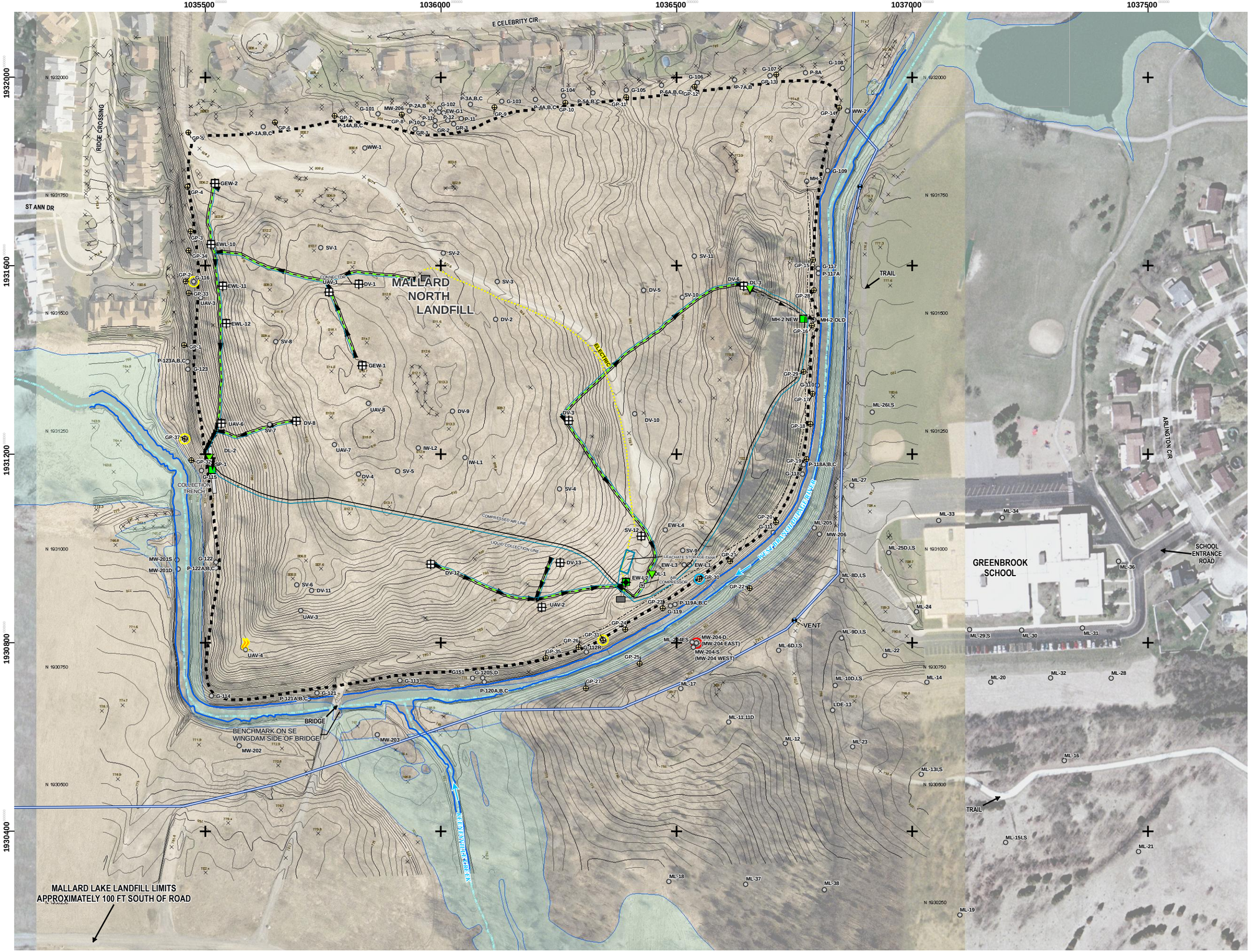

LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL. MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT MAY 26-27, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(MAY 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: JUNE 2010	6/2/2010		

744 Heartland Trail
Madison, WI 53717-1934

P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

D:\PRE_TESS_PROJECTS\06809\03\MXD\68090314.mxd 6/2/2010 08:20:36

Mallard North Landfill Status Meeting
July 1, 2010

Meeting Logistics

- Location: Mallard Lake Landfill conference room
- Time: 10:30 AM
- Call-in number: 1-800-503-2899; access code 8679635

Completed Activities/Activities In-Progress

- Monthly LFGCS monitoring on May 26, 2010 and June 28, 2010.
- Continued negotiations between District and Village of Hanover Park regarding leachate forcemain hookup.
- Meeting with County of DuPage regarding forcemain hookup permitting on June 23, 2010.
- Teasel eradication implemented.
- Groundwater monitoring initiated and ongoing.
- Prepared MH-2 investigation workplan.
- Preparation of Ecological Risk Assessment (Steps 1 and 2) is ongoing.
- Preparation of QAPP is ongoing.
- Continued operation/balancing and fine-tuning of LFGCS.
- Continued operation/balancing of leachate collection system.

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary
- Completion of road repairs.
- Manhole MH-2 area investigation.

Attached Data

- Table – Gas Probe Monitoring (May 26, 2010)
- Table – Landfill Gas/Leachate Monitoring
- Figure 1 – Methane Detections (May 2010)
- Table - Gas Probes With Significant Methane Detections
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary
- Table – Northwest/Blower Flare Summary

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: J. Roelke
Gas Meter: GEM 2000
Serial #: GM11209
Date Calibrated: 5/26/2010

Pressure Device: Magnahelics
Water Level Device: Water Level Indicator
Ground Conditions: Moist

Date: 5/26/2010
Weather: Clear
Temp and Pressure: 75-85°F; 30.01" Hg, steady

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.00	0.0	0.1	20.2	79.7	19.70	
GP-33A	0.00	0.0	0.0	20.4	79.6	13.93	
GP-33B	0.00	0.0	0.0	20.4	79.6	13.14	
G-116	-5.00	12.1	3.4	16.4	68.1	NA	
GP-2A	0.00	0.0	0.0	20.4	79.6	14.23	
GP-2B	0.00	0.0	0.0	20.5	79.5	13.55	
GP-34A	0.00	0.0	0.1	20.4	79.5	11.10	
GP-34B	0.00	0.0	0.0	20.5	79.5	15.34	
GP-3	0.00	0.0	0.4	19.9	79.7	11.92	
GP-4A	0.00	0.0	0.3	20.2	79.5	11.72	
GP-4B	0.00	0.0	0.4	20.1	79.5	9.81	
GP-4C	-6.00	0.0	0.0	20.6	79.4	17.91	
GP-5	0.00	0.0	0.0	20.5	79.5	14.71	
P-1A	0.00	0.0	0.0	20.7	79.3	16.08	
GP-6	0.00	0.0	0.0	20.8	79.2	9.48	
GP-7A	0.00	0.0	0.0	20.9	79.1	17.91	Sample port hits protective casing cover
GP-7B	0.00	0.0	2.3	16.1	81.6	11.09	Sample port hits protective casing cover
GP-8A	0.00	0.0	0.0	20.6	79.4	7.33	
GP-8B	0.00	0.0	0.0	20.8	79.2	13.08	
P-3A	0.00	0.0	0.0	20.8	79.2	6.18	
GP-9A	0.00	0.0	0.0	20.9	79.1	6.58	
GP-9B	0.00	0.0	0.0	21.0	79.0	18.87	
P-4C	0.00	0.0	0.6	19.8	79.6	6.15	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.00	0.0	0.8	19.9	79.3	8.06	
GP-10B	0.00	0.0	0.0	20.9	79.1	9.61	
GP-10C	0.00	0.0	0.0	20.9	79.1	10.82	
P-5A	0.00	0.0	0.0	20.9	79.1	8.28	
GP-11A	0.00	0.0	0.0	20.9	79.1	7.88	
GP-11B	0.00	0.0	0.0	20.9	79.1	9.18	
P-6C	0.00	0.0	0.0	20.9	79.1	6.14	
GP-12	0.00	0.0	0.0	20.9	79.1	5.06	
P-7A	0.00	0.0	0.0	20.9	79.1	4.64	Broken port
P-7B	0.00	0.0	0.0	20.9	79.1	5.14	
GP-13	0.00	0.0	0.0	20.9	79.1	6.04	
GP-14	0.00	0.0	0.0	20.9	79.1	5.08	
G-109	0.00	0.0	0.0	20.8	79.2	6.24	
GP-15A	+0.6	0.0	0.1	20.4	79.5	4.89	
GP-15B	+0.4	0.0	0.0	20.8	79.2	6.88	
GP-28A	0.00	0.0	0.0	20.8	79.2	8.44	
GP-28B	0.00	0.0	0.0	20.9	79.1	4.24	
GP-28C	+0.4	0.0	0.0	20.8	79.2	4.31	
GP-16A	0.00	0.0	0.0	20.7	79.3	5.39	
GP-16B	+0.5	0.0	0.0	20.7	79.3	3.08	
GP-16C	+0.2	0.0	0.0	20.7	79.3	7.11	
GP-29A	+0.5	0.0	0.0	20.7	79.3	5.06	
GP-29B	+0.2	0.0	0.6	20.7	78.7	8.96	
G-110	0.00	0.0	0.0	20.7	79.3	8.63	
GP-17	+0.4	0.0	0.0	20.7	79.3	4.52	
GP-18	0.00	0.0	0.0	20.7	79.3	7.86	
GP-19	0.00	0.0	0.0	20.7	79.3	11.35	
GP-20	0.00	0.0	0.0	20.7	79.3	4.58	
GP-21A	+0.2	0.0	0.0	20.7	79.3	6.64	
GP-21B	+0.2	0.0	0.0	20.7	79.3	10.08	
GP-22A	0.00	0.0	0.0	20.7	79.3	5.02	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.00	0.0	0.0	20.7	79.3	18.16	
GP-30A	0.00	0.0	0.0	20.1	79.9	5.17	
GP-30B	-3.7	0.5	0.0	20.0	79.5	7.18	Induced vacuum
MW-204 East	0.00	52.5	7.8	3.8	35.9	18.47	
MW-204 West	0.00	0.0	0.0	20.6	79.4	24.78	
GP-23A	-4.2	0.0	0.5	19.7	79.8	4.52	
GP-23B	0.00	0.0	0.0	20.1	79.9	10.44	
GP-24A	0.00	0.0	0.0	20.1	79.9	5.54	
GP-24B	0.00	0.0	0.0	20.1	79.9	14.76	
GP-25A	+0.1	0.0	0.3	20.3	79.4	4.73	
GP-25B	+0.1	0.0	0.0	20.7	79.3	16.51	
GP-31A	0.00	0.0	0.0	21.1	78.9	7.41	
GP-31B	-3.7	6.2	0.2	18.9	74.7	14.49	Induced vacuum
GP-26A	0.00	0.0	0.0	20.2	79.8	7.74	
GP-26B	0.00	0.0	0.2	19.9	79.9	16.14	
GP-27A	+0.2	0.0	0.0	20.7	79.3	3.51	
GP-27B	0.00	0.0	0.0	20.7	79.3	19.27	
GP-35A	0.00	0.0	0.2	20.1	79.7	6.49	
GP-35B	0.00	0.0	0.1	20.1	79.8	9.91	
G-113	+0.5	0.0	3.1	18.2	78.7	NA	
G-121	0.00	0.0	1.6	16.0	82.4	NA	
GP-32A	0.00	0.0	0.0	20.2	79.8	11.45	
GP-32B	0.00	0.0	0.0	20.1	79.9	12.38	
GP-37A	-5.0	4.1	1.7	18.8	75.4	12.34	Induced vacuum
GP-37B	0.00	0.0	0.0	20.3	79.7	12.96	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: E. Watruba, 6/1/10
Checked by: N. Braun, 6/1/10

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/4

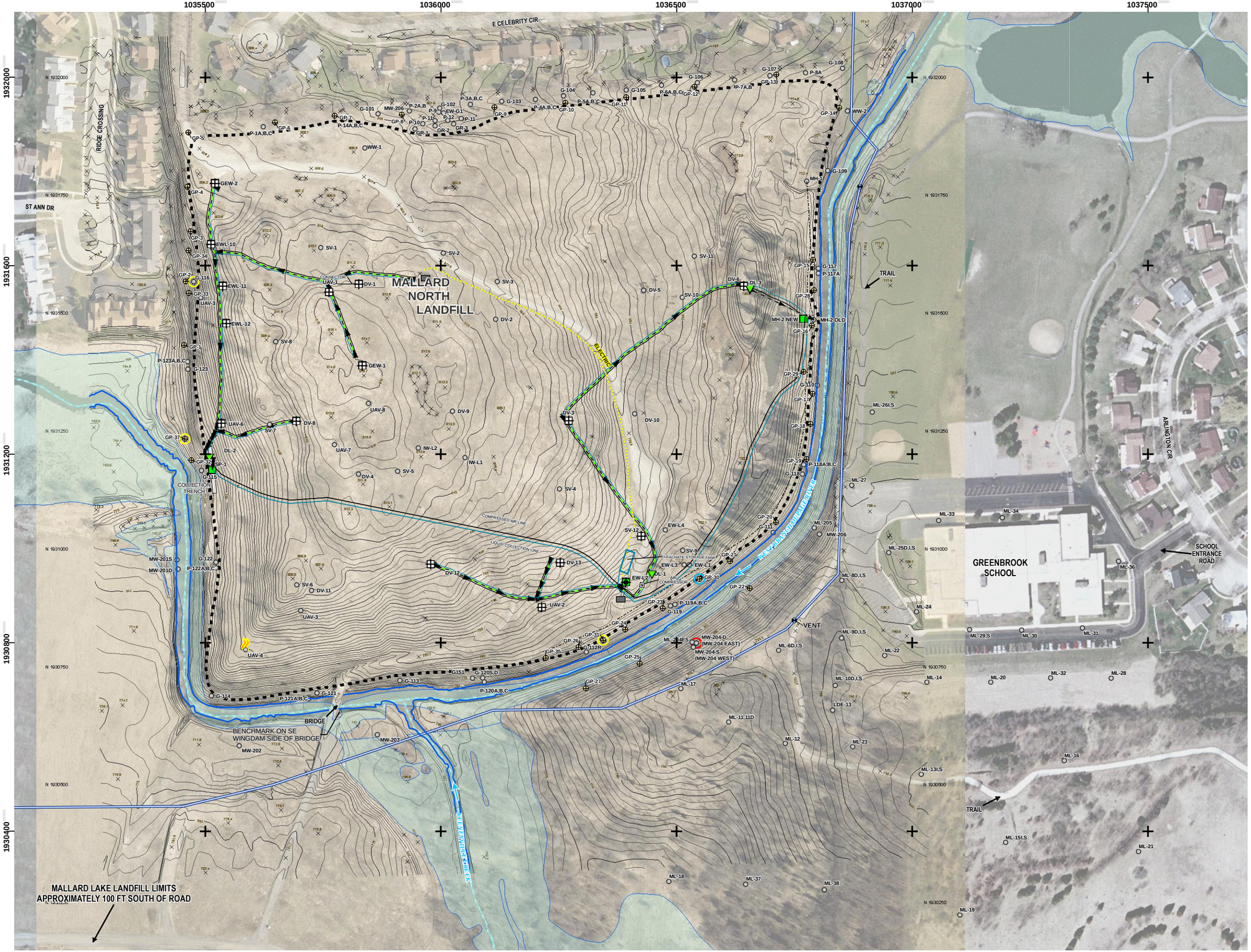
Date: 5/27/2010

Gas Extraction Wells

Location	Header Side Pressure	Well Side Pressure		Orifice Plate DP		Approx. Post-Adjustment Flow Rate (cfm)	% CH_4	%CO_2	%O_2	%Balance	Temperature (^oF)	Valve Turns Open		Liquid Level (ft BTOC)	Depth to Top of Screen (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	-6.0	-5.8	NR	2.60	NC	5.0	50.7	26.5	0.0	22.8	64	10	NC	NR	
DV-8	-6.0	-1.5	NR	0.40	NC	2.0	37.8	25.2	0.0	37.0	70	0.5	NC	19.43	
EWL-10	-6.0	-6.0	-5.0	0.10	0.08	<1	24.1	19.5	1.6	54.8	76	2	NR	16.62	
EWL-11	-6.0	-6.0	NR	0.50	NC	2.2	12.8	15.3	5.3	66.6	80	7	NC	15.05	
EWL-12	-6.0	-1.2	NR	0.15	NC	1.2	25.2	17.7	7.7	49.4	78	0.5	NC	NR	
GEW-1	-6.0	-5.4	NR	2.80	NC	5.2	56.4	31.6	0.0	12.0	62	10	NC	17.54	
GEW-2	-6.0	-6.0	NR	0.02	NC	<1	56.1	29.4	0.0	14.5	74	10	NC	NR	
UAV-1	-6.0	-5.4	NR	3.80	NC	6.0	51.9	29.9	0.4	17.8	78	6.5	NC	NR	
UAV-6	-6.0	-5.6	NR	5.00	NC	6.5	21.1	12.9	10.5	55.5	72	1.25	NC	11.95	
SOUTHCENTRAL WELLS															
DV-3	-2.6	-2.6	NR	0.70	NC	2.5	70.6	22.6	0.0	6.8	68	12	NC	NR	
DV-6	-2.6	-1.8	-0.25	0.02	0.01	<1	0.4	0.2	20.2	79.2	76	0.125	0	NR	
DV-12	-2.6	-0.5	NR	0.35	NC	2.0	55.2	25.1	2.5	17.2	72	1.5	NC	NR	
DV-13	-2.6	-2.5	-0.5	0.40	0.03	<1	0.3	0.3	20.1	79.3	88	0.75	0.625	NR	
EWL-2	-2.6	0.0	NR	0.00	NC	0.0	7.0	2.2	18.7	72.1	72	0	NC	6.79	
SV-12	-2.60	-0.04	NR	0.01	NC	<1	47.8	17.7	6.5	28.0	76	0.125	NC	NR	
UAV-2	-2.6	+0.02	-0.5	0.01	0.02	<1	77.4	20.4	0.1	2.1	82	0	NC	NR	

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

Location	Well Pressure	% CH_4	%CO_2	%O_2	%Balance	Flame Present (yes/no)	Blower Operating (yes/no)	Sparking Unit Operating (yes/no)	Comments
	I								
UAV-4	NR	NR	NR	NR	NR	NR	NR	NR	Blower was not operating - will be checked.



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL. MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT MAY 26-27, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(MAY 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090314.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: JUNE 2010	6/2/2010		

744 Heartland Trail
Madison, WI 53717-1934

P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

D:\PRE_TESS_PROJECTS\06809\03\MXD\68090314.mxd 6/2/2010 08:20:36

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NR		
	5/26/2010	0.0	0.00	14.23		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NR		
	5/26/2010	0.0	0.00	13.55		
GP-4C	6/3/2009	**0.5**	NM	dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NR		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
	4/28/2010	**0**	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3**	-6.00	NM		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2**	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1**	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0	13.93		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NR		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	0.40	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East	2/9/2009	**30.3**	0.00	21.49	22.02	
(Shallow)	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		

NM= not measured

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10
Updated by: E. Watruba, 6/17/10; update checked by S. Inman, 6/21/10

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
					Total System Gallons Pumped	**2,171,622**			**8,995**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Created by: J. Schoephoester, 2/1/10
Checked by: N. Braun, 2/3/10
Updated by: J. Schoephoester, 5/25/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10
Updated by: E. Watruba, 6/17/10
Checked by: S. Inman, 6/21/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010
Time	8:45 AM	11:35 AM	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM
Blower Inlet Vacuum (in H_2O)	2.8	NR	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6
Gas Inlet Temperature (^oF)	60	NR	42	51	55	60	50	54	65	51	56	38	NR	70
Blower Outlet Pressure (in H_2O)	0.3	NR	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2
Orifice Plate DP (in H_2O)	0.02	NR	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03
Approximate Flow (scfm)	7	NR	5	5	5	5	5	12	7	4	5	5	NR	8
% CH_4	NR	27.5	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2
% CO_2	NR	12.5	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9
% O_2	NR	10.6	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3
% Balance Gas	NR	49.4	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6
Combustion Temperature(^oF)	518	NR	493	661	727	670	771	846	654	530	191	404	465	808
Blower SPD%	30	NR	30	30	30	30	30	30	30	30	30	30	30	30
Blower Hours	134	NR	146	192	207	210	221	238.5	253	297	297	301	321	333
Blower Cycles	10	NR	14	14	14	14	14	14	14	14	14	16	17	19
Blower Amps	NR	NR	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1
Blower RPMs	NR	NR	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093
Air Compressor Pressure (psi)	90	NR	150	160	140	NR	150	140	NR	0	0	160	160	160
Well Field Air Pressure (psi)	75	NR	80	80	80	NR	80	80	NR	0	0	80	79	80
Approx. Leachate Tank Level	NR	NR	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"
Comments			Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81
		Pre-blower:	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:		
		42.6% CH4	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side
		18.7% CO2	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0
		5.2% O2	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5
			Blower RPM-1093							6.6 O2	6.7 O2			5.6
			Two leachate loads	Vac Side	Water present in									37.9
			hauled offsite.	CH4=48%	air valve vault					Ray said a leachate				
				CO2=19.8%	south of compressor					load was hauled out				
				O2=4.0%	building. No air leaks.					on Saturday.				

Notes:
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NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010
Time	9:30 AM	10:23 AM	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.0	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	58	58	50	68	70	82	NR	84	64	NR	75	86	68	80
Blower Outlet Pressure (in H_2O)	0.3	0.4	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3
Orifice Plate DP (in H_2O)	0.01	0.07	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03
Approximate Flow (scfm)	5	13	9	9	8	11	11	9	9	12	9	6	5	9
% CH_4	22.1	21.6	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9
% CO_2	9.6	9.0	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0
% O_2	13.0	13.4	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8
% Balance Gas	55.3	56.0	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3
Combustion Temperature(^oF)	1013	518	523	952	933	761	453	770	663	750	807	798	680	651
Blower SPD%	30	0.3	30	30	30	30	30	30	30	30	30	30	30	35
Blower Hours	412	452	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315
Blower Cycles	19	19	19	19	19	20	1	1	1	1	1	41	1	1
Blower Amps	3.0	3.1	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1
Blower RPMs	1093	1093	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280
Air Compressor Pressure (psi)	160	160	140	150	150	140	140	150	150	140	160	152	145	150
Well Field Air Pressure (psi)	80	80	75	75	75	80	80	80	80	80	60	65	75	NR
Approx. Leachate Tank Level	NR	11"	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am
Comments	Pre-blower				Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:		
	CH4-39.2%				CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were	
	CO2-16.6%				CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower	
	O2-7.1%				O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1		
											LO LO 200		Compressor oil	
							Blower hours reset	blower down approx					level is OK	
							after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:
								after system running			CH_4 31.8			CH_4 50.9
								for approx 1 hr			CO_2 21.7			CO_2 20.2
											O_2 2.5			O_2 4.3

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010
Time	12:15 PM	10:38 AM	9:35 AM	9:40 AM	
Blower Inlet Vacuum (in H_2O)	4.0	4.5	4.1	NR	2.8
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	66	88	NR	88
Blower Outlet Pressure (in H_2O)	0.3	0.0	0.0	NR	0
Orifice Plate DP (in H_2O)	0.03	0.08	0.00	NR	0
Approximate Flow (scfm)	9	15	0	NR	8
% CH_4	25.8	19.3	21.8	21.9	61.8
% CO_2	10.7	9.7	10.7	10.8	23.0
% O_2	12.2	14.5	12.9	12.1	1.8
% Balance Gas	51.3	56.5	54.6	NR	13.4
Combustion Temperature(^oF)	795	542	806	593	740
Blower SPD%	35	35	35	35	35
Blower Hours	457	576	730	107	NR
Blower Cycles	4	4	4	1	NR
Blower Amps	3.1	3.1	3.1	3.1	NR
Blower RPMs	1279	1280	1279	1279	NR
Air Compressor Pressure (psi)	160	140	160	160	NR
Well Field Air Pressure (psi)	75	75	75	75	NR
Approx. Leachate Tank Level	NR	12"	3"	8.5"	NR
Comments					
					Gas reading
					was taken
	Pre-blower:	Pre-blower:	Pre-blower:		pre-blower.
	CH_4 53.0	CH_4 65.2	CH_4 51.7		No post-
	CO_2 21.6	CO_2 30.2	CO_2 22.2		blower reading
	O_2 3.9	O_2 0	O_2 4.5		was recorded.

Notes:
NA = not available
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Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4
Blower Amps													
Blower RPMs													
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR
Comments								Blower outlet pressure fluctuating.					

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Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
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Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Updated by: E. Watruba, 6/21/10
Checked by: S. Inman, 6/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010
Time	2:30 PM	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM
Blower Inlet Vacuum (in H_2O)	4	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8
Inlet Valve (Turns) Open / 6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	86	88	NR	85	85	85	83	82	82	84
Blower Outlet Pressure (in H_2O)	+1.3	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6
Orifice Plate DP (in H_2O)	0.14	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13
Approximate Flow (scfm)	20	17	NR	14	14	17	17	15	20	19
% CH_4	42.6	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8
% CO_2	25.6	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0
% O_2	2.6	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6
% Balance Gas	29.2	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6
Combustion Temperature(^oF)	NR	817	NR	1029	660	988	948	903	953	56
Blower SPD%	45	45	NR	45	45	45	45	45	45	50
Blower Hours	NR	170	NR	184	230	245	247	258	276	291
Blower Cycles	NR	4	NR	6	6	6	6	6	6	6
Blower Amps				3	3.0	3.0	3.0	3.0	3.0	3.0
Blower RPMs				1650	1651	1651	1651	1650	1841	1838
Air Compressor Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	140	NA
Well Field Air Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	80	NA
Approx. Leachate Tank Level	NR	NA	NA	NA	NA	NA	NA	NA		NA
Comments					Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max
						47.6 CH4	47.9 CH4	49.3 CH4		starts faults
					No hours logged	26.0 CO2	26.3 CO2	26.3 CO2		
						2.3 O2	2.2 O2	2.2 O2		Blower on
						23.5 BAL	23.6 BAL	22.2 BAL		
										No flame
										Sparker on

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Checked by: J. Schoephoester, 2/24/10
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Updated by: N. Braun, 6/1/10
Updated by: E. Watruba, 6/21/10
Checked by: S. Inman, 6/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010
Time	9:52 AM	10:50 AM	10:40 AM	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM
Blower Inlet Vacuum (in H_2O)	NR	NR	NR	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5
Inlet Valve (Turns) Open / 6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	NR	80	76	74	74	70	70	84	NR	72	68	NR
Blower Outlet Pressure (in H_2O)	NR	NR	0.2	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00
Orifice Plate DP (in H_2O)	NR	NR	0.17	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22
Approximate Flow (scfm)	NR	NR	22	22	20	19	20	23	22	24	24	23	25
% CH_4	67.0	55.4	44.9	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1
% CO_2	32.7	27.3	23.8	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5
% O_2	0.2	2.6	3.8	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2
% Balance Gas	0.1	14.7	27.5	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1
Combustion Temperature(^oF)	NR	520	202-840	1118	862	594	1021	1043	760	940	834	680	442
Blower SPD%	NR	50	40	40	40	40	40	40	40	40	45	45	45
Blower Hours	NR	0	313	376	417	516	555	595	658.1	737.6	800	814	837.4
Blower Cycles	NR	1	14	114	120	120	120	120	120	121	121	121	121
Blower Amps	NR	3.5	3.3	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR
Blower RPMs	NR	1838	1468	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR
Air Compressor Pressure (psi)	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	80	NA	80	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	29"	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA
Comments	NW blower/flare		Inlet side	Blower/flare off upon						Pre-blower:			Pre-blower:
	system down.		49.5	arrival. Restarted						CH4=43.0	3 loads today		CH_4 43.6
			26.2	and kept shutting down						CO2=25.4			CO_2 25.1
			2.0	when flare temp reached						O2=2.8			O_2 2.3
			22.3	1100F (after 3 min).									
				Changed preset for									
				normal operating									
				temp range to									
				200-1500F.									
				Blower/flare stayed									
				running.									

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Updated by: E. Watruba, 6/21/10
Checked by: S. Inman, 6/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010
Time	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM
Blower Inlet Vacuum (in H_2O)	5.0	5.1	4.6	5.0	5.0	5.3	4.9	NR	6.4	6.5	NR	6.5	6.0	6.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	70	72	72	70	69	66	70	NR	64	69	NR	70	NR	72
Blower Outlet Pressure (in H_2O)	2.2	2.2	2.0	2.0	1.8	2.0	1.8	NR	2.6	3.0	NR	2.3	NR	2.3
Orifice Plate DP (in H_2O)	0.20	0.19	0.20	0.19	0.15	0.30	0.14	NR	NR	0.23	NR	0.21	NR	0.22
Approximate Flow (scfm)	24	23	24	23	20	29	20	NR	NA	25	NR	24	NR	25
% CH_4	NR	38.7	43.3	40.6	42.0	48.3	45.0	NR	39.5	38.4	42.9	39.3	39.4	39.7
% CO_2	NR	22.7	25.5	24.8	25.4	28.4	26.2	NR	23.8	23.4	24.1	25.0	25.5	24.7
% O_2	NR	4.5	2.4	2.7	2.9	1.2	2.2	NR	3.4	3.5	3.4	3.3	3.2	3.1
% Balance Gas	NR	34.1	28.8	31.9	29.7	22.1	26.6	NR	33.3	34.7	29.6	32.4	31.9	32.5
Combustion Temperature(^oF)	885	430*	573	548	820	629	602	460	761	337	NR	625	NR	356
Blower SPD%	45	45	45	45	35	45	45	50	50	50	NR	50	50	50
Blower Hours	875	958	999	1115	1257	1376	1535	107	NR	227	NR	344	NR	506
Blower Cycles	121	22	121	121	127	127	127	1	NR	1	NR	3	NR	3
Blower Amps	3.3	NR	NR	3.3	3.2	3.3	3.3	3.6	NR	3.4	NR	3.4	NR	3.4
Blower RPMs	1650	NR	NR	1650	1652	1650	1652	1838	NR	1840	NR	1838	NR	1840
Air Compressor Pressure (psi)	160	152	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	60	65	NA	NA	75	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	10%	27" @ 13:20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments	HI 1500	*Low value due to	Gas readings											
	LO 200	position of thermo-	are pre-blower							Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower
	HI HI 1900	couple.	values.							CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9
	LO LO 200									CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8
		Pre-blower:		Pre-blower:	Pre-blower:	Post-blower:	Post-blower:	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9
		CH_4 43.6		CH_4 40.4	CH_4 40.5	CH_4 46.1	CH_4 43.5	CH_4 43.6	was taken					
		CO_2 25.6		CO_2 25.2	CO_2 25.3	CO_2 27.4	CO_2 25.2	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf
		O_2 2.3		O_2 2.2	O_2 2.3	O_2 2.0	O_2 2.9	O_2 2.10	No post-					card
									blower reading					
									was recorded.					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
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Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Updated by: E. Watruba, 6/21/10
Checked by: S. Inman, 6/21/10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(^oF)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	-3.1	-4.4	-4.4	-5.8	NR
Orifice Plate DP (in H_2O)	1.30	1.50	NR	1.60	1.80	1.80	2.60	NC
% CH_4	59.1		58.3		51.3		50.7	
% CO_2	28.0		28.7		27.2		26.5	
% O_2	0.0		0.0		0.4		0.0	
% Balance Gas	12.9		13.0		21.1		22.8	
Gas Temperature(^oF)	NR		NR		82		64	
Valve Turns Open	5	6.5	6.5	9.5	8	10	10	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6	
Well Side Pressure (in H_2O)	-2.4	-1.0	NR	NC	-1.25	NC	-1.50	NR
Orifice Plate DP (in H_2O)	1.20	0.50	NR	NC	0.50	NC	0.40	NC
% CH_4	29.4		34.9		35.2		37.8	
% CO_2	23.2		24.2		24.0		25.2	
% O_2	0.4		1.8		0.4		0.0	
% Balance Gas	47.0		39.1		40.4		37.0	
Gas Temperature(^oF)	NR		NR		66		70	
Valve Turns Open	1	0.5	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		19.49		19.43	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^oF)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	-4.4	-4.4	-6.0	-5.0
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.02	0.10	0.08
% CH_4	18.2		17.3		24.1	
% CO_2	16.2		16.8		19.5	
% O_2	3.6		3.4		1.6	
% Balance Gas	62.0		62.5		54.8	
Gas Temperature(^oF)	NR		74		76	
Valve Turns Open	4	4	4	2	2	NR
Liquid Level (ft BTOC)	NR		16.4		16.62	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(^oF)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010		3/31/2010		4/2/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	0.2	-3.7	NR	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NR
Orifice Plate DP (in H_2O)	0.20	NR	0.50	NR	0.60	NR	0.60	0.65	0.50	NC	0.50	NC
% CH_4	11.3		12.1		12.1		11.2		12.2		12.8	
% CO_2	12.2		13.3		12.8		14.3		14.0		15.3	
% O_2	8.0		6.4		7.2		6.4		6.3		5.3	
% Balance Gas	68.5		68.2		67.9		68.1		67.5		66.6	
Gas Temperature(^oF)	NR		70		60		NR		58		80	
Valve Turns Open	7	7	7	7	7	7	6.5	7	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		16.1		15.05	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(^oF)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.5	NC	-1.0	-0.8	-1.2	NR
Orifice Plate DP (in H_2O)	NR	NC	0.20	0.15	0.15	NC
% CH_4	21.1		22.9		25.2	
% CO_2	15.8		14.4		17.7	
% O_2	8.6		10.3		7.7	
% Balance Gas	54.5		52.4		49.4	
Gas Temperature(^oF)	NR		64		78	
Valve Turns Open	0.25	NR	0.75	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		12.8		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(^oF)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	NR	-4.4	-4.4	-5.4	NR
Orifice Plate DP (in H_2O)	1.50	1.80	NR	1.60	2.00	2.00	2.80	NC
% CH_4	67.2		59.3		62.2		56.4	
% CO_2	31.8		31.0		31.8		31.6	
% O_2	0.0		0.0		0.3		0.0	
% Balance Gas	1.0		9.7		5.7		12.0	
Gas Temperature(^oF)	NR		NR		62		62	
Valve Turns Open	5%	6.5	6.5	8.5	8.5	10	10.0	NC
Liquid Level (ft BTOC)	NR		NR		NR		17.54	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^oF)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.7	NR	-4.4	-4.4	-6.0	NR
Orifice Plate DP (in H_2O)	0.15	0.20	0.05	0.08	0.02	NC
% CH_4	47.9		48.9		56.1	
% CO_2	26.0		26.7		29.4	
% O_2	1.3		1.4		0.0	
% Balance Gas	24.8		23.0		14.5	
Gas Temperature(^oF)	NR		68		74	
Valve Turns Open	6	7	7.5	10	10	NC
Liquid Level (ft BTOC)	NR		17.3		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(^oF)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-4		-4.4		-6.0	
Well Side Pressure (in H_2O)	-3.8	-3.8	NR	NR	-4.4	NC	-5.4	NR
Orifice Plate DP (in H_2O)	2.30	2.40	NR	2.70	3.00	NC	3.80	NC
% CH_4	55.2		56.0		48.7		51.9	
% CO_2	30.9		31.8		29.5		29.9	
% O_2	0.0		0.0		0.6		0.4	
% Balance Gas	13.9		12.2		21.2		17.8	
Gas Temperature(^oF)	NR		NR		56		78	
Valve Turns Open	3.5	4.5	4.5	6.5	6.5	NC	6.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(^oF)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-4.4		-6.0	
Well Side Pressure (in H_2O)	NR	NC	-0.8	-0.9	-5.6	NR
Orifice Plate DP (in H_2O)	NR	NC	0.65	0.85	5.00	NC
% CH_4	28.2		34.4		21.1	
% CO_2	14.5		16.5		12.9	
% O_2	9.4		8.8		10.5	
% Balance Gas	47.9		40.3		55.5	
Gas Temperature(^oF)	NR		74		72	
Valve Turns Open	1.75	NC	1	1.25	1.25	NC
Liquid Level (ft BTOC)	NR		12.8		11.95	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC
% CH_4	75.5		NR		70.1		79.9		71.6	
% CO_2	24.5		NR		28.2		25.9		28.0	
% O_2	0		NR		0		0		0.4	
% Balance Gas	0.0		NR		1.7		0		0.0	
Gas Temperature(^oF)	34		38		NR		NR		32	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.7		+0.2		NR		NR	
Well Side Pressure (in H_2O)	-2.6	-2.7	-2.7	NR	+0.2	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.50	0.65	0.20	NR	0.00	NR	NR	NR	NR	NR
% CH_4	69.1		72.3		77.7		NR		73.1	
% CO_2	22.9		23.2		22.3		NR		22.3	
% O_2	1.5		0.1		0.0		NR		0.0	
% Balance Gas	6.5		4.5		0.0		NR		4.6	
Gas Temperature(^oF)	40		48		52		NR		NR	
Valve Turns Open	1	1.75	NR	NR	1.75	NC	1.75	NC	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6	
Well Side Pressure (in H_2O)	-2.4	NC	-2.6	NC
Orifice Plate DP (in H_2O)	0.70	NC	0.70	NC
% CH_4	69.1		70.6	
% CO_2	22.1		22.6	
% O_2	0.1		0.0	
% Balance Gas	8.7		6.8	
Gas Temperature(^oF)	50		68	
Valve Turns Open	10	NC	12	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	61.3		NR		NR		65.7		58.2	
% CO_2	30.4		NR		NR		34.9		35.2	
% O_2	2.5		NR		NR		0		2.5	
% Balance Gas	5.8		NR		NR		0		4.1	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.8		+0.04		NR		NR	
Well Side Pressure (in H_2O)	0.0	-0.6	-2.8	NR	+0.01	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.05	0.01	NR	0.00	NR	NR	NR	NR	NR
% CH_4	64.4		0.2		9.8		NR		0.5	
% CO_2	33.7		0.2		4.4		NR		0.6	
% O_2	0.5		21.2		18.0		NR		19.2	
% Balance Gas	1.4		99.6		67.8		NR		79.7	
Gas Temperature(^oF)	36		50		46		NR		NR	
Valve Turns Open	0	0.5	NR	NR	0.5	NC	0.5	NC	0.25	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6	
Well Side Pressure (in H_2O)	-2.4	NC	-1.8	-0.3
Orifice Plate DP (in H_2O)	0.00	NC	0.02	0.01
% CH_4	4.0		0.4	
% CO_2	2.5		0.2	
% O_2	18.8		20.2	
% Balance Gas	74.7		79.2	
Gas Temperature(^oF)	58		76	
Valve Turns Open	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR
% CH_4	36.3		59.3		20.3		38.1		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7	
Gas Temperature(^oF)	44		44		42		42		49	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-1.0	-0.8	-0.7	NC	NR	NR	-0.1	-0.5	-0.5	NR
Orifice Plate DP (in H_2O)	0.70	0.60	0.50	NC	NR	NR	0.10	0.30	0.35	NC
% CH_4	31.9		43.2		43.5		66.3		55.2	
% CO_2	20.2		22.1		22.3		28.7		25.1	
% O_2	4.3		3.0		4.0		1.1		2.5	
% Balance Gas	43.6		31.7		30.2		3.9		17.2	
Gas Temperature(^oF)	48		NR		NR		50		72	
Valve Turns Open	2	1.75	1.75	NC	0.75	0.5	1	1.5	1.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR
% CH_4	56.5		63.4		52.0		51.9		43.3	
% CO_2	19.1		17.6		19.0		17.9		14.1	
% O_2	5.1		4		6.1		4.7		8.7	
% Balance Gas	19.3		15		22.9		25.5		42.6	
Gas Temperature(^oF)	34		36		24		38		52	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-0.2	-0.2	-2.8	-2.8	NR	NR	-2.2	-1.3	-2.5	-0.5
Orifice Plate DP (in H_2O)	0.01	0.01	0.15	0.10	NR	NR	0.02	0.01	0.40	0.03
% CH_4	19.8		32.6		0.2		27.2		0.3	
% CO_2	5.8		8.7		0.6		7.3		0.3	
% O_2	15.6		11.4		19.0		13.5		20.1	
% Balance Gas	58.8		47.3		80.2		52.0		79.3	
Gas Temperature(^oF)	50		NR		NR		62		88	
Valve Turns Open	3	2.5	2.5	2	2	0.5	1	0.75	0.75	0.625
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC
% CH_4	9.0		NR		2.4		NR		3.4	
% CO_2	1.9		NR		1.1		NR		2.0	
% O_2	18.9		NR		19.4		NR		16.7	
% Balance Gas	70.2		NR		77.1		NR		77.9	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		NR		-0.7		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	NR	NR	0.0	NR	NR	NR	0.0	NC	0.0	NR
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	0.00	NR	NR	NR	0.00	NC	0.00	NC
% CH_4	9.1		11.2		0.4		NR		2.2		7.0	
% CO_2	3.6		1.3		0.2		NR		1.0		2.2	
% O_2	14.8		18.4		20.5		NR		20.1		18.7	
% Balance Gas	72.5		87.5		78.9		NR		76.7		72.1	
Gas Temperature(^oF)	36		45		44		NR		70		72	
Valve Turns Open	0	NC	NR	NR	CL	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		5.8		6.79	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	75.5		NR		68.1		48.2		17.0	
% CO_2	23.8		NR		27.4		17.6		6.7	
% O_2	0.4		NR		0		5.2		13.2	
% Balance Gas	0.3		NR		4.5		29		63.1	
Gas Temperature(^oF)	32		NR		NR		30		28	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		-2.8		+0.15		NR		-2.4		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	-0.02	NR	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NR
Orifice Plate DP (in H_2O)	0.00	NC	0.02	NR	0.00	0.005	NR	NR	0.15	0.05	0.01	NR
% CH_4	29.8		41.7		76.5		NR		58.3		47.8	
% CO_2	11.9		13.4		22.9		NR		19.3		17.7	
% O_2	9.1		9.4		0.1		NR		4.1		6.5	
% Balance Gas	49.2		35.5		0.5		NR		18.3		28.0	
Gas Temperature(^oF)	34		50		44		NR		56		76	
Valve Turns Open	0	NC	NR	NR	CL	0.125	0.125	NC	0	0.125	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8
% O_2	19.4		0		16.7		0.0		0.3	0.3
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4
Gas Temperature(^oF)	36		38		24		36		54	54
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		NR		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	+0.07	-0.2	NR	NR	NR	NR	0.0	0.0	0.02	-0.5
Orifice Plate DP (in H_2O)	0.00	0.01	NR	NR	NR	NR	0.01	0.00	0.01	0.02
% CH_4	78.9		NR		62.2		1.8		77.4	
% CO_2	13.8		NR		4.3		2.0		20.4	
% O_2	1.5		NR		0.8		18.4		0.1	
% Balance Gas	5.8		NR		32.7		77.8		2.1	
Gas Temperature(^oF)	48		NR		NR		64		82	
Valve Turns Open	0.25	0.375	0	NC	0	0.125	0.125	0	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
August 5, 2010

Meeting Logistics

- Location: Mallard Lake Landfill conference room
- Time: 10:30 AM
- Call-in number: 1-800-503-2899; access code 8679635

Completed Activities/Activities In-Progress

- Response to U.S. EPA letter dated July 20, 2010 was prepared.
- Reviewed U.S. EPA example of an OM&M plan and began revision to existing draft OM&M plan.
- Monthly LFGCS monitoring was performed on July 19-20, 2010.
- Weekly LFGCS monitoring was performed.
- Continued negotiations between District and Village of Hanover Park regarding leachate forcemain hookup.
- Second application of teasel eradication implemented.
- Groundwater monitoring completed, analytical laboratory reports received and data are being evaluated.
- Performed MH-2 investigation on July 9 and data is being evaluated. Report/remedial action plan will be submitted to U.S. EPA in August.
- Additional road repairs occurred the week of July 26th.
- Continued operation/balancing and fine-tuning of LFGCS.
- Continued operation/balancing of leachate collection system.

Planned Activities

- O&M on the leachate extraction system and LFGCS, as necessary
- Other activities as stated above

Attached Data

- Table – Gas Probe Monitoring (July 19-20, 2010)
- Table – Landfill Gas/Leachate Monitoring
- Figure 1 – Methane Detections (July 2010)
- Table - Gas Probes With Significant Methane Detections
- Table – Liquid Pumping Volumes and Rates
- Table – Southcentral/Blower Flare Summary

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By: BD/KKG
Gas Meter: GEM 2000
Serial #: GM11209
Date Calibrated: 7/19/10, 7/20/10

Pressure Device: Magnehelics
Water Level Device: Water level indicator
Ground Conditions: Dry

Date: 7/19/10 and 7/20/10
Weather: Sunny / Cloudy
Temp and Pressure 7/19-75 to 82F, 29.90 (steady)
7/20-70 to 85F, 29.95 (steady)

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.10	0.0	0.6	19.7	79.7	20.17	
GP-33A	0.06	0.0	0.1	20.1	79.8	15.46	
GP-33B	0.12	0.0	0.1	20.0	79.9	14.35	
G-116	0.00	42.5	15.0	6.7	35.8	NR	
GP-2A	0.11	0.0	0.2	19.6	80.2	15.22	
GP-2B	0.04	0.0	0.1	19.9	80.0	10.84	
GP-34A	0.04	0.0	1.0	19.4	79.6	14.21	
GP-34B	0.04	0.0	0.3	19.9	79.8	15.68	
GP-3	0.06	0.0	0.4	19.8	79.8	13.24	
GP-4A	0.00	0.0	0.5	19.8	79.7	11.42	
GP-4B	0.00	0.0	0.4	19.8	79.8	11.73	
GP-4C	-2.00	0.0	0.0	19.6	80.4	NR	Readings from 7/19/10 with blower on.
GP-5	0.00	0.0	0.0	20.1	79.9	15.60	
P-1A	0.00	0.0	0.2	19.9	79.9	20.10	
GP-6	0.00	0.0	8.2	10.6	81.2	Dry	
GP-7A	0.00	0.0	2.6	17.2	80.2	12.20	
GP-7B	0.00	0.0	0.1	20.2	79.7	21.74	
GP-8A	0.00	0.0	0.4	19.8	79.8	8.59	
GP-8B	0.00	0.0	0.2	20.0	79.8	26.51	
P-3A	0.00	0.0	3.4	12.0	84.6	19.58	
GP-9A	0.00	0.0	0.1	19.6	80.3	7.08	
GP-9B	0.00	0.0	0.0	20.1	79.9	20.86	
P-4C	NR	NR	NR	NR	NR	NR	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.00	0.0	5.1	16.1	78.8	Dry	
GP-10B	0.10	0.0	0.4	19.7	79.9	10.84	
GP-10C	0.10	0.0	0.3	19.7	80.0	12.33	
P-5A	0.00	0.0	0.0	20.0	80.0	9.71	
GP-11A	0.02	0.0	1.6	18.7	79.7	8.91	
GP-11B	0.07	0.0	0.2	19.8	80.0	10.09	
P-6C	0.00	0.0	0.0	19.8	80.2	6.73	
GP-12	0.40	0.0	0.1	19.7	80.2	5.58	
P-7A	0.00	0.0	6.6	12.8	80.6	5.84	
P-7B	0.00	0.0	0.0	19.3	80.7	5.27	
GP-13	0.00	0.0	0.2	19.2	80.6	6.31	
GP-14	0.00	0.0	0.0	19.5	80.5	6.04	
G-109	0.00	0.0	0.0	19.7	80.3	6.49	
GP-15A	0.15	0.0	1.0	18.9	80.1	4.51	
GP-15B	0.00	0.4	0.2	19.2	80.2	6.91	
GP-28A	0.02	0.0	0.0	19.4	80.6	8.28	
GP-28B	0.01	0.0	0.0	19.5	80.5	4.62	
GP-28C	0.02	0.1	0.0	19.4	80.5	4.71	
GP-16A	0.03	0.0	0.0	19.4	80.6	5.97	
GP-16B	0.02	0.0	0.0	19.4	80.6	7.70	
GP-16C	0.05	0.0	0.0	19.5	80.5	7.36	
GP-29A	0.02	0.0	0.1	19.4	80.5	5.74	
GP-29B	0.07	0.0	0.3	19.1	80.6	9.88	
G-110	0.00	0.0	0.2	19.4	80.4	9.12	
GP-17	0.03	0.0	0.0	19.5	80.5	4.20	
GP-18	0.25	0.0	0.0	19.4	80.6	7.93	
GP-19	0.04	0.0	0.0	19.4	80.6	11.34	
GP-20	0.09	0.0	0.2	19.3	80.5	5.74	
GP-21A	0.03	0.0	0.0	19.4	80.6	7.15	
GP-21B	0.00	0.0	0.2	18.9	80.9	14.21	
GP-22A	0.02	0.0	0.8	19.4	79.8	6.20	

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ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.02	8.8	0.9	15.9	74.4	19.49	
GP-30A	0.04	0.0	0.2	19.7	80.1	6.32	
GP-30B	-3.5	0.2	0.1	19.6	80.1	NR	Readings from 7/19/10 with blower on.
MW-204 East	0.00	47.6	6.9	6.2	39.3	17.48	
MW-204 West	0.00	0.0	0.0	20.1	79.9	25.67	
GP-23A	0.05	0.0	2.6	17.4	80.0	4.55	
GP-23B	0.03	1.1	0.7	18.3	79.9	10.87	
GP-24A	0.08	0.0	2.0	18.5	79.5	9.26	
GP-24B	0.02	12.1	1.8	17.0	69.1	17.62	
GP-25A	0.06	0.0	1.5	19.0	79.5	5.82	
GP-25B	0.02	0.0	0.1	20.0	79.9	20.83	
GP-31A	0.00	0.0	4.6	17.0	78.4	9.10	
GP-31B	-3.50	24.3	0.9	14.2	60.6	NR	Readings from 7/19/10 with blower on.
GP-26A	0.04	0.0	0.1	19.9	80.0	8.99	
GP-26B	0.05	0.0	0.2	19.6	80.2	17.27	
GP-27A	0.00	0.0	2.4	17.8	79.8	7.23	
GP-27B	0.00	0.0	0.5	19.7	79.8	22.05	
GP-35A	0.04	0.0	1.7	18.8	79.5	6.19	
GP-35B	0.00	0.0	0.4	19.8	79.8	10.77	
G-113	0.00	0.0	1.8	18.8	79.4	12.37	
G-121	0.00	0.0	1.5	19.1	79.4	12.42	
GP-32A	0.10	0.0	0.1	19.6	80.3	11.81	
GP-32B	0.00	0.0	0.2	19.4	80.4	12.65	
GP-37A	-2.30	0.3	0.0	19.7	80.0	NR	Readings from 7/19/10 with blower on.
GP-37B	0.00	0.0	0.4	19.9	79.7	13.38	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: S. Jorgensen, 7/27/2010
Checked by: Kevin Kyrias-Gann, 8/3/2010

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois
Sheet 1 / 5

Form update 7-15-10

Date:	7/19/2010, 7/21/2010					
Person (s) sampling	Brad Drake / Kevin Kyrias-Gann		Weather Conditions:	Sunny, Partly Cloudy		
Ambient Temperature:	85	°F	Ground Conditions:	Dry		
Barometric Pressure:	29.9	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM08330
Trend in barometric pressure:	Steady		Date Last Calibrated:	7/19/2010		
Notes:						

	Blower/Flare Data					
	Northwest	Northwest		South Central	South Central	UAV-4
Date / Time / Location	7/19/2010 13:10	7/19/2010 13:10		7/19/2010 12:40	7/19/2010 12:40	7/19/2010 13:36
Blower Inlet Vacuum (in H_2O)	-2.5			-3.5		0.0
Inlet Valve (Turns) Open / 6	6			6		-
Gas Inlet Temperature (°F)	Not working			102		-
Blower Outlet Pressure (in H_2O)	1.5			0.5		-
Orifice Plate DP (in H_2O)	0.09			0.02		-
Approximate Flow (scfm)	16			7		-
% CH_4	45.5	45.5		26.6	27.3	60.9
% CO_2	26.4	26.3		12.6	12.9	38.9
% O_2	3.0	2.9		11.3	11.0	0.1
% Balance Gas	25.1	25.3		49.5	48.8	0.1
Combustion Temperature(°F)	232			641		-
Blower SPD%	35	45		35	40	-
Blower Hours	2			74		-
Blower Cycles	13			1		-
Blower Amps	3.2			3.1		-
Blower RPM	1283			1280		-
Air Compressor Pressure (psi)				160		
Air Compressor Hours				-		
Well Field Air Pressure (psi)				72		
Approx. Leachate Tank Level				36.5		
Comments	Flare not burning and blower not running upon arrival. System reset - everything working properly after reset.			Flare burning and blower on upon arrival		Flare burning upon arrival

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois Sheet 2/5

Date: 7/19/2010

Gas Extraction Wells

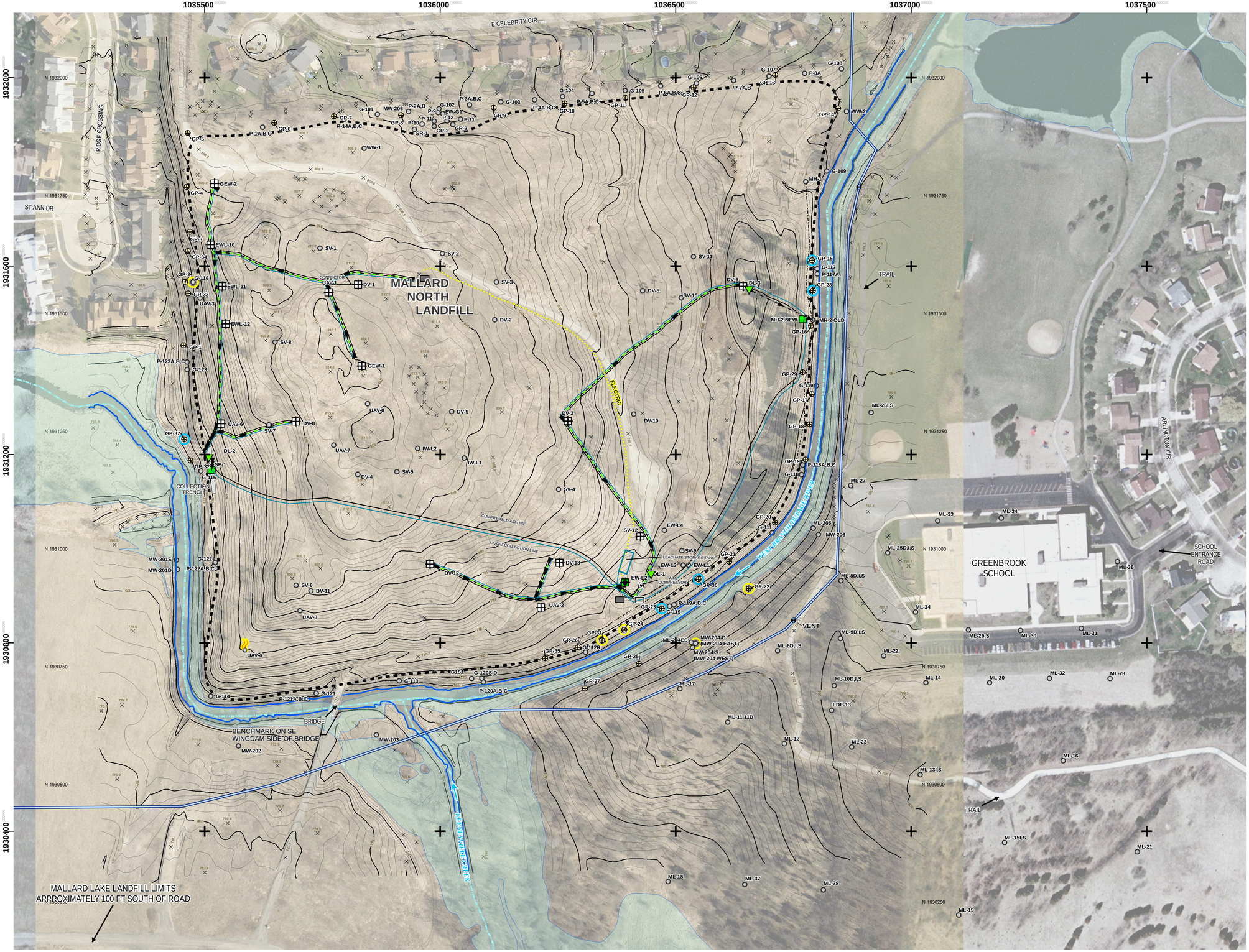
Location	Header Side Pressure	Well Side Pressure		Orifice Plate DP		Approx. Post-Adjustment Flow Rate (cfm)	% CH_4	%CO_2	%O_2	%Balance	Temperature (°F)	Valve Turns Open		Liquid Level (ft BTOC)	Depth to Top of Screen (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	-2.4	-2.4		-1.00	NC	3.1	60.5	34.1	0.0	5.4	73	10	NC	NR	
DV-8	-2.1	-0.65		-0.35	NC	1.9	46.1	26.2	1.5	26.2	82	0.5	NC	Dry	
EWL-10	-2.4	-2.25		0.00	NR	0.0	37.5	23.3	2.5	36.7	84	2	1	17.01	
EWL-11	-2.4	-2.4		-0.12	NC	1.1	30.0	27.2	0.0	42.8	88	7	NC	16.77	
EWL-12	-2.3	-0.1		-0.02	NR	0.4	32.6	22.2	0.7	44.5	84	0.5	0.25	13.43	
GEW-1	-2.4	-2.4		-0.90	NC	3.0	56.1	29.7	0.0	14.2	75	10	NC	NR	
GEW-2	-2.4	-2.4		-0.01	NC	0.3	65.3	30.7	0.9	3.1	85	10	NC	17.28	
UAV-1	-2.4	-2.4		-1.60	NC	4.0	57.7	33.2	0.0	9.1	72	7	NC	NR	
UAV-6	-2.45	-2.0		-1.95	NR	4.3	21.7	12.9	10.7	54.7	84	1.25	0.75	Dry	
SOUTHCENTRAL WELLS															
DV-3 (1)	3.4	3.4		0.92	NC	3.0	64.8	25.9	0.4	8.9	82	12	NC	NR	
DV-6	0.0	0.0		0.00	NC	0.0	0.5	0.6	19.3	79.6	82	NC	NC	NR	
DV-8 (1)	3.5	0.3		0.03	NC	0.5	0.1	0.4	18.6	80.9	98	0.125	NC	NR	
DV-12 (1)	3.5	0.4		0.40	NR	2.0	44.8	21.0	6.2	28.0	88	1.5	0.75	NR	
DV-13 (1)	3.5	0.0		0.10	NC	1.0	56.0	21.4	2.9	19.7	100	1.5	NC	NR	
EWL-2 (1)	3.5	3.5		2.3-2.7	NC	5.0	1.8	0.8	18.5	78.9	87	0	NC	8.69	
SV-12 (1)	3.5	0.04		0.03	NC	0.5	30.5	14.0	8.6	46.9	98	0.125	NC	NR	
UAV-2 (1)	3.5	0.2		0.00	NR	0.0	67.8	31.8	0.4	0.0	98	0.25	0.5	NR	

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

Location	Well Pressure	% CH_4	%CO_2	%O_2	%Balance	Flame Present (yes/no)	Blower Operating (yes/no)	Sparking Unit Operating (yes/no)	Comments
	I								
UAV-4	0	60.9	38.9	0.1	0.1	Yes	NA	Yes	Flare burning upon arrival

River Walk / Seep Checks

(1) Measurements taken on 7/21/2010



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT JULY 19-20, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(JULY 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090320.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: AUGUST 2010	8/3/2010		

RMT

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Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	0.2	NM	9.57	15.37	1st monitoring round
	6/17/2009	0.6	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	3.0	+0.10	14.53		
	8/4/2009	2.9	0.00	15.65		
	8/17/2009	13.8	+0.10	13.45		
	9/29/2009	31.9	0.00	16.91		
	10/19/2009	31.1	-0.20	14.36		
	11/17/2009	13.5	0.00	15.78		
	12/10/2009	6.1	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	0.6	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	0.1	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
GP-2B	6/3/2009	0.6	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	0.2	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	0.3	-0.40	11.83		
	11/17/2009	1.6	0.00	13.09		
	12/10/2009	2.8	+3.40	12.42		
	1/27/2010	0.4	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	0.5	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	0.4	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
GP-4C	6/3/2009	0.5	NM	dry	30.14	1st monitoring round
	6/17/2009	2.7	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	24.2	+0.20	18.24		
	8/4/2009	19.7	0.00	18.19		
	8/17/2009	24.3	0.00	18.30		
	9/29/2009	31.5	+0.10	18.68		
	10/19/2009	22.0	+0.60	18.92		
	11/17/2009	25.4	0.00	19.93		
	12/10/2009	5.1	0.00	19.96		
	1/27/2010	7.7	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	7.5	+7.6	18.58		
	3/17/2010	6.0	+5.2	17.62		
	4/28/2010	2.5	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
GP-15A	1/27/2010	2.4	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	0.3	0.00	4.92		
	3/17/2010	0.3	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	0.15	4.51		
GP-15B	7/20/2010	0.4	0.00	6.91		
GP-17	6/3/2009	10.7	NM	NM	13.25	1st monitoring round
	6/17/2009	1.1	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	0.03	4.20		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	0.2	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
GP-22B	6/28/2010	0.2	0.00	19.04	27.75	
	7/20/2010	8.8	+0.02	19.49		
GP-23B	2/23/2010	0.3	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	0.2	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	1.1	+0.03	10.87		
GP-24B	6/28/2010	8.2	0.00	13.48	22.02	
	7/20/2010	12.1	+0.02	17.62		
GP-26B	6/3/2009	0.6	NM	16.76	27.45	1st monitoring round
	6/17/2009	0.1	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	2.0	-0.50	18.90		
	8/4/2009	1.9	-0.10	19.42		
	8/17/2009	1.1	0.00	20.32		
	9/29/2009	3.4	-2.50	20.28		
	10/19/2009	6.4	+3.60	20.65		
	11/17/2009	4.6	+0.10	18.56		
	12/10/2009	3.9	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.31		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.81		
	7/20/2010	0.0	+0.05	17.27		
GP-28C	7/20/2010	0.1	+0.02	4.71		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	13.2	+0.10	7.83		
	7/22/2009	17.3	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	11.8	-0.10	8.15		
	8/4/2009	13.8	+0.10	7.46		
	8/17/2009	11.2	0.00	6.76		
	9/29/2009	7.0	+0.50	7.82		
	10/19/2009	16.0	+0.20	9.22		
	11/17/2009	80.0	+0.10	10.21		
	12/10/2009	31.5	0.00	9.98		
	1/27/2010	13.6	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	5.5	0.00	8.14		
	3/17/2010	82.8	-0.20	8.73		
	4/28/2010	3.1	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	0.5	-3.70	7.18		
	6/10/2010	0.3	-6.00	NM		
	6/28/2010	0.1	-6.50	NM		
	7/20/2010	0.2	-3.50	NM		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	72.8	+0.10	15.34		
	7/22/2009	0.2	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	41.7	+0.10	16.72		
	8/4/2009	86.6	+0.10	17.39		
	8/17/2009	87.9	0.00	18.21		
	9/29/2009	68.8	+0.10	19.07		
	10/19/2009	38.1	0.00	11.82		
	11/17/2009	90.1	0.00	19.34		
	12/10/2009	55.6	0.00	17.98		
	1/27/2010	1.1	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	12.1	+0.20	5.42		
	3/17/2010	1.2	0.02	12.48		
	4/28/2010	42.6	+0.10	14.88		
	5/24/2010	2.8	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	6.2	-3.70	14.49		
	6/10/2010	2.0	-6.00	NM		
	6/28/2010	1.2	-6.50	NM		
	7/20/2010	24.3	-3.50	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33A	6/17/2009	62.7	+0.40	13.84	16.13	
	7/22/2009	0.1	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	4.1	+0.20	15.47		
	8/4/2009	1.8	0.00	15.65		
	8/17/2009	0.6	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	0.2	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0	13.93		
	6/28/2010	0.0	0	13.57		
	7/19/2010	0.0	+0.06	15.46		
GP-37A	6/17/2009	0.2	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	0.1	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	2.7	0.00	13.23		
	12/10/2009	4.8	0.00	13.35		
	1/27/2010	9.1	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	12.0	0.00	12.42		
	3/17/2010	14.4	+0.2	12.35		
	4/28/2010	16.5	0.00	12.38		
	5/24/2010	13.1	-4.80	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NR		Increased vacuum
	5/26/2010	4.1	-5.00	12.34		
	6/10/2010	0.9	-6.00	NM		
	6/28/2010	0.1	-6.00	NM		
	7/20/2010	0.3	-2.30	NM		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	12.3	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	0.5	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	0.40	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	0.2	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
G-116	5/7/2009	76.1	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	80.0	+9.50	12.26		casing likely cracked at
	6/17/2009	65.1	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	73.4	+0.10	12.72		
	8/4/2009	73.9	NM	12.93		
	8/17/2009	67.6	0.00	13.28		
	9/29/2009	75.3	0.00	13.50		
	10/19/2009	72.7	+0.20	13.32		
	11/17/2009	79.8	0.00	14.31		
	12/10/2009	70.1	+0.50	13.88		
	1/27/2010	75.6	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	80.1	0.00	12.55		
	3/17/2010	78.3	+0.15	12.69		
	3/31/2010	16.2	-3.20	NM		hose vacuum extraction from EWL-
	4/2/2010	16.7	-3.20	NM		11 began 3/26/10
	4/5/2010	12.7	-3.30	NM		
	4/9/2010	14.9	-3.60	NM		
	4/28/2010	24.7	-4.60	NM		
	5/24/2010	7.9	-5.00	NM		Increased vacuum
	5/25/2010	9.4	-5.25	NM		
	5/26/2010	12.1	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	42.5	0.22	NM		

Gas Probes With Significant Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	30.3	0.00	21.49	22.02	
	3/5/2009	15.0	0.00	21.09		
	3/11/2009	8.6	0.00	20.44		
	4/8/2009	12.8	0.00	20.07		
	5/7/2009	23.3	0.00	19.65		
	6/3/2009	19.1	0.00	18.20		
	6/17/2009	0.4	0.00	20.00		
	7/22/2009	60.0	0.00	20.65		LCT pumps started 7/15
	7/29/2009	48.3	0.00	20.72		
	8/4/2009	37.8	0.00	21.00		
	8/17/2009	17.7	0.00	21.91		
	9/29/2009	10.7	0.00	23.86		
	10/19/2009	57.5	+0.10	22.80		
	11/17/2009	35.2	0.00	18.26		
	12/10/2009	52.8	0.00	21.88		
	1/27/2010	34.2	0.00	NM		LFGCS started 1/22/10
	2/23/2010	42.2	0.00	19.42		
	3/17/2010	41.4	0.00	17.21		
	4/28/2010	41.0	0.00	19.09		
	5/26/2010	52.5	0.00	18.47		
	6/28/2010	35.9	0.00	NM		
	6/29/2010	27.9	0.00	NM		
	7/20/2010	47.6	0.00	17.48		

NM= not measured

By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10
Updated by: E. Watruba, 6/17/10; update checked by S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10; update checked by E. Watruba, 6/30/10
Updated by: S. Jorgensen, 7/30/10; update checked by N. Braun, 8/2/10

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter
	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8/30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed.cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	soap noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
				Total System Gallons Pumped		2,525,160			8,948	Average Daily Volume (gal/day Since Startup)

NA = not applicable
NR= not recorded
Notes:
1 Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Created by: J Schoephoester, 2/17/10 Updated by: J Schoephoester, 5/25/10 Updated by: N. Braun, 6/1/10 Updated by: E Walruba, 6/17/10 Updated by: S Jorgensen, 6/28/10
Checked by N Braun, 2/3/10 Checked by: E Walruba, 6/1/10 Checked by: S. Inman, 6/21/10 Checked by: E Walruba, 6/29/10

Updated by: S Jorgensen, 7/30/10
Checked by N Braun, 8/2/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time		9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (°F)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(°F)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated: E. Watruba, 3/23/10
Checked by: N. Braun, 3/34/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/2010
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Checked by: E. Watruba, 6/1/10
Updated by: E> Watruba, 6/21/10
Checked by: S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10
Checked by: E. Watruba, 7/1/10
Updated by: S. Jorgensen, 8/2/10
Checked by: N. Braun, 8/2/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (°F)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(°F)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL.	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

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Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(°F)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

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Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3
Combustion Temperature(°F)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches
Comments				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and										
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf						
		No post-	O2 1.0	O2 1.6					card						
		blower reading			Swapped card at SC										
		was recorded.													

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Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	82	84	85	NR	NR	72	84	81	84	84	88	88	85
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0
Combustion Temperature(°F)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4
Blower Amps													
Blower RPMs													
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR
Comments								Blower outlet pressure fluctuating.					

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Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010
Time	2:30 PM	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM
Blower Inlet Vacuum (in H_2O)	4	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8
Inlet Valve (Turns) Open / 6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	86	88	NR	85	85	85	83	82	82	84
Blower Outlet Pressure (in H_2O)	+1.3	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6
Orifice Plate DP (in H_2O)	0.14	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13
Approximate Flow (scfm)	20	17	NR	14	14	17	17	15	20	19
% CH_4	42.6	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8
% CO_2	25.6	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0
% O_2	2.6	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6
% Balance Gas	29.2	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6
Combustion Temperature(°F)	NR	817	NR	1029	660	988	948	903	953	56
Blower SPD%	45	45	NR	45	45	45	45	45	45	50
Blower Hours	NR	170	NR	184	230	245	247	258	276	291
Blower Cycles	NR	4	NR	6	6	6	6	6	6	6
Blower Amps				3	3.0	3.0	3.0	3.0	3.0	3.0
Blower RPMs				1650	1651	1651	1651	1650	1841	1838
Air Compressor Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	140	NA
Well Field Air Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	80	NA
Approx. Leachate Tank Level	NR	NA	NA	NA	NA	NA	NA	NA		NA
Comments					Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max
						47.6 CH4	47.9 CH4	49.3 CH4		starts faults
					No hours logged	26.0 CO2	26.3 CO2	26.3 CO2		
						2.3 O2	2.2 O2	2.2 O2		Blower on
						23.5 BAL	23.6 BAL	22.2 BAL		
										No flame
										Sparker on

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Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010
Time	9:52 AM	10:50 AM	10:40 AM	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM
Blower Inlet Vacuum (in H_2O)	NR	NR	NR	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5
Inlet Valve (Turns) Open / 6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	NR	NR	80	76	74	74	70	70	84	NR	72	68	NR
Blower Outlet Pressure (in H_2O)	NR	NR	0.2	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00
Orifice Plate DP (in H_2O)	NR	NR	0.17	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22
Approximate Flow (scfm)	NR	NR	22	22	20	19	20	23	22	24	24	23	25
% CH_4	67.0	55.4	44.9	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1
% CO_2	32.7	27.3	23.8	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5
% O_2	0.2	2.6	3.8	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2
% Balance Gas	0.1	14.7	27.5	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1
Combustion Temperature(°F)	NR	520	202-840	1118	862	594	1021	1043	760	940	834	680	442
Blower SPD%	NR	50	40	40	40	40	40	40	40	40	45	45	45
Blower Hours	NR	0	313	376	417	516	555	595	658.1	737.6	800	814	837.4
Blower Cycles	NR	1	14	114	120	120	120	120	120	121	121	121	121
Blower Amps	NR	3.5	3.3	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR
Blower RPMs	NR	1838	1468	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR
Air Compressor Pressure (psi)	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	80	NA	80	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	29"	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA
Comments	NW blower/flare system down.		Inlet side 49.5 26.2 2.0 22.3	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Created by: E. Watruba, 2/24/10
Checked by: J. Schoephoester, 2/24/10
Updated by: S. Inman, 4/16/2010
Checked by: J. Schoephoester, 4/16/10
Updated by: J. Schoephoester, 4/27/10
Checked by: S. Inman, 4/28/10
Updated by: N. Braun, 6/1/10
Updated by: E. Watruba, 6/21/10
Checked by: S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10
Checked by: E. Watruba, 7/1/10
Updated by: S. Jorgensen, 8/2/10
Checked by: N. Braun, 8/2/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010
Time	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM
Blower Inlet Vacuum (in H_2O)	5.0	5.1	4.6	5.0	5.0	5.3	4.9	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	70	72	72	70	69	66	70	NR	64	69	NR	70	NR	72	61	55	31
Blower Outlet Pressure (in H_2O)	2.2	2.2	2.0	2.0	1.8	2.0	1.8	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20
Orifice Plate DP (in H_2O)	0.20	0.19	0.20	0.19	0.15	0.30	0.14	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21
Approximate Flow (scfm)	24	23	24	23	20	29	20	NR	NA	25	NR	24	NR	25	22	22	24
% CH_4	NR	38.7	43.3	40.6	42.0	48.3	45.0	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5
% CO_2	NR	22.7	25.5	24.8	25.4	28.4	26.2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2
% O_2	NR	4.5	2.4	2.7	2.9	1.2	2.2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7
% Balance Gas	NR	34.1	28.8	31.9	29.7	22.1	26.6	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6
Combustion Temperature(°F)	885	430*	573	548	820	629	602	460	761	337	NR	625	NR	356	615	770	262
Blower SPD%	45	45	45	45	35	45	45	50	50	50	NR	50	50	50	50	50	50
Blower Hours	875	958	999	1115	1257	1376	1535	107	NR	227	NR	344	NR	506	665	765	906
Blower Cycles	121	22	121	121	127	127	127	1	NR	1	NR	3	NR	3	3	4	398
Blower Amps	3.3	NR	NR	3.3	3.2	3.3	3.3	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5
Blower RPMs	1650	NR	NR	1650	1652	1650	1652	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838
Air Compressor Pressure (psi)	160	152	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	60	65	NA	NA	75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	10%	27" @ 13:20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments	HI 1500	*Low value due to	Gas readings														
	LO 200	position of thermo-	are pre-blower							Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower
	HI HI 1900	couple.	values.							CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%
	LO LO 200									CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%
		Pre-blower:		Pre-blower:	Pre-blower:	Post-blower:	Post-blower:	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%
		CH_4 43.6		CH_4 40.4	CH_4 40.5	CH_4 46.1	CH_4 43.5	CH_4 43.6	was taken								
		CO_2 25.6		CO_2 25.2	CO_2 25.3	CO_2 27.4	CO_2 25.2	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf			
		O_2 2.3		O_2 2.2	O_2 2.3	O_2 2.0	O_2 2.9	O_2 2.10	No post-					card			
									blower reading								
									was recorded.								

Notes:
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(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

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Checked by: J. Schoephoester, 2/24/10
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Checked by: N. Braun, 8/2/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/14/2010	7/19/2010	7/26/2010
Time	1:30 PM	1:10 PM	11:30 AM
Blower Inlet Vacuum (in H_2O)	5.3	2.5	2.6
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6
Gas Inlet Temperature (°F)	NA	NA	NA
Blower Outlet Pressure (in H_2O)	3.30	1.50	1.60
Orifice Plate DP (in H_2O)	0.19	0.09	0.11
Approximate Flow (scfm)	24	16	17
% CH_4	49.8	45.5	48.2
% CO_2	26.4	26.4	25.3
% O_2	3.2	3.0	3.7
% Balance Gas	20.6	25.1	22.8
Combustion Temperature(°F)	415	232	NA
Blower SPD%	50	35 - 45*	45
Blower Hours	956	2	102
Blower Cycles	862	13	270
Blower Amps	3.5	3.2	3.2
Blower RPMs	1839	1283	1283
Air Compressor Pressure (psi)	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA
Comments	Pre-blower	Pre-blower	Pre-blower
	CH4-50.1%	CH4-45.5%	CH4-48.2%
	CO2-26.5%	CO2-26.3%	CO2-25.3%
	O2-3.1%	O2-2.9%	O2-3.6%
		*Blower SPD	
		increased to	
		45% on 7/21	

Notes:
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(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

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Checked by: J. Schoephoester, 2/24/10
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Updated by: S. Jorgensen, 6/29/10
Checked by: E. Watruba, 7/1/10
Updated by: S. Jorgensen, 8/2/10
Checked by: N. Braun, 8/2/10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR
% CH_4	67.6		68.6		64.8		62.5		61.8	
% CO_2	32.4		30.1		32.9		29.5		29.5	
% O_2	0		0		0.7		0.4		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7	
Gas Temperature(°F)	40		43		42		48		48	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	-3.1	-4.4	-4.4	-5.8	NR	-6.0	NR	-2.4	NR
Orifice Plate DP (in H_2O)	1.30	1.50	NR	1.60	1.80	1.80	2.60	NC	0.25	NR	-1.00	NR
% CH_4	59.1		58.3		51.3		50.7		53.3		60.5	
% CO_2	28.0		28.7		27.2		26.5		27.4		34.1	
% O_2	0.0		0.0		0.4		0.0		0.0		0.0	
% Balance Gas	12.9		13.0		21.1		22.8		19.3		5.4	
Gas Temperature(°F)	NR		NR		82		64		70		73	
Valve Turns Open	5	6.5	6.5	9.5	8	10	10	NC	10	NC	10	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR
% CH_4	63.4		72.5		40.5		36.0		44.8	
% CO_2	32.1		26.8		31.6		27.5		27.4	
% O_2	0.5		0		0.0		0.0		0.0	
% Balance Gas	4.0		0.7		27.9		36.5		27.8	
Gas Temperature(^oF)	40		40		38		46		50	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
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NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6		-6.0	
Well Side Pressure (in H_2O)	-2.4	-1.0	NR	NC	-1.25	NC	-1.50	NR	-1.50	NR
Orifice Plate DP (in H_2O)	1.20	0.50	NR	NC	0.50	NC	0.40	NC	0.70	NR
% CH_4	29.4		34.9		35.2		37.8		44.3	
% CO_2	23.2		24.2		24.0		25.2		26.9	
% O_2	0.4		1.8		0.4		0.0		0.0	
% Balance Gas	47.0		39.1		40.4		37.0		28.8	
Gas Temperature(°F)	NR		NR		66		70		76	
Valve Turns Open	1	0.5	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		19.49		19.43		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/19/2010									
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.1									
Well Side Pressure (in H_2O)	-0.65	NR								
Orifice Plate DP (in H_2O)	-0.35	NR								
% CH_4	46.1									
% CO_2	26.2									
% O_2	1.5									
% Balance Gas	26.2		100.0		100.0		100.0		100.0	
Gas Temperature(°F)	82									
Valve Turns Open	0.5	NC								
Liquid Level (ft BTOC)	DRY									
Comments										

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR
% CH_4	20.1		46.2		16.9		12.5		26.6	
% CO_2	17.4		20		19.2		13.0		21.1	
% O_2	5.4		4		6.1		7.3		0.0	
% Balance Gas	57.1		29.8		57.8		67.2		52.3	
Gas Temperature(^{o}F)	34		40		30		40		50	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-3.7	-3.7	-4.4	-4.4	-6.0	-5.0	-5.5	NR	-2.3	NR
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.02	0.10	0.08	0.03	NR	0.00	NR
% CH_4	18.2		17.3		24.1		32.7		37.5	
% CO_2	16.2		16.8		19.5		20.3		23.3	
% O_2	3.6		3.4		1.6		2.5		2.5	
% Balance Gas	62.0		62.5		54.8		44.5		36.7	
Gas Temperature(^{o}F)	NR		74		76		88		84	
Valve Turns Open	4	4	4	2	2	NR	2	NC	2	1
Liquid Level (ft BTOC)	NR		16.4		16.62		16.32		17.01	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR
% CH_4	18.4		53.2		16.6		11.5		12.0	
% CO_2	21.2		24.5		21.6		15.5		14.7	
% O_2	3.3		1.2		1.0		5.7		5.2	
% Balance Gas	57.1		21.1		60.8		67.3		73.3	
Gas Temperature(°F)	34		38		32		42		44	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010		3/31/2010		4/2/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-3.7		-4.4	
Well Side Pressure (in H_2O)	-3.7	0.2	-3.7	NR	-3.8	NR	-3.3	-3.4	-4.4	NC
Orifice Plate DP (in H_2O)	0.20	NR	0.50	NR	0.60	NR	0.60	0.65	0.50	NC
% CH_4	11.3		12.1		12.1		11.2		12.2	
% CO_2	12.2		13.3		12.8		14.3		14.0	
% O_2	8.0		6.4		7.2		6.4		6.3	
% Balance Gas	68.5		68.2		67.9		68.1		67.5	
Gas Temperature(^oF)	NR		70		60		NR		58	
Valve Turns Open	7	7	7	7	7	7	6.5	7	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		16.1	
Comments										

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[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-6.0	NR	-6.0	NR	-2.4	NR
Orifice Plate DP (in H_2O)	0.50	NC	0.50	NR	-0.12	NR
% CH_4	12.8		17.4		30.0	
% CO_2	15.3		18.8		27.2	
% O_2	5.3		2.9		0.0	
% Balance Gas	66.6		60.9		42.8	
Gas Temperature(^oF)	80		88		88	
Valve Turns Open	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	15.05		15.70		16.77	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR
% CH_4	22.2		24.8		18.6		19.8		27.1	
% CO_2	13.8		12.4		13.8		14.0		15.1	
% O_2	11.2		11		10.8		9.5		10.5	
% Balance Gas	52.8		51.8		56.8		56.7		57.8	
Gas Temperature(°F)	30		38		28		40		48	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0		-6.5		-2.3	
Well Side Pressure (in H_2O)	-3.5	NC	-1.0	-0.8	-1.2	NR	-0.7	NR	-0.1	NR
Orifice Plate DP (in H_2O)	NR	NC	0.20	0.15	0.15	NC	0.08	NR	-0.02	NR
% CH_4	21.1		22.9		25.2		33.1		32.6	
% CO_2	15.8		14.4		17.7		21.6		22.2	
% O_2	8.6		10.3		7.7		6.7		0.7	
% Balance Gas	54.5		52.4		49.4		38.6		44.5	
Gas Temperature(^{o}F)	NR		64		78		84		84	
Valve Turns Open	0.25	NR	0.75	0.5	0.5	NC	0.5	NC	0.5	0.25
Liquid Level (ft BTOC)	NR		12.8		NR		12.54		13.43	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR
% CH_4	64.9		74.1		71.4		66.8		67.2	
% CO_2	34.1		23		37.5		31.9		32.7	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1	
Gas Temperature(°F)	40		45		40		48		50	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-4.4		-6.0		-6.0	
Well Side Pressure (in H_2O)	-3.7	-3.7	NR	NR	-4.4	-4.4	-5.4	NR	-6.0	NR
Orifice Plate DP (in H_2O)	1.50	1.80	NR	1.60	2.00	2.00	2.80	NC	2.50	NR
% CH_4	67.2		59.3		62.2		56.4		57.1	
% CO_2	31.8		31.0		31.8		31.6		32.2	
% O_2	0.0		0.0		0.3		0.0		0.0	
% Balance Gas	1.0		9.7		5.7		12.0		10.7	
Gas Temperature(°F)	NR		NR		62		62		68	
Valve Turns Open	5%	6.5	6.5	8.5	8.5	10	10.0	NC	10.0	NC
Liquid Level (ft BTOC)	NR		NR		NR		17.54		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/19/2010									
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4									
Well Side Pressure (in H_2O)	-2.4	NR								
Orifice Plate DP (in H_2O)	-0.90	NR								
% CH_4	56.1									
% CO_2	29.7									
% O_2	0.0									
% Balance Gas	14.2		100.0		100.0		100.0		100.0	
Gas Temperature(°F)	75									
Valve Turns Open	10.0	NC								
Liquid Level (ft BTOC)	NR									
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR
% CH_4	58		71.1		43.6		37.1		54.4	
% CO_2	29		28		28.8		23.1		27.0	
% O_2	1.9		0		1.9		3.9		0.9	
% Balance Gas	11.1		0.9		25.7		35.9		18.6	
Gas Temperature(^{o}F)	36		40		34		46		50	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.4		-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-3.7	NR	-4.4	-4.4	-6.0	NR	-6.0	NR	-2.4	NR
Orifice Plate DP (in H_2O)	0.15	0.20	0.05	0.08	0.02	NC	0.03	NR	-0.01	NR
% CH_4	47.9		48.9		56.1		67.8		65.3	
% CO_2	26.0		26.7		29.4		30.6		30.7	
% O_2	1.3		1.4		0.0		0.4		0.9	
% Balance Gas	24.8		23.0		14.5		1.2		3.1	
Gas Temperature(°F)	NR		68		74		84		85	
Valve Turns Open	6	7	7.5	10	10	NC	10	NC	10	NC
Liquid Level (ft BTOC)	NR		17.3		NR		17.22		17.28	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR
% CH_4	65.1		63.5		64.0		57.6		60.7	
% CO_2	34.9		30.9		38.2		32.3		32.6	
% O_2	0		0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7	
Gas Temperature(°F)	38		40		38		48		48	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-4		-4.4		-6.0		-6.0	
Well Side Pressure (in H_2O)	-3.8	-3.8	NR	NR	-4.4	NC	-5.4	NR	-6.0	-6.0
Orifice Plate DP (in H_2O)	2.30	2.40	NR	2.70	3.00	NC	3.80	NC	3.80	3.80
% CH_4	55.2		56.0		48.7		51.9		52.2	
% CO_2	30.9		31.8		29.5		29.9		30.6	
% O_2	0.0		0.0		0.6		0.4		0.0	
% Balance Gas	13.9		12.2		21.2		17.8		17.2	
Gas Temperature(^{o}F)	NR		NR		56		78		66	
Valve Turns Open	3.5	4.5	4.5	6.5	6.5	NC	6.5	NC	6.5	7.0
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/19/2010									
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4									
Well Side Pressure (in H_2O)	-2.4	NR								
Orifice Plate DP (in H_2O)	-1.60	NR								
% CH_4	57.7									
% CO_2	33.2									
% O_2	0.0									
% Balance Gas	9.1		100.0		100.0		100.0		100.0	
Gas Temperature(°F)	72									
Valve Turns Open	7	NC								
Liquid Level (ft BTOC)	DRY									
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR
% CH_4	23.8		43.5		21.2		18.1		34.1	
% CO_2	14.1		17.9		15.4		11.9		17.5	
% O_2	10.1		6.8		9.2		10.5		8.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4	
Gas Temperature(°F)	38		44		38		46		52	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-4.4		-6.0		-6.0		-2.5	
Well Side Pressure (in H_2O)	NR	NC	-0.8	-0.9	-5.6	NR	-5.5	NR	-2.0	NR
Orifice Plate DP (in H_2O)	NR	NC	0.65	0.85	5.00	NC	5.00	NR	-1.95	NR
% CH_4	28.2		34.4		21.1		21.2		21.7	
% CO_2	14.5		16.5		12.9		11.5		12.9	
% O_2	9.4		8.8		10.5		10.6		10.7	
% Balance Gas	47.9		40.3		55.5		56.7		54.7	
Gas Temperature(°F)	NR		74		72		80		84	
Valve Turns Open	1.75	NC	1	1.25	1.25	NC	1.25	NC	1.25	0.75
Liquid Level (ft BTOC)	NR		12.8		11.95		NR		DRY	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC
% CH_4	75.5		NR		70.1		79.9		71.6	
% CO_2	24.5		NR		28.2		25.9		28.0	
% O_2	0		NR		0		0		0.4	
% Balance Gas	0.0		NR		1.7		0		0.0	
Gas Temperature(^{o}F)	34		38		NR		NR		32	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.7		+0.2		NR		NR	
Well Side Pressure (in H_2O)	-2.6	-2.7	-2.7	NR	+0.2	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.50	0.65	0.20	NR	0.00	NR	NR	NR	NR	NR
% CH_4	69.1		72.3		77.7		NR		73.1	
% CO_2	22.9		23.2		22.3		NR		22.3	
% O_2	1.5		0.1		0.0		NR		0.0	
% Balance Gas	6.5		4.5		0.0		NR		4.6	
Gas Temperature(°F)	40		48		52		NR		NR	
Valve Turns Open	1	1.75	NR	NR	1.75	NC	1.75	NC	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	-2.4	NC	-2.6	NC	-6.0	NR	3.4	NR
Orifice Plate DP (in H_2O)	0.70	NC	0.70	NC	1.60	NR	0.92	NR
% CH_4	69.1		70.6		67.1		64.8	
% CO_2	22.1		22.6		26.2		25.9	
% O_2	0.1		0.0		0.0		0.4	
% Balance Gas	8.7		6.8		6.7		8.9	
Gas Temperature(°F)	50		68		68		82	
Valve Turns Open	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	61.3		NR		NR		65.7		58.2	
% CO_2	30.4		NR		NR		34.9		35.2	
% O_2	2.5		NR		NR		0		2.5	
% Balance Gas	5.8		NR		NR		0		4.1	
Gas Temperature(^{o}F)	32.0		40.0		NR		NR		24	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.7		-2.8		+0.04		NR		NR	
Well Side Pressure (in H_2O)	0.0	-0.6	-2.8	NR	+0.01	NR	NR	NR	NR	NR
Orifice Plate DP (in H_2O)	0.00	0.05	0.01	NR	0.00	NR	NR	NR	NR	NR
% CH_4	64.4		0.2		9.8		NR		0.5	
% CO_2	33.7		0.2		4.4		NR		0.6	
% O_2	0.5		21.2		18.0		NR		19.2	
% Balance Gas	1.4		99.6		67.8		NR		79.7	
Gas Temperature(^oF)	36		50		46		NR		NR	
Valve Turns Open	0	0.5	NR	NR	0.5	NC	0.5	NC	0.25	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		7/21/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.4		-2.6		-6.0		0.0		-3.5	
Well Side Pressure (in H_2O)	-2.4	NC	-1.8	-0.3	-4.0	NR	0.0	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.00	NC	0.02	0.01	0.02	NR	0.00	NR	0.03	NR
% CH_4	4.0		0.4		0.2		0.5		0.1	
% CO_2	2.5		0.2		0.1		0.6		0.4	
% O_2	18.8		20.2		19.3		19.3		18.6	
% Balance Gas	74.7		79.2		80.4		79.6		80.9	
Gas Temperature(°F)	58		76		84		82		98	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR
% CH_4	36.3		59.3		20.3		38.1		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3	
% Balance Gas	40.0		14.5		55.6		36.4		34.7	
Gas Temperature(°F)	44		44		42		42		49	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-1.0	-0.8	-0.7	NC	NR	NR	-0.1	-0.5	-0.5	NR
Orifice Plate DP (in H_2O)	0.70	0.60	0.50	NC	NR	NR	0.10	0.30	0.35	NC
% CH_4	31.9		43.2		43.5		66.3		55.2	
% CO_2	20.2		22.1		22.3		28.7		25.1	
% O_2	4.3		3.0		4.0		1.1		2.5	
% Balance Gas	43.6		31.7		30.2		3.9		17.2	
Gas Temperature(°F)	48		NR		NR		50		72	
Valve Turns Open	2	1.75	1.75	NC	0.75	0.5	1	1.5	1.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/28/2010		7/21/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-3.5	
Well Side Pressure (in H_2O)	-1.0	NR	0.4	NR
Orifice Plate DP (in H_2O)	0.80	NR	0.40	NR
% CH_4	46.9		44.8	
% CO_2	21.8		21.0	
% O_2	5.9		6.2	
% Balance Gas	25.4		28.0	
Gas Temperature(^oF)	76		88	
Valve Turns Open	1.5	NC	1.5	0.75
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR
% CH_4	56.5		63.4		52.0		51.9		43.3	
% CO_2	19.1		17.6		19.0		17.9		14.1	
% O_2	5.1		4		6.1		4.7		8.7	
% Balance Gas	19.3		15		22.9		25.5		42.6	
Gas Temperature(°F)	34		36		24		38		52	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		-2.8		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	-0.2	-0.2	-2.8	-2.8	NR	NR	-2.2	-1.3	-2.5	-0.5
Orifice Plate DP (in H_2O)	0.01	0.01	0.15	0.10	NR	NR	0.02	0.01	0.40	0.03
% CH_4	19.8		32.6		0.2		27.2		0.3	
% CO_2	5.8		8.7		0.6		7.3		0.3	
% O_2	15.6		11.4		19.0		13.5		20.1	
% Balance Gas	58.8		47.3		80.2		52.0		79.3	
Gas Temperature(^{o}F)	50		NR		NR		62		88	
Valve Turns Open	3	2.5	2.5	2	2	0.5	1	0.75	0.75	0.625
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/28/2010		7/21/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-3.5	
Well Side Pressure (in H_2O)	+1.2	-0.6	0.0	NR
Orifice Plate DP (in H_2O)	0.02	0.03	0.10	NR
% CH_4	81.7		56.0	
% CO_2	20.9		21.4	
% O_2	0.0		2.9	
% Balance Gas	-2.6		19.7	
Gas Temperature(°F)	90		100	
Valve Turns Open	0.75	1.50	1.5	NC
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC
% CH_4	9.0		NR		2.4		NR		3.4	
% CO_2	1.9		NR		1.1		NR		2.0	
% O_2	18.9		NR		19.4		NR		16.7	
% Balance Gas	70.2		NR		77.1		NR		77.9	
Gas Temperature(^{o}F)	66.0		35.0		NR		NR		34	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		NR		-0.7		NR		-2.6	
Well Side Pressure (in H_2O)	0.0	NC	NR	NR	0.0	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	0.00	NR	NR	NR	0.00	NC
% CH_4	9.1		11.2		0.4		NR		2.2	
% CO_2	3.6		1.3		0.2		NR		1.0	
% O_2	14.8		18.4		20.5		NR		20.1	
% Balance Gas	72.5		87.5		78.9		NR		76.7	
Gas Temperature(°F)	36		45		44		NR		70	
Valve Turns Open	0	NC	NR	NR	CL	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		5.8	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/21/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.6		-6.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	0.0	NR	3.5	NR
Orifice Plate DP (in H_2O)	0.00	NC	0.00	NC	2.3-2.7	NC
% CH_4	7.0		4.5		1.8	
% CO_2	2.2		1.8		0.8	
% O_2	18.7		18.4		18.5	
% Balance Gas	72.1		75.3		78.9	
Gas Temperature(°F)	72		90		87	
Valve Turns Open	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	6.79		8.00		8.69	
Comments						

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC
% CH_4	75.5		NR		68.1		48.2		17.0	
% CO_2	23.8		NR		27.4		17.6		6.7	
% O_2	0.4		NR		0		5.2		13.2	
% Balance Gas	0.3		NR		4.5		29		63.1	
Gas Temperature(^{o}F)	32		NR		NR		30		28	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010		3/10/2010		3/15/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.8		-2.8		+0.15		NR		-2.4	
Well Side Pressure (in H_2O)	0.0	NC	-0.02	NR	+0.03	-0.01	NR	NR	0.0	-0.80
Orifice Plate DP (in H_2O)	0.00	NC	0.02	NR	0.00	0.005	NR	NR	0.15	0.05
% CH_4	29.8		41.7		76.5		NR		58.3	
% CO_2	11.9		13.4		22.9		NR		19.3	
% O_2	9.1		9.4		0.1		NR		4.1	
% Balance Gas	49.2		35.5		0.5		NR		18.3	
Gas Temperature(°F)	34		50		44		NR		56	
Valve Turns Open	0	NC	NR	NR	CL	0.125	0.125	NC	0	0.125
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

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[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/21/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-2.6		-6.0		-3.5	
Well Side Pressure (in H_2O)	-0.04	NR	-0.11	NR	0.04	NR
Orifice Plate DP (in H_2O)	0.01	NR	0.08	NR	0.03	NR
% CH_4	47.8		39.1		30.5	
% CO_2	17.7		15.8		14.0	
% O_2	6.5		7.8		8.6	
% Balance Gas	28.0		37.3		46.9	
Gas Temperature(°F)	76		80		98	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8
% O_2	19.4		0		16.7		0.0		0.3	0.3
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4
Gas Temperature(^oF)	36		38		24		36		54	54
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.2		NR		NR		-2.6		-2.6	
Well Side Pressure (in H_2O)	+0.07	-0.2	NR	NR	NR	NR	0.0	0.0	0.02	-0.5
Orifice Plate DP (in H_2O)	0.00	0.01	NR	NR	NR	NR	0.01	0.00	0.01	0.02
% CH_4	78.9		NR		62.2		1.8		77.4	
% CO_2	13.8		NR		4.3		2.0		20.4	
% O_2	1.5		NR		0.8		18.4		0.1	
% Balance Gas	5.8		NR		32.7		77.8		2.1	
Gas Temperature(°F)	48		NR		NR		64		82	
Valve Turns Open	0.25	0.375	0	NC	0	0.125	0.125	0	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
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NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/28/2010		7/21/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.5		-3.5	
Well Side Pressure (in H_2O)	0.00	-0.2	0.20	NR
Orifice Plate DP (in H_2O)	0.01	0.01	0.00	NR
% CH_4	73.5		67.8	
% CO_2	25.6		31.8	
% O_2	0.0		0.4	
% Balance Gas	0.9		0.0	
Gas Temperature(°F)	88		98	
Valve Turns Open	0	0.25	0.25	0.5
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

- Table – Northwest/Blower Flare Summary
- Table - Gas Extraction Well Summary

Mallard North Landfill Status Meeting
October 21, 2010

Discussion Topics

- Manhole MH-2 remedial activities
- O&M Plan review status
- Groundwater evaluation report review status
- Ongoing OM&M activities

Attached Data [1]

- August 2010 LFG Monitoring Data
- September 2010 LFG Monitoring Data
- October 2010 LFG Monitoring Data
- Gas Probes with Significant Methane Detections
- Liquid Pumping Volumes and Rates
- Southcentral/Blower Flare Summary
- Northwest/Blower Flare Summary
- Gas Extraction Well Summary

[1] October 2010 LFG Monitoring Data was not available at meeting and was added to this package on October 22, 2010.

August 2010 LFG Monitoring Data
Mallard North Landfill

Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

Monitored By:	TH/BD	Pressure Device:	Magnehelics	Date:	8/16-8/17/2010
Gas Meter:	GEM 2000	Water Level Device:	Water level indicator	Weather:	Overcast
Serial #:	GMI 1209	Ground Conditions:	Dry	Temperature:	76
Date Calibrated:	8/17/2010			Pressure:	29.18

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.00	0.0	0.7	19.3	80.0	19.85	
GP-33A	0.00	0.0	0.0	19.9	80.1	13.94	
GP-33B	0.00	0.0	0.1	19.8	80.1	12.96	
G-116	-5.00	13.7	4.5	16.0	65.8	NR	Connected to hose extraction
GP-2A	0.00	0.0	0.3	19.4	80.3	13.93	
GP-2B	0.00	0.0	0.0	19.8	80.2	11.00	
GP-34A	0.00	0.0	0.9	19.0	80.1	8.21	
GP-34B	0.00	0.0	0.1	19.8	80.1	14.76	
GP-3	0.00	0.0	0.7	19.1	80.2	12.82	
GP-4A	0.00	0.0	0.2	19.7	80.1	11.57	
GP-4B	0.00	0.0	1.4	18.4	80.2	10.11	
GP-4C	-5.00	0.1	0.1	19.6	80.2	NR	Connected to hose extraction
GP-5	0.00	0.0	0.0	20.1	79.9	15.69	
P-1A	0.00	0.0	0.1	20.2	79.7	18.26	
GP-6	0.00	0.0	8.6	8.4	83.0	11.85	
GP-7A	0.00	0.0	0.3	19.4	80.3	11.70	
GP-7B	0.00	0.0	0.1	20.0	79.9	20.15	
GP-8A	0.00	0.0	0.0	19.9	80.1	7.43	
GP-8B	0.00	0.0	0.1	19.9	80.0	26.33	
P-3A	0.00	0.0	5.9	5.8	88.3	19.19	
GP-9A	0.00	0.0	0.1	19.7	80.2	6.65	
GP-9B	0.00	0.0	0.0	20.0	80.0	20.43	
P-4C	0.00	0.0	5.7	12.2	82.1	Dry	
GP-10A	0.00	0.0	5.6	14.4	80.0	Dry	
GP-10B	0.00	0.0	0.5	19.4	80.1	10.39	

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Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10C	0.00	0.0	0.8	19.1	80.1	11.40	
P-5A	0.00	0.0	0.1	19.8	80.1	9.02	
GP-11A	0.00	0.0	1.1	19.1	79.8	8.28	
GP-11B	0.00	0.0	0.2	19.9	79.9	9.40	
P-6C	0.00	0.0	0.0	20.0	80.0	6.05	
GP-12	0.00	0.0	0.1	19.9	80.0	4.90	
P-7A	0.00	0.0	0.1	19.9	80.0	4.60	
P-7B	0.00	0.0	0.0	19.9	80.1	5.02	
GP-13	0.00	0.0	0.1	19.8	80.1	5.98	
GP-14	0.00	0.0	0.0	19.9	80.1	4.13	
G-109	0.00	0.0	0.0	19.9	80.1	6.47	
GP-15A	0.00	0.0	0.3	19.6	80.1	4.37	
GP-15B	0.00	0.1	0.2	19.6	80.1	6.98	
GP-28A	0.00	0.1	0.0	19.9	80.0	8.19	
GP-28B	0.00	0.0	0.0	20.0	80.0	4.18	
GP-28C	0.00	0.0	0.0	19.9	80.1	4.33	
GP-16A	0.00	0.0	0.0	19.8	80.2	5.58	
GP-16B	0.50	0.0	0.0	20.0	80.0	3.65	
GP-16C	0.00	0.0	0.0	19.9	80.1	7.54	
GP-29A	0.00	0.0	0.0	19.9	80.1	5.63	
GP-29B	0.00	0.0	0.2	19.7	80.1	9.44	
G-110	0.00	0.0	0.4	19.8	79.8	9.00	
GP-17	0.00	0.0	0.0	19.7	80.3	4.00	
GP-18	0.00	0.0	0.0	19.8	80.2	7.95	
GP-19	0.05	0.0	0.0	19.9	80.1	11.71	
GP-20	0.00	0.0	0.1	19.9	80.0	5.47	
GP-21A	0.03	0.0	0.0	19.9	80.1	6.69	
GP-21B	0.01	0.0	0.0	19.9	80.1	10.15	
GP-22A	0.00	0.5	0.2	19.6	79.7	5.52	
GP-22B	0.00	1.4	0.1	19.3	79.2	19.43	
GP-30A	0.03	0.0	0.0	19.9	80.1	4.55	

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Gas Probe Monitoring
Mallard North Landfill, Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-30B	-3.50	0.3	0.2	19.0	80.5	NR	Connected to hose extraction
MW-204 East	0.00	44.5	5.5	8.3	41.7	20.25	Intermediate screen
MW-204 West	0.00	0.1	0.0	20.1	79.8	25.04	
GP-23A	0.01	0.0	0.9	19.0	80.1	4.93	
GP-23B	0.03	0.1	0.2	19.6	80.1	10.79	
GP-24A	0.02	0.0	0.1	19.7	80.2	6.70	
GP-24B	0.02	1.2	0.5	19.3	79.0	16.91	
GP-25A	0.00	0.1	0.3	19.9	79.7	5.04	
GP-25B	0.00	0.1	0.0	20.0	79.9	19.56	
GP-31A	0.02	0.0	0.9	19.0	80.1	7.52	
GP-31B	-3.50	0.0	0.1	19.0	80.9	NR	Connected to hose extraction
GP-26A	0.00	0.0	0.1	19.8	80.1	8.67	
GP-26B	0.00	0.0	0.0	19.9	80.1	17.05	
GP-27A	NR	NR	NR	NR	NR	NR	
GP-27B	NR	NR	NR	NR	NR	NR	
GP-35A	0.00	0.0	1.4	18.3	80.3	5.65	
GP-35B	0.00	0.0	0.3	19.6	80.1	10.42	
G-113	0.00	0.0	3.1	18.1	78.8	11.86	
G-121	0.00	0.0	1.5	18.4	80.1	11.67	
GP-32A	0.00	0.2	0.4	19.6	79.8	11.30	
GP-32B	0.00	0.0	0.1	19.9	80.0	12.12	
GP-37A	-5.00	0.0	0.0	19.7	80.3	NR	Connected to hose extraction
GP-37B	0.00	0.0	0.1	19.9	80.0	12.73	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: S. Jorgensen 8/18/10
Checked by: T. Halena, 8/19/10

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	8/16/2010					
Person (s) sampling	T. Halena and B. Drake		Weather Conditions:	Sunny		
Ambient Temperature:	75	°F	Ground Conditions:	Dry		
Barometric Pressure:	29.21	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM08330
Trend in barometric pressure:	Rising		Date Last Calibrated:			
Notes:						

	Blower/Flare Data					
	SC - Inlet	SC - Outlet	NW - Inlet	NW - Outlet	Solar Flare	
Date / Time / Location	8/16/2010 12:20	8/16/2010 12:20	8/16/2010 12:56	8/16/2010 12:59	UAV-4	
Blower Inlet Vacuum (in H_2O)	3.50		4.5			
Inlet Valve (Turns) Open / 6	6/6		6/6			
Gas Inlet Temperature (°F)	98			-		
Blower Outlet Pressure (in H_2O)		0.5		3.5		
Orifice Plate DP (in H_2O)	0.075		0.14			
Approximate Flow (scfm)	14		20			
% CH_4	26.0	26.2	47.5	47.5	60.9	
% CO_2	13.7	14.0	29.9	29.9	39.0	
% O_2	11.1	10.9	1.8	1.7	0.0	
% Balance Gas	49.2	48.9	20.8	20.9	0.1	
Combustion Temperature(°F)	920		1200			
Blower SPD%	35		45			
Blower Hours	521		522			
Blower Cycles	3		272			
Blower Amps	3.1		3.3			
Blower RPM	1280		1656			
Air Compressor Pressure (psi)	140					
Air Compressor Hours	-					
Well Field Air Pressure (psi)	70					
Approx. Compressor Oil Level	Good					
Comments	Flare is burning		Increased blower speed to 50.		Flare is burning	
			Flare is burning			

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date: 8/16/2010

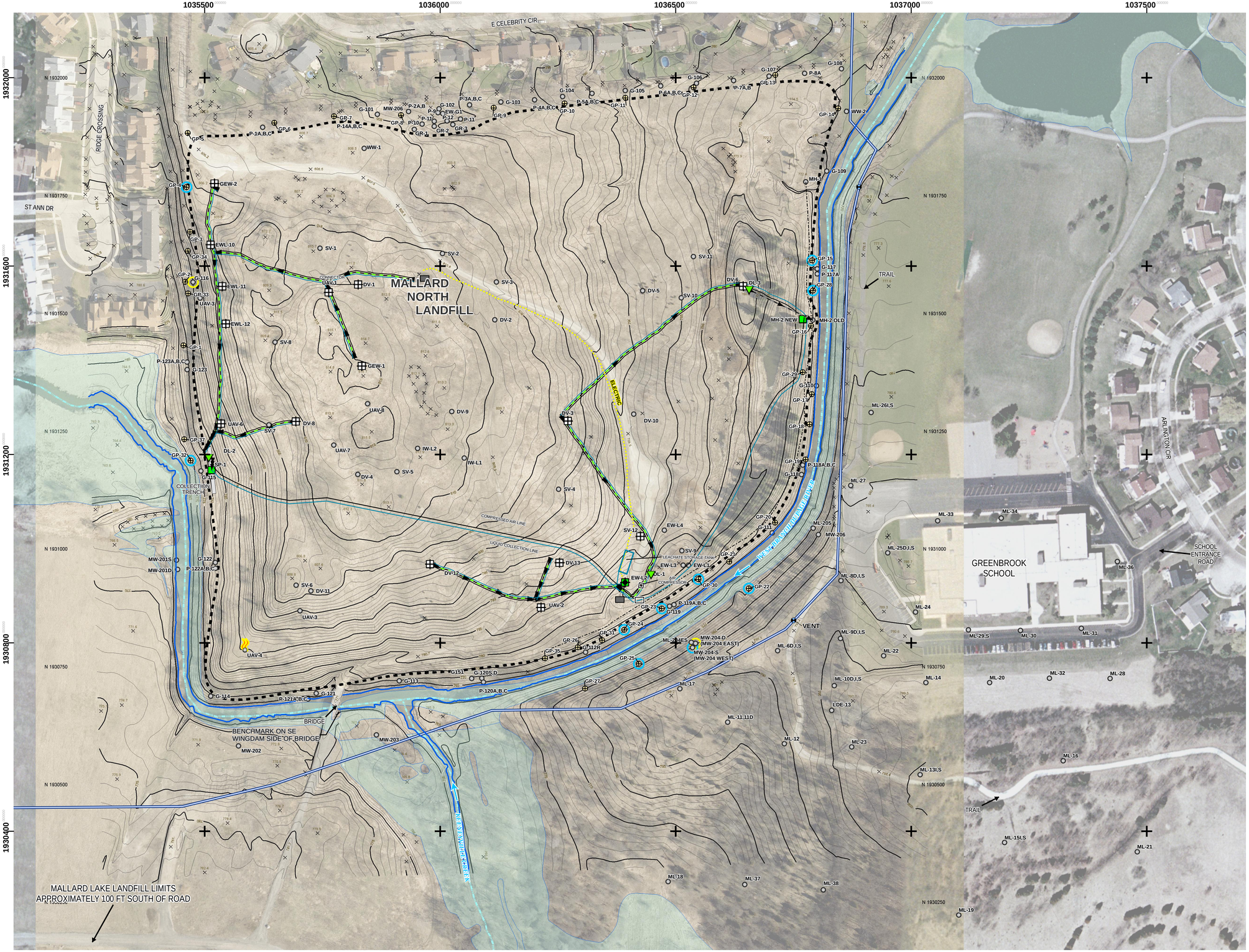
Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. POST-ADJUSTMENT FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^oF)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)	DEPTH TO TOP OF SCREEN (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	5.5	5.5	NR	3.00	NR		60.5	30.9	0.0	8.6	72	10	10.25	-	
DV-8	5.5	2.8	NC	1.00	NC		47.7	30.2	0.0	22.1	80	0.5	NC	Dry	
EWL-10	5.0	5.0	NC	0.025	NC		49.1	26.2	2.0	22.7	90	1	NC	15.5	
EWL-11	5.0	5.0	NC	0.50	NC		19.1	19.8	3.9	57.2	90	7	NC	15.7	
EWL-12	5.0	0.5	NC	0.09	NC		37.9	25.4	6.1	30.6	82	0.25	NC	11.0	
GEW-1	5.0	5.0	NR	2.00	NR		59.9	33.9	0.0	6.2	72	10	10.25	-	
GEW-2	5.0	5.0	NR	0.04	NR		66.4	31.9	1.0	0.7	90	10	10.25	17.0	
UAV-1	5.5	5.0	NC	4.00	NC		50.3	32.4	0.2	17.1	72	7	NC	-	
UAV-6	5.0	3.5	NC	2.00	NC		32.9	19.7	6.9	40.5	84	0.75	NC	Dry	
SOUTHCENTRAL WELLS															
DV-3	3.0	3.0	NR	0.75	NR		67.3	28.9	0.2	3.6	72	12	12.25	-	
DV-6	3.5	0.5	NC	0.015	NC		0.3	0.4	19.7	79.6	88	0.125	NC	-	
DV-12	3.5	2.5	NC	2.00	NC		31.4	17.6	8.2	42.8	72	0.75	NC	-	
DV-13	3.5	0.05	NC	0.01	NC		53.2	21.4	4.6	20.8	88	1.5	NC	-	
EWL-2	3.5	3.5	NC	2.00	NC		5.7	2.0	18.4	73.9	75	0	NC	-	
SV-12	3.5	0.04	NC	0.05	NC		34.0	16.3	8.0	41.7	84	0.125	NC	-	
UAV-2	3.5	3.5	NC	0.06	NC		31.7	17.6	9.3	41.4	90	0.5	NC	-	

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

LOCATION	WELL PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0.0	60.9	39.0	0.0	0.1	Yes	NA	No	Burning



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFL 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT AUGUST 16, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(AUGUST 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: JORGENSEN S	AS NOTED	FILE NO.	68090321.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: AUGUST 2010	8/23/2010		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

D:\PRE_TESS_PROJECTS\06809\03\MXD\68090321.mxd

September 2010 LFG Monitoring Data
Mallard North Landfill

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: BD/SJ
Gas Meter: GEM 2000
Serial #: GM11209
Date Calibrated: 9/16/10 at 8:45

Pressure Device: Magnehelic Gauge
Water Level Device: Water Level Indicator
Ground Conditions: Dry to moist

Date: 9/16/2010
Weather: Overcast, Rain in AM
Barometric Pressure: 28.87 in Hg

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.7	19.9	79.4	19.98	
GP-33A	0.0	0.0	0.2	20.2	79.6	15.41	
GP-33B	0.0	0.0	0.1	20.2	79.7	14.50	
G-116	-4.7	10.8	4.0	16.1	69.1	NR	
GP-2A	0.6	0.0	0.0	20.4	79.6	15.84	
GP-2B	0.0	0.1	0.2	20.3	79.4	11.56	
GP-34A	0.0	0.0	1.4	19.5	79.1	15.66	
GP-34B	0.0	0.0	0.4	20.2	79.4	15.88	
GP-3	0.0	0.0	0.8	19.9	79.3	13.45	
GP-4A	0.0	0.0	3.9	17.7	78.4	14.39	
GP-4B	0.0	0.0	1.0	19.8	79.2	13.53	
GP-4C	-6.0	0.1	0.0	20.2	79.7	NR	
GP-5	0.0	0.0	0.0	20.4	79.6	16.19	
P-1A	0.2	0.0	0.1	20.4	79.5	21.59	
GP-6	0.0	0.0	0.5	20.1	79.4	Dry	
GP-7A	0.0	0.0	2.7	17.8	79.5	13.18	
GP-7B	0.0	0.0	0.1	20.4	79.5	23.00	Valve open upon arrival
GP-8A	0.0	0.0	1.9	18.8	79.3	9.06	
GP-8B	0.0	0.0	0.2	20.1	79.7	26.04	
P-3A	0.0	0.0	10.5	3.1	86.4	20.48	
GP-9A	0.0	0.0	0.2	19.7	80.1	8.13	
GP-9B	0.0	0.0	0.0	20.3	79.7	21.18	
P-4C	0.0	0.0	6.3	16.1	77.6	Dry	

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	1.9	18.5	79.6	Dry	
GP-10B	0.0	0.0	0.2	20.1	79.7	12.24	
GP-10C	0.0	0.0	0.2	20.2	79.6	13.54	
P-5A	0.0	0.0	0.0	20.5	79.5	10.55	
GP-11A	0.0	0.0	2.7	18.9	78.4	9.63	
GP-11B	0.0	0.0	0.0	20.5	79.5	10.40	
P-6C	0.0	0.0	0.1	20.5	79.4	7.10	
GP-12	0.0	0.0	0.0	20.5	79.5	5.61	
P-7A	0.0	0.0	5.7	16.6	77.7	5.42	Labcock broken
P-7B	0.0	0.0	0.0	20.5	79.5	5.92	
GP-13	0.0	0.0	0.1	20.5	79.4	6.88	
GP-14	0.0	0.0	0.0	20.6	79.4	4.63	
G-109	0.0	0.0	0.1	20.5	79.4	6.40	
GP-15A	0.0	0.0	0.1	20.5	79.4	4.91	
GP-15B	0.0	0.0	0.0	20.5	79.5	6.98	Valve open upon arrival
GP-28A	0.0	0.0	0.0	20.6	79.4	8.10	
GP-28B	0.0	0.0	0.0	20.7	79.3	4.60	
GP-28C	0.0	0.0	0.0	20.6	79.4	4.70	
GP-16A	0.0	0.0	0.0	20.6	79.4	5.91	
GP-16B	0.0	0.0	0.0	20.6	79.4	4.00	
GP-16C	0.0	0.0	0.0	20.6	79.4	7.72	
GP-29A	0.0	0.0	0.1	20.5	79.4	6.24	
GP-29B	0.0	0.0	0.3	20.3	79.4	9.76	
G-110	0.0	0.0	0.2	20.4	79.4	9.00	
GP-17	0.0	0.0	0.0	20.4	79.6	4.85	
GP-18	0.0	0.0	0.0	20.4	79.6	6.72	
GP-19	0.0	0.0	0.0	20.5	79.5	6.95	
GP-20	0.0	0.0	0.1	20.4	79.5	7.54	
GP-21A	0.0	0.0	0.0	20.3	79.7	7.77	
GP-21B	0.0	0.0	0.0	20.3	79.7	10.31	
GP-22A	0.0	0.0	4.2	15.6	80.2	9.34	

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.0	0.0	20.4	79.6	19.45	
GP-30A	0.0	0.0	0.3	20.3	79.4	6.03	
GP-30B	-3.7	0.0	0.0	20.0	80.0	7.85	
MW-204 East	0.0	40.2	6.2	8.6	45.0	20.01	
MW-204 West	0.0	0.0	0.0	20.5	79.5	26.58	
GP-23A	0.1	0.0	0.6	19.7	79.7	6.52	
GP-23B	0.1	0.0	0.2	20.1	79.7	11.61	
GP-24A	0.0	0.1	0.2	20.0	79.7	7.64	
GP-24B	0.0	36.5	5.3	11.0	47.2	18.60	
GP-25A	0.0	0.0	0.5	20.1	79.4	7.46	Valve open upon arrival
GP-25B	0.0	0.0	0.0	20.5	79.5	21.74	Valve open upon arrival
GP-31A	0.0	0.0	3.5	17.6	78.9	Dry	
GP-31B	-3.7	0.1	0.0	19.8	80.1	16.62	
GP-26A	0.0	0.0	0.0	20.3	79.7	11.75	
GP-26B	0.0	0.1	0.4	19.8	79.7	19.20	
GP-27A	0.0	0.0	2.4	18.8	78.8	7.74	
GP-27B	0.0	0.0	0.3	20.3	79.4	22.49	
GP-35A	0.0	0.0	1.2	19.4	79.4	8.20	
GP-35B	0.0	0.0	0.2	20.1	79.7	13.25	
G-113	0.0	0.0	5.1	15.5	79.4	12.39	
G-121	0.2	0.0	2.6	17.7	79.7	12.29	
GP-32A	0.0	0.0	0.3	19.8	79.9	11.80	
GP-32B	0.0	0.0	0.4	19.8	79.8	12.70	
GP-37A	-6.0	0.0	0.0	20.1	79.9	12.78	
GP-37B	0.0	0.0	0.0	20.2	79.8	13.19	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: Sam Jorgensen, 9/20/10
Checked by: T. Halena, 9/21/10

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Form update 7-15-10

Date:	9/14/2010					
Person (s) sampling	Brad Drake		Weather Conditions:	Clear and Sunny - Wind 4 mph SE		
Ambient Temperature:	71	°F	Ground Conditions:	Dry, cracked soil throughout site		
Barometric Pressure:	30.1	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	11209
Trend in barometric pressure:	Steady		Date Last Calibrated:	09/14/10 @ 12:30		
Notes:	Monthly rainfall=2.39"					

	Blower/Flare Data					
	NW (inlet)	NW (outlet)	SC (inlet)	SC (outlet)	Compressor	UAV-4
Date / Time / Location	13:15	13:20	12:40	12:45	12:20 PM	13:55
Blower Inlet Vacuum (in H_2O)	-6.00		-3.6	0.4		-0.015
Inlet Valve (Turns) Open / 6	6		6			
Gas Inlet Temperature (°F)	-		100			
Blower Outlet Pressure (in H_2O)	3.2		0.4			
Orifice Plate DP (in H_2O)	0.17		0.025			
Approximate Flow (scfm)	22		8			
% CH_4	36.1	36.0	38.1	39.2		61.4
% CO_2	25.1	25.0	19.6	20.3		37.7
% O_2	3.0	2.9	7.2	6.8		0.6
% Balance Gas	35.8	36.1	35.1	33.7		0.3
Combustion Temperature(°F)	832		520			
Blower SPD%	50		35			
Blower Hours	1103		1101			
Blower Cycles	272		4			
Blower Amps	3.4		3.1			
Blower RPM	1840		1280			
Air Compressor Pressure (psi)					139-170	
Air Compressor Hours					-	
Well Field Air Pressure (psi)					72	
Approx. Leachate Tank Level					65"	
Comments	Flare burning and blower running upon arrival.		Flare burning and blower running upon arrival.			Flare burning upon arrival.

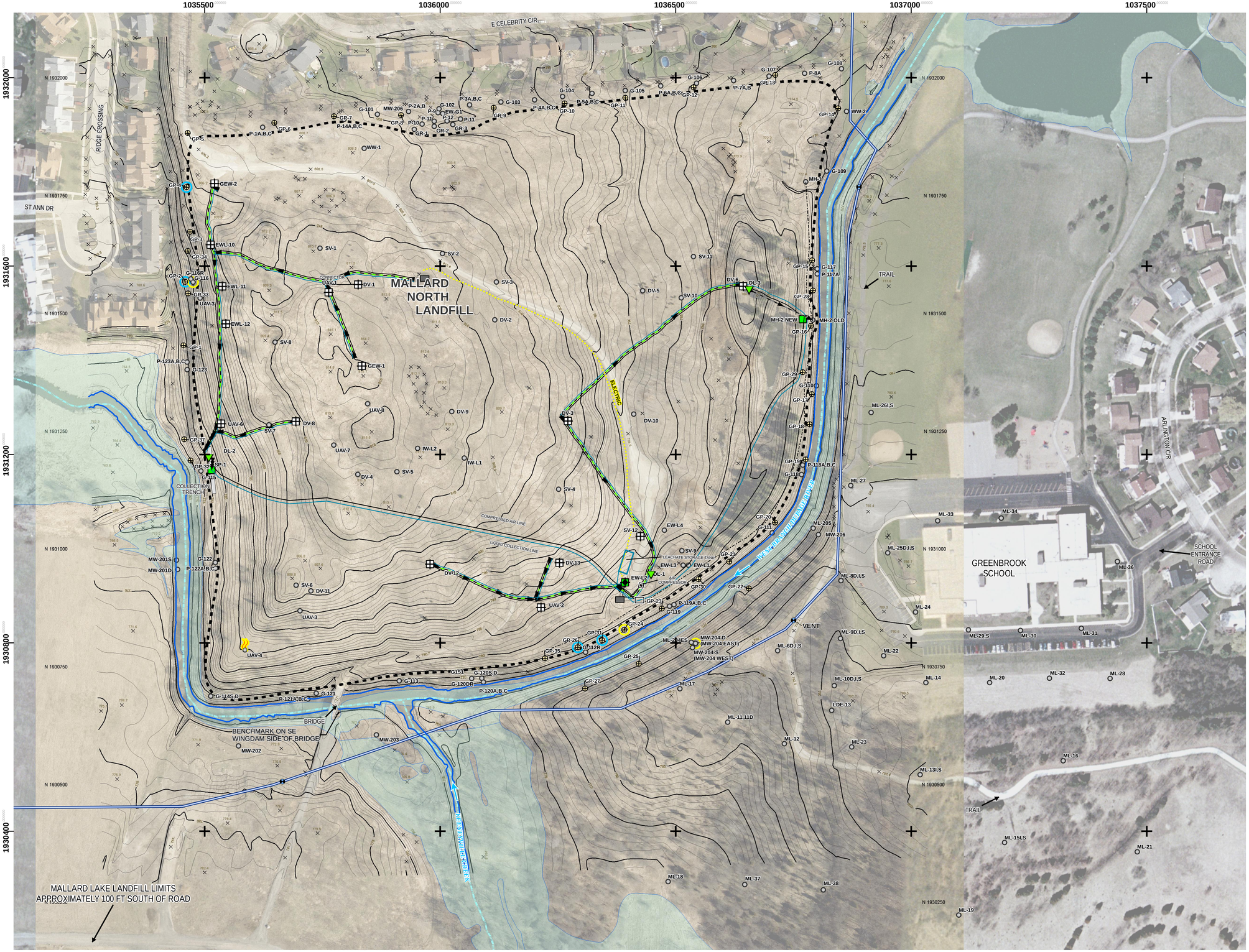
Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date: 9/15/10
Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. POST-ADJUSTMENT FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^oF)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)	DEPTH TO TOP OF SCREEN (feet)
	I	I	P	I	P							I	P		
NORTHWEST WELLS															
DV-1	5.5	5.5	NC	2.80	NC	5.3	48.0	29.5	0.0	22.5	72	10.25	NC	NA	
DV-8	5.5	1.5	NC	0.50	NC	2.3	32.5	27.8	0.0	39.7	74	0.5	NC	Dry	
EWL-10	5.5	5.5	NC	0.02	NC	0.4	28.7	23.4	1.3	46.6	84	1	NC	16.74	
EWL-11	5.5	5.5	NC	0.40	NC	2.0	16.0	19.6	2.9	61.5	82	7	NC	15.59	
EWL-12	5.5	0.11	NC	0.05	NC	0.7	16.2	10.8	13.3	59.7	78	0.25	NC	13.91	
GEW-1	5.5	5.0	NC	2.40	NC	4.8	53.0	32.9	0.0	14.1	68	10.25	NC	NA	
GEW-2	5.5	5.5	NC	0.00	NC	0.0	66.2	33.5	0.1	0.2	88	10.25	NC	17.04	
UAV-1	5.5	5.5	NC	4.00	NC	6.3	43.9	30.7	0.2	25.2	70	7	NC	NA	
UAV-6	5.25	2.0	NC	2.00	NC	4.4	19.8	11.6	11.2	57.4	84	0.75	NC	Dry	
SOUTHCENTRAL WELLS															
DV-3	3.7	3.6	NC	1.20	NC	3.4	60.9	30.3	0.3	8.5	70	12.25	NC	NA	
DV-6	3.7	0.5	NC	0.005	NC	0.0	0.3	0.5	19.9	79.3	80	0.125	NC	NA	
DV-12	3.7	1.3	NC	1.30	NC	3.6	34.5	17.9	8.7	38.9	72	0.75	NC	NA	
DV-13	3.7	0.7	NC	0.045	NC	0.7	17.5	7.4	14.9	60.2	80	1.5	NC	NA	
EWL-2	3.7	0.2	NC	0.02	NC	0.4	14.1	6.1	15.3	64.5	79	0	NC	10.24	
SV-12	3.7	0.025	NC	0.02	NC	0.4	64.6	27.0	1.5	6.9	80	0.125	NC	NA	
UAV-2	3.7	3.4	NC	0.035	NC	0.5	19.8	18.3	5.7	56.2	87	0.5	NC	NA	

Notes:
I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

LOCATION	WELL PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0.015	61.4	37.7	0.6	0.3	Yes	NA	Yes	Readings taken on 9/14/10



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
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5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
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9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT SEPTEMBER 16, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(SEPTEMBER 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: JORGENSEN S	AS NOTED	FILE NO.	68090321.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: SEPTEMBER 2010	9/28/2010		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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October 2010 LFG Monitoring Data
Mallard North Landfill

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: J. Roelke
Gas Meter: GEM 2000
Serial #: GM11209
Date Calibrated: 10/14/2010

Pressure Device: Magnehelic Gauge
Water Level Device: Water Level Indicator
Ground Conditions: dry

Date: 10/14/2010
Weather: partly cloudy, 65 ^{o}F
Barometric Pressure: 30.09 in. Hg falling

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.2	0.0	0.4	20.1	79.5	20.48	
GP-33A	0.0	0.0	0.1	20.2	79.7	16.39	
GP-33B	0.0	0.0	0.0	20.2	79.8	16.15	
G-116	-5.3	15.6	7.3	13.6	63.5	NR	connected to hose extraction
GP-2A	0.0	0.0	0.0	20.3	79.7	17.54	
GP-2B	0.0	0.0	0.0	20.2	79.8	12.97	
GP-34A	0.0	0.0	0.6	19.8	79.6	16.32	
GP-34B	0.0	0.0	0.4	20.0	79.6	16.74	
GP-3	0.0	0.0	0.8	19.4	79.8	14.56	
GP-4A	0.0	0.0	1.6	19.0	79.4	15.54	
GP-4B	0.0	0.0	0.9	19.5	79.6	16.12	
GP-4C	-6.0	0.0	0.0	20.3	79.7	NR	connected to hose extraction
GP-5	0.0	0.0	0.0	20.2	79.8	17.62	
P-1A	0.0	0.0	0.1	20.3	79.6	23.38	
GP-6	0.0	0.0	10.5	14.3	75.2	Dry	
GP-7A	0.0	0.0	3.5	17.4	79.1	Dry	
GP-7B	0.0	0.0	0.2	20.1	79.7	NR	
GP-8A	0.0	0.0	6.5	15.2	78.3	9.78	
GP-8B	0.0	0.0	0.1	20.0	79.9	Dry	
P-3A	0.0	0.0	12.2	4.9	82.9	21.79	
GP-9A	0.0	0.0	0.5	19.5	80.0	9.24	
GP-9B	0.0	0.0	0.1	20.1	79.8	22.86	
P-4C	0.0	0.0	4.7	17.3	78.0	Dry	

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	4.7	17.7	77.6	Dry	
GP-10B	0.0	0.0	0.2	20.1	79.7	14.09	
GP-10C	0.0	0.0	0.1	20.2	79.7	15.71	
P-5A	0.0	0.0	0.1	20.1	79.8	12.32	
GP-11A	0.0	0.0	2.1	18.9	79.0	Dry	
GP-11B	0.1	0.0	0.1	20.0	79.9	11.63	
P-6C	0.0	0.0	6.7	12.6	80.7	8.01	
GP-12	0.1	0.0	0.2	19.9	79.9	6.42	
P-7A	0.0	0.0	5.3	16.5	78.2	6.51	
P-7B	0.0	0.0	0.1	20.0	79.9	6.11	
GP-13	0.0	0.0	0.1	20.2	79.7	7.47	
GP-14	0.0	0.0	0.0	20.3	79.7	5.11	
G-109	0.0	0.0	0.2	20.3	79.5	6.42	
GP-15A	0.0	0.0	0.4	20.1	79.5	5.69	
GP-15B	0.5	0.0	0.1	20.3	79.6	7.01	
GP-28A	0.0	0.0	0.0	20.4	79.6	8.08	
GP-28B	0.0	0.0	0.0	20.4	79.6	5.31	
GP-28C	0.0	0.0	0.0	20.4	79.6	5.43	
GP-16A	0.0	0.0	0.1	20.3	79.6	6.61	
GP-16B	0.0	0.0	0.0	20.4	79.6	4.91	
GP-16C	-8.5	0.0	0.2	20.3	79.5	7.71	connected to hose extraction
GP-29A	0.2	0.0	0.2	20.3	79.5	6.88	
GP-29B	0.0	0.0	0.3	20.2	79.5	10.38	
G-110	0.0	0.0	4.5	16.7	78.8	9.64	
GP-17	0.4	0.0	0.1	20.2	79.7	5.96	
GP-18	0.2	0.0	0.0	20.3	79.7	9.28	
GP-19	0.0	0.0	0.4	20.0	79.6	12.02	
GP-20	0.5	0.0	0.1	20.2	79.7	9.86	
GP-21A	0.1	0.0	0.0	20.2	79.8	9.96	
GP-21B	0.2	0.0	0.0	20.2	79.8	11.21	
GP-22A	0.0	0.0	8.9	10.5	80.6	11.09	

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.1	0.0	0.0	20.3	79.7	20.06	
GP-30A	0.1	0.0	0.4	20.1	79.5	7.28	
GP-30B	-3.8	0.0	0.0	20.3	79.7	NR	connected to hose extraction
MW-204 East	0.0	39.1	6.4	8.3	46.2	19.63	
MW-204 West	0.0	0.0	0.1	20.1	79.8	26.86	
GP-23A	0.0	0.0	0.2	20.1	79.7	8.78	
GP-23B	0.2	0.0	0.2	19.9	79.9	12.78	
GP-24A	0.5	0.0	0.6	19.9	79.5	8.72	
GP-24B	-3.8	21.0	2.6	15.3	61.1	NR	connected to hose extraction
GP-25A	0.0	0.0	1.6	19.3	79.1	10.27	
GP-25B	0.0	0.0	0.1	20.3	79.6	22.72	
GP-31A	0.0	0.0	1.9	18.5	79.6	Dry	
GP-31B	0.0	38.7	2.3	10.6	48.4	18.58	
GP-26A	0.0	0.0	0.1	20.0	79.9	13.34	
GP-26B	0.1	0.2	0.8	19.2	79.8	20.23	
GP-27A	0.0	0.0	2.3	19.0	78.7	10.26	
GP-27B	0.1	0.0	0.2	20.2	79.6	23.52	
GP-35A	0.0	0.0	1.4	19.3	79.3	10.05	
GP-35B	0.0	0.0	0.2	19.9	79.9	15.81	
G-113	0.0	14.4	16.6	3.5	65.5	NR	
G-121	-0.1	0.0	2.6	18.1	79.3	NR	
GP-32A	0.0	0.0	0.1	20.6	79.3	12.28	
GP-32B	0.0	0.0	0.6	20.1	79.3	13.09	
GP-37A	-6.0	1.4	0.4	19.1	79.1	NR	connected to hose extraction
GP-37B	0.0	0.0	0.1	20.0	79.9	13.81	

Notes:
NR = Not recorded.
NA=Not applicable.
Created by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

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Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	10/15/2010					
Person (s) sampling	John Roelke		Weather Conditions:	P. Cloudy to Sunny		
Ambient Temperature:	50-62	°F	Ground Conditions:	dry		
Barometric Pressure:	30.07	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	11209
Trend in barometric pressure:	rising		Date Last Calibrated:	10/15/2010		
Notes:						

	Blower/Flare Data					
	NW	NW	SC	SC	Compressor	
Date / Time / Location	9:53 AM	11:25 AM	7:53 AM	11:42 AM	7:55 AM	
Blower Inlet Vacuum (in H_2O)	-6.90	-6.9	-3.9	-3.9		
Inlet Valve (Turns) Open / 6	6	6	6	6		
Gas Inlet Temperature (°F)	38 (broken)	38 (broken)	62	82		
Blower Outlet Pressure (in H_2O)	2.2	2.2	0.4	0.3		
Orifice Plate DP (in H_2O)	0.18	0.18	0.01	0.01		
Approximate Flow (scfm)	22	22	5	5		
% CH_4	35.1	35.3	34.8	43.2		
% CO_2	26.4	26.8	20.4	24.0		
% O_2	2.0	1.9	6.8	4.3		
% Balance Gas	36.5	36.0	38.0	28.5		
Combustion Temperature(°F)	573		531			
Blower SPD%	50		35			
Blower Hours	1697		1717			
Blower Cycles	426		4			
Blower Amps						
Blower RPM						
Air Compressor Pressure (psi)					140	
Air Compressor Hours					-	
Well Field Air Pressure (psi)					75	
Approx. Leachate Tank Level					20.8"	
Comments	Flare burning and blower running upon arrival.		Flare burning and blower running upon arrival.			

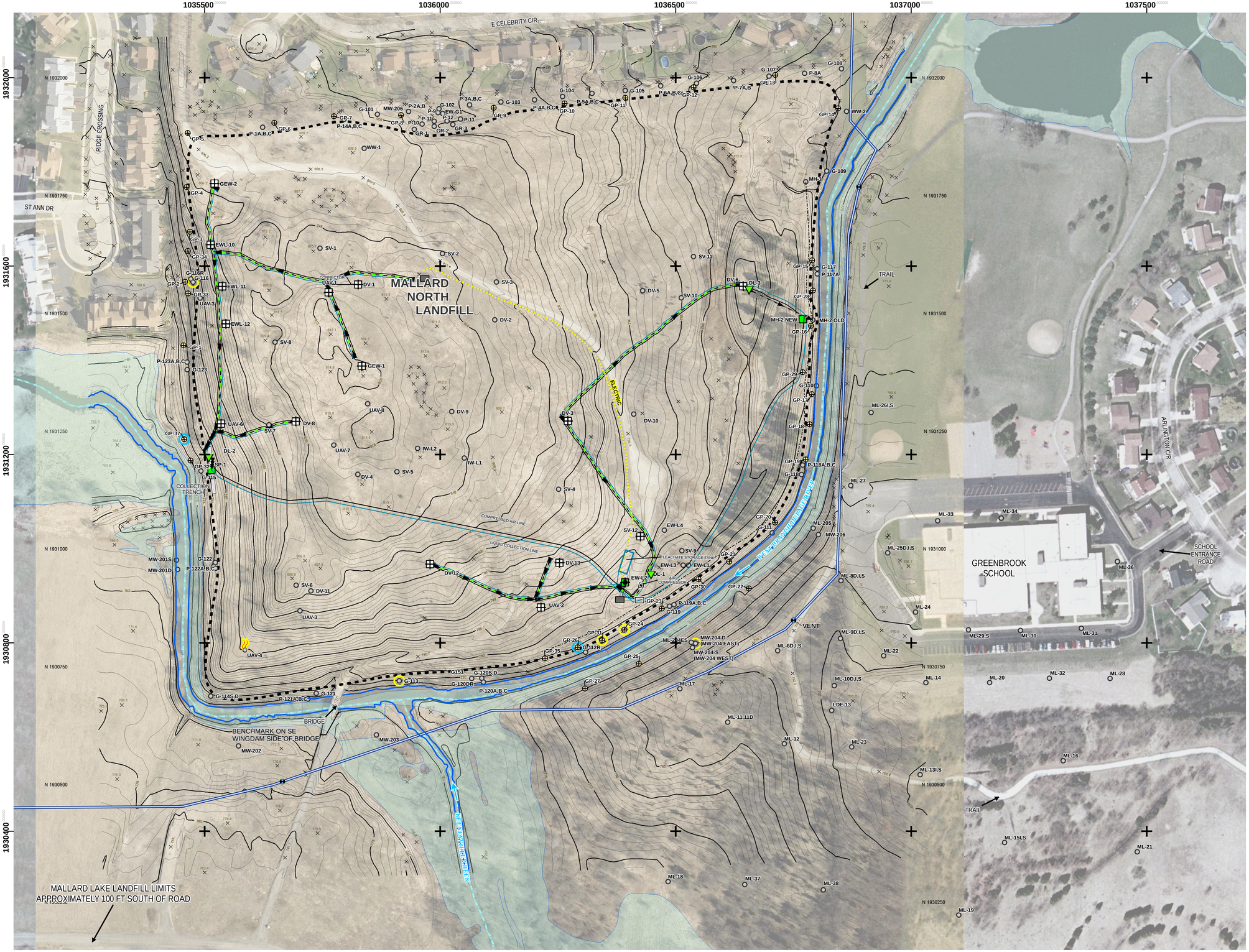
10/15/2010
Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. POST-ADJUSTMENT FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^oF)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-6.6	-6.5	NC	3.50	NC	5.5	41.5	28.3	0.6	29.6	68	10.25	NC	NA
DV-8	-6.6	-2.1	NC	0.10	NC	1.0	30.4	27.3	0.3	42.0	56	0.5	NC	20.08
EWL-10	-6.6	-6.6	NC	0.01	NC	0.5	24.8	24.7	0.5	50.0	62	1	NC	17.26
EWL-11	-6.6	-6.6	NC	0.85	NC	2.5	13.5	19.4	3.8	63.3	62	7	NC	17.38
EWL-12	-6.6	-0.20	NC	0.01	NC	0.5	10.0	8.2	14.1	67.7	60	0.25	NC	15.41
GEW-1	-6.6	-6.5	NC	3.00	NC	5.5	53.7	32.9	0.4	13.0	62	10.25	NC	NA
GEW-2	-6.6	-6.6	NC	0.03	NC	0.5	63.3	32.7	0.7	3.3	64	10.25	NC	17.18
UAV-1	-6.6	-6.5	NC	2.00	NC	4.5	32.9	27.7	0.9	38.5	64	7	NC	NA
UAV-6	-6.6	-0.2	NC	0.20	NC	1.5	21.2	14.0	11.2	53.6	64	0.75	NC	12.34
SOUTHCENTRAL WELLS														
DV-3	-3.8	-3.7	NC	1.25	NC	3.0	52.8	30.1	0.4	16.7	58	12.25	NC	NA
DV-6	-3.9	-0.8	NC	0.030	NC	0.5	0.0	0.6	19.3	80.1	58	0.125	NC	NA
DV-12	-3.8	-0.9	-0.2	0.50	0.1	1.0	29.4	16.1	10.2	44.3	62	1	0.75	NA
DV-13	-3.9	0.01	-0.1	0.010	0.08	0.5	71.9	28.1	0.0	0.0	62	0.25	0.75	NA
EWL-2	-3.9	0.0	NC	0.00	NC	0.0	1.1	2.5	19.1	77.3	54	0.25	NC	8.54
SV-12	-3.9	-0.4	-0.1	0.24	0.05	0.5	23.7	13.2	11.0	52.1	64	1	0.75	NA
UAV-2	-3.9	-3.3	-1.6	0.010	0.010	0.5	10.0	11.2	11.1	67.7	58	1	0.75	NA

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded

LOCATION	WELL PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	NR	42.5	28.8	1.7	27	Yes	NA	Yes	



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- APPROXIMATE LOW AREA
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
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NOTES:

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10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY RMT OCTOBER 14, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(OCTOBER 2010 GAS MONITORING ROUND)

DRAWN BY: MCKEEFRY J	SCALE:	PROJ. NO.	00-06809.03
CHECKED BY: SCHOEPHOESTER J	AS NOTED	FILE NO.	68090321.mxd
APPROVED BY: SCHMIDT A	DATE PRINTED:	**FIGURE 1**	
DATE: OCTOBER 2010	10/22/2010		

RMT
744 Heartland Trail
Madison, WI 53717-1934
P.O. Box 8923 53708-8923
Phone: 608-831-4444
Fax: 608-831-3334

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Gas Probes with Significant Methane Detections

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2**	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1**	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2**	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3**	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1**	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1**	-5.0	NM		
	9/16/2010	**0.1**	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3**	0.00	4.92		
	3/17/2010	**0.3**	+0.02	3.81		
	4/28/2010	**0**	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1**	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
GP-19	2/23/2010	**0.2**	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
GP-22B	6/28/2010	**0.2**	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
GP-23B	2/23/2010	**0.3**	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2**	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1**	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
GP-24A	9/16/2010	**0.1**	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1**	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1**	0.00	19.20		
	10/14/2010	**0.2**	+0.1	20.23		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3**	-6.00	NM		
	6/28/2010	**0.1**	-6.50	NM		
	7/20/2010	**0.2**	-3.50	NM		
	8/16/2010	**0.3**	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2**	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1**	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-32A	8/16/2010	**0.2**	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1**	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2**	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0	13.93		
	6/28/2010	0.0	0	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0	13.94		
	9/16/2010	0.0	0	15.41		
	10/14/2010	0.0	0	16.39		
GP-37A	6/17/2009	**0.2**	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1**	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1**	-6.00	NM		
	7/20/2010	**0.3**	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2**	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		

NM= not measured

Updated by: J. Schoephoester, 10/20/10; update checked by: S. Jorgensen, 10/21/10

Liquid Pumping Volumes and Rates

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2 (Cont.)	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter
	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
	9/8/2009	NR		NR	NA	NA	63,058	818	68	
	9/14/2009	NR		NR	NA	NA	63,419	361	60	
	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2 (Cont.)	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	
	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	
	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	

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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1 (Cont.)	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	
	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump
	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
					Total System Gallons Pumped	**3,083,145**			**8,581**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Southcentral Blower/Flare Summary

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010
Approximate Flow (scfm)	13	8	10	8	5	6	12	5
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531
Blower SPD%	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717
Blower Cycles	3	3	4	4	4	4	4	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in
Comments								
	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower			
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%			
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%			
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%			
			Compressor					
			off due to full					
			frac tank.					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/20/10
Checked by: S. Jorgensen, 10/21/10

Northwest Blower/Flare Summary

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4
Blower Amps													
Blower RPMs													
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR
Comments								Blower outlet pressure fluctuating.					

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/21/10
Checked by: S. Jorgensen 10/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/1/2010	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010
Time	2:30 PM	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM
Blower Inlet Vacuum (in H_2O)	4	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8
Inlet Valve (Turns) Open / 6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	86	88	NR	85	85	85	83	82	82	84
Blower Outlet Pressure (in H_2O)	+1.3	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6
Orifice Plate DP (in H_2O)	0.14	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13
Approximate Flow (scfm)	20	17	NR	14	14	17	17	15	20	19
% CH_4	42.6	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8
% CO_2	25.6	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0
% O_2	2.6	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6
% Balance Gas	29.2	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6
Combustion Temperature(^oF)	NR	817	NR	1029	660	988	948	903	953	56
Blower SPD%	45	45	NR	45	45	45	45	45	45	50
Blower Hours	NR	170	NR	184	230	245	247	258	276	291
Blower Cycles	NR	4	NR	6	6	6	6	6	6	6
Blower Amps				3	3.0	3.0	3.0	3.0	3.0	3.0
Blower RPMs				1650	1651	1651	1651	1650	1841	1838
Air Compressor Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	140	NA
Well Field Air Pressure (psi)	NR	NA	NA	NA	NA	NA	NA	NA	80	NA
Approx. Leachate Tank Level	NR	NA	NA	NA	NA	NA	NA	NA		NA
Comments					Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max
						47.6 CH4	47.9 CH4	49.3 CH4		starts faults
					No hours logged	26.0 CO2	26.3 CO2	26.3 CO2		
						2.3 O2	2.2 O2	2.2 O2		Blower on
						23.5 BAL	23.6 BAL	22.2 BAL		
										No flame
										Sparker on

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/21/10
Checked by: S. Jorgensen 10/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010
Time	9:52 AM	10:50 AM	10:40 AM	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM
Blower Inlet Vacuum (in H_2O)	NR	NR	NR	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5
Inlet Valve (Turns) Open / 6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	NR	80	76	74	74	70	70	84	NR	72	68
Blower Outlet Pressure (in H_2O)	NR	NR	0.2	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20
Orifice Plate DP (in H_2O)	NR	NR	0.17	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19
Approximate Flow (scfm)	NR	NR	22	22	20	19	20	23	22	24	24	23
% CH_4	67.0	55.4	44.9	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6
% CO_2	32.7	27.3	23.8	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0
% O_2	0.2	2.6	3.8	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3
% Balance Gas	0.1	14.7	27.5	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1
Combustion Temperature(^oF)	NR	520	202-840	1118	862	594	1021	1043	760	940	834	680
Blower SPD%	NR	50	40	40	40	40	40	40	40	40	45	45
Blower Hours	NR	0	313	376	417	516	555	595	658.1	737.6	800	814
Blower Cycles	NR	1	14	114	120	120	120	120	120	121	121	121
Blower Amps	NR	3.5	3.3	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3
Blower RPMs	NR	1838	1468	1467	1468	1468	1468	1469	NR	NR	1650	1651
Air Compressor Pressure (psi)	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	80	NA	80	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	29"	NA	NA	NA	NA	NA	NA	NA	NA	7"
Comments	NW blower/flare		Inlet side	Blower/flare off upon						Pre-blower:		
	system down.		49.5	arrival. Restarted						CH4=43.0	3 loads today	
			26.2	and kept shutting down						CO2=25.4		
			2.0	when flare temp reached						O2=2.8		
			22.3	1100F (after 3 min).								
				Changed preset for								
				normal operating								
				temp range to								
				200-1500F.								
				Blower/flare stayed								
				running.								

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/21/10
Checked by: S. Jorgensen 10/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010
Time	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM
Blower Inlet Vacuum (in H_2O)	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	70	72	72	70	69	66	70	NR	64	69	NR	70	NR	72	61
Blower Outlet Pressure (in H_2O)	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8	NR	2.6	3.0	NR	2.3	NR	2.3	2.4
Orifice Plate DP (in H_2O)	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14	NR	NR	0.23	NR	0.21	NR	0.22	0.18
Approximate Flow (scfm)	25	24	23	24	23	20	29	20	NR	NA	25	NR	24	NR	25	22
% CH_4	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0
% CO_2	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1
% O_2	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7
% Balance Gas	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2
Combustion Temperature(^oF)	442	885	430*	573	548	820	629	602	460	761	337	NR	625	NR	356	615
Blower SPD%	45	45	45	45	45	35	45	45	50	50	50	NR	50	50	50	50
Blower Hours	837.4	875	958	999	1115	1257	1376	1535	107	NR	227	NR	344	NR	506	665
Blower Cycles	121	121	22	121	121	127	127	127	1	NR	1	NR	3	NR	3	3
Blower Amps	NR	3.3	NR	NR	3.3	3.2	3.3	3.3	3.6	NR	3.4	NR	3.4	NR	3.4	3.4
Blower RPMs	NR	1650	NR	NR	1650	1652	1650	1652	1838	NR	1840	NR	1838	NR	1840	1840
Air Compressor Pressure (psi)	NA	160	152	NA	NA	160	NA	160	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	60	65	NA	NA	75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments	Pre-blower:	HI 1500	*Low value due to	Gas readings												
	CH_4 43.6	LO 200	position of thermo-	are pre-blower							Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower	
	CO_2 25.1	HI HI 1900	couple.	values.							CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9	
	O_2 2.3	LO LO 200									CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8	
			Pre-blower:		Pre-blower:	Pre-blower:	Post-blower:	Post-blower:	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9	
			CH_4 43.6		CH_4 40.4	CH_4 40.5	CH_4 46.1	CH_4 43.5	CH_4 43.6	was taken						
			CO_2 25.6		CO_2 25.2	CO_2 25.3	CO_2 27.4	CO_2 25.2	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf	
			O_2 2.3		O_2 2.2	O_2 2.3	O_2 2.0	O_2 2.9	O_2 2.10	No post-					card	
										blower reading						
										was recorded.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/21/10
Checked by: S. Jorgensen 10/21/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010
Time	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM	12:00 PM	11:15 AM	11:25 AM
Blower Inlet Vacuum (in H_2O)	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0	6.5	6.3	6.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00	2.30	2.70	2.20
Orifice Plate DP (in H_2O)	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18	0.14	0.20	0.18
Approximate Flow (scfm)	22	24	24	16	17	20	22	26	23	22	22	20	24	22
% CH_4	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0	38.4	36.5	35.3
% CO_2	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2	27.0	27.2	26.8
% O_2	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0	2.0	1.8	1.9
% Balance Gas	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8	32.6	34.5	36.0
Combustion Temperature(^oF)	770	262	415	232	NA	1200	1002	938	933	832	800	810	759	573
Blower SPD%	50	50	50	35 - 45*	45	45	50	50	50	50	50	50	50	50
Blower Hours	765	906	956	2	102	522	701	821	1005	1103	1261	1381	1561	1697
Blower Cycles	4	398	862	13	270	272	272	272	272	272	273	273	274	426
Blower Amps	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	NR
Blower RPMs	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838	1838	1838	NR
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments														
		Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower			
		CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%			
		CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%			
		O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%			
				*Blower SPD		*Blower speed								
				increased to		increased to								
				45% on 7/21		50%								

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 10/21/10
Checked by: S. Jorgensen 10/21/10

Gas Extraction Well Summary

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR
Orifice Plate DP (in H_2O)	1.80	1.80	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR
% CH_4	51.3		50.7		53.3		60.5		60.5		48.0		41.5	
% CO_2	27.2		26.5		27.4		34.1		30.9		29.5		28.3	
% O_2	0.4		0.0		0.0		0.0		0.0		0.0		0.6	
% Balance Gas	21.1		22.8		19.3		5.4		8.6		22.5		29.6	
Gas Temperature(^oF)	82		64		70		73		72		72		68	
Valve Turns Open	8	10	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0	
Gas Temperature(^oF)	76		88		84		90		84		62	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8	
Gas Temperature(^oF)	60		NR		58		80		88		88	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-5.0	NC	-5.5	NC	-6.6	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.85	NC
% CH_4	19.1		16.0		13.5	
% CO_2	19.8		19.6		19.4	
% O_2	3.9		2.9		3.8	
% Balance Gas	57.2		61.5		63.3	
Gas Temperature(^oF)	90		82		62	
Valve Turns Open	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	15.65		15.59		17.38	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7	
Gas Temperature(^oF)	78		84		84		82		78		60	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20
% CH_4	58		71.1		43.6		37.1		54.4		47.9	
% CO_2	29		28		28.8		23.1		27.0		26.0	
% O_2	1.9		0		1.9		3.9		0.9		1.3	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8	
Gas Temperature(^oF)	36		40		34		46		50		NR	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-2.4		-5.0	
Well Side Pressure (in H_2O)	-4.4	-4.4	-6.0	NC	-6.0	NC	-2.4	NC	-2.4	NC	-5.0	NR
Orifice Plate DP (in H_2O)	0.05	0.08	0.02	NC	0.03	NC	0.01	NC	0.01	NC	0.04	NR
% CH_4	48.9		56.1		67.8		65.3		65.3		66.4	
% CO_2	26.7		29.4		30.6		30.7		30.7		31.9	
% O_2	1.4		0.0		0.4		0.9		0.9		1.0	
% Balance Gas	23.0		14.5		1.2		3.1		3.1		0.7	
Gas Temperature(^oF)	68		74		84		85		85		90	
Valve Turns Open	7.5	10	10	NC	10	NC	10	NC	10	NC	10	10.25
Liquid Level (ft BTOC)	17.3		NR		17.22		17.28		17.28		17.00	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC
Orifice Plate DP (in H_2O)	0.00	NC	0.03	NC
% CH_4	66.2		63.3	
% CO_2	33.5		32.7	
% O_2	0.1		0.7	
% Balance Gas	0.2		3.3	
Gas Temperature(^oF)	88		64	
Valve Turns Open	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	17.04		17.18	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9	
Gas Temperature(^oF)	38		44		38		46		52		NR	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.5		-5.0		-5.25		-6.60	
Well Side Pressure (in H_2O)	-0.8	-0.9	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR
Orifice Plate DP (in H_2O)	0.65	0.85	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR
% CH_4	34.4		21.1		21.2		21.7		32.5		19.8		21.2	
% CO_2	16.5		12.9		11.5		12.9		19.7		11.6		14.0	
% O_2	8.8		10.5		10.6		10.7		6.9		11.2		11.2	
% Balance Gas	40.3		55.5		56.7		54.7		40.9		57.4		53.6	
Gas Temperature(^oF)	74		72		80		84		84		84		64	
Valve Turns Open	1	1.25	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25
Liquid Level (ft BTOC)	12.8		11.95		NR		DRY		DRY		DRY		12.34	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC
% CH_4	67.3		60.9		52.8	
% CO_2	28.9		30.3		30.1	
% O_2	0.2		0.3		0.4	
% Balance Gas	3.6		8.5		16.7	
Gas Temperature(^oF)	72		70		58	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1	
% O_2	18.0		NR		19.2		18.8		20.2		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4	
Gas Temperature(^oF)	46		NR		NR		58		76		84	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/19/2010		7/21/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0.0		-3.5		-3.5		-3.7		-3.9	
Well Side Pressure (in H_2O)	0.0	NC	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.00	NC	0.03	NC	0.015	NC	0.005	NC	0.030	NC
% CH_4	0.5		0.1		0.3		0.3		0.0	
% CO_2	0.6		0.4		0.4		0.5		0.6	
% O_2	19.3		18.6		19.7		19.9		19.3	
% Balance Gas	79.6		80.9		79.6		79.3		80.1	
Gas Temperature(^oF)	82		98		88		80		58	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8	
Gas Temperature(^oF)	NR		50		72		76		88		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.3	NR	-0.9	-0.2
Orifice Plate DP (in H_2O)	1.30	NR	0.50	0.10
% CH_4	34.5		29.4	
% CO_2	17.9		16.1	
% O_2	8.7		10.2	
% Balance Gas	38.9		44.3	
Gas Temperature(^oF)	72		62	
Valve Turns Open	0.75	0.5	1	0.75
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8	
Gas Temperature(^oF)	NR		62		88		90		100		88	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9	
Well Side Pressure (in H_2O)	-0.70	NR	0.01	-0.1
Orifice Plate DP (in H_2O)	0.045	NR	0.010	0.08
% CH_4	17.5		71.9	
% CO_2	7.4		28.1	
% O_2	14.9		0.0	
% Balance Gas	60.2		0.0	
Gas Temperature(^oF)	80		62	
Valve Turns Open	1.5	1.0	0.25	0.75
Liquid Level (ft BTOC)	NR		NR	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC
% CH_4	14.1		1.1	
% CO_2	6.1		2.5	
% O_2	15.3		19.1	
% Balance Gas	64.5		77.3	
Gas Temperature(^oF)	79		54	
Valve Turns Open	0	NC	0.25	NC
Liquid Level (ft BTOC)	10.24		8.54	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0	
% O_2	0.1		NR		4.1		6.5		7.8		8.6	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9	
Gas Temperature(^oF)	44		NR		56		76		80		98	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.7		-3.9	
Well Side Pressure (in H_2O)	-0.04	NC	-0.025	NR	-0.400	-0.10
Orifice Plate DP (in H_2O)	0.05	NC	0.02	NR	0.24	0.05
% CH_4	34.0		64.6		23.7	
% CO_2	16.3		27.0		13.2	
% O_2	8.0		1.5		11.0	
% Balance Gas	41.7		6.9		52.1	
Gas Temperature(^oF)	84		80		64	
Valve Turns Open	0.125	NC	0.125	0.25	1	0.75
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8	
Gas Temperature(^oF)	36		38		24		36		54	54	48	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		NR		-2.6		-2.6		-6.5		-3.5	
Well Side Pressure (in H_2O)	NR	NR	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR
Orifice Plate DP (in H_2O)	NR	NR	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR
% CH_4	NR		62.2		1.8		77.4		73.5		67.8	
% CO_2	NR		4.3		2.0		20.4		25.6		31.8	
% O_2	NR		0.8		18.4		0.1		0.0		0.4	
% Balance Gas	NR		32.7		77.8		2.1		0.9		0.0	
Gas Temperature(^oF)	NR		NR		64		82		88		98	
Valve Turns Open	0	NC	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.7		-3.9	
Well Side Pressure (in H_2O)	-3.50	NC	-3.40	NC	-3.30	-1.6
Orifice Plate DP (in H_2O)	0.06	NC	0.035	NC	0.010	0.01
% CH_4	31.7		19.8		10.0	
% CO_2	17.6		18.3		11.2	
% O_2	9.3		5.7		11.1	
% Balance Gas	41.4		56.2		67.7	
Gas Temperature(^oF)	90		87		58	
Valve Turns Open	0.5	NC	0.5	NC	1	0.75
Liquid Level (ft BTOC)	NR		NR		NR	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
February 10, 2011

Meeting Logistics

- Location: Mallard Lake Landfill conference room
- Time: 10 AM.
- Call-in number: 1-800-503-2899; access code 8679635

Discussion Topics

- USEPA/IEPA comments on Groundwater Evaluation Report
- USEPA – IEPA transition status
- O&M Plan review status
- Ongoing OM&M activities
- Leachate force main connection status

Attached Data[1]

- Gas Probe Monitoring Data Tables (December 2010, January 2011)
- Methane Detections Figures (December 2010, January 2011)
- Gas Probes with Significant Methane Detections Table
- Liquid Pumping Volumes and Rates Table
- Southcentral Blower/Flare Summary Table
- Northwest Blower/Flare Summary Table
- Gas Extraction Well Summary Tables

[1] Refer to bookmarks panel

Gas Probe Monitoring Data Tables (December 2010, January 2011)

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 12/1/2010

Pressure Device: Magnehelic
Water Level Device: N/M
Ground Conditions: Dry

Date: 12/1/2010
Weather: Mostly sunny
Barometric Pressure: N/R

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.2	20.0	79.8	20.49	
GP-33A	0.0	0.0	0.6	20.4	79.0	14.91	
GP-33B	0.0	0.0	0.0	20.2	79.8	14.50	
G-116	0.0	31.0	11.7	10.9	46.4	14.00	
GP-2A	0.0	0.0	0.0	20.2	79.8	15.45	
GP-2B	0.0	0.0	0.4	20.3	79.3	12.79	
GP-34A	0.0	0.0	2.3	19.1	78.6	16.62	
GP-34B	0.0	0.0	0.0	20.2	79.8	16.62	
GP-3	0.0	0.0	0.6	19.5	79.9	15.11	
GP-4A	0.0	0.0	1.8	18.3	79.9	Dry	TD= 15.51'
GP-4B	0.0	0.0	1.3	19.9	78.8	15.71	
GP-4C	0.0	0.0	0.5	19.4	80.1	20.72	
GP-5	0.0	0.0	0.0	19.8	80.2	21.71	
P-1A	0.0	0.0	0.0	20.2	79.8	25.25	
GP-6	0.0	0.0	0.2	20.2	79.6	Dry	TD = 12.38'
GP-7A	0.0	0.0	2.0	20.2	77.8	Dry	TD = 14.03'
GP-7B	0.0	0.0	0.0	19.8	80.2	27.58	
GP-8A	0.0	0.0	0.8	18.3	80.9	9.61	
GP-8B	0.0	0.0	0.0	20.2	79.8	25.49	
P-3A	0.0	0.0	7.4	5.1	87.5	Dry	TD = 6.99'
GP-9A	0.0	0.0	0.1	20.0	79.9	10.90	
GP-9B	0.0	0.0	0.0	20.2	79.8	25.09	
P-4C	0.0	0.0	7.3	18.5	74.2	Dry	TD = 6.90'

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	0.9	19.4	79.7	Dry	TD = 8.92'
GP-10B	0.0	0.0	0.0	20.1	79.9	15.56	
GP-10C	0.0	0.0	0.0	20.2	79.8	17.31	
P-5A	0.0	0.0	0.0	20.5	79.5	12.16	
GP-11A	0.0	0.0	2.8	19.3	77.9	Dry	TD = 9.91'
GP-11B	0.0	0.0	0.0	20.2	79.8	12.26	
P-6C	0.0	0.0	0.1	20.1	79.8	8.20	
GP-12	0.0	0.0	0.0	20.2	79.8	6.50	
P-7A	0.0	0.0	4.4	17.2	78.4	5.34	
P-7B	0.0	0.0	0.0	20.4	79.6	5.68	
GP-13	0.0	0.0	0.0	20.5	79.5	6.60	
GP-14	0.0	0.0	0.0	20.5	79.5	6.04	
G-109	0.0	0.0	0.0	20.5	79.5	6.36	
GP-15A	0.0	0.0	0.0	20.5	79.5	6.10	
GP-15B	0.0	0.0	0.0	20.5	79.5	7.25	
GP-28A	0.0	0.0	0.0	20.5	79.5	8.47	
GP-28B	0.0	0.0	0.0	20.6	79.4	5.48	
GP-28C	0.0	0.0	0.0	20.5	79.5	5.60	
GP-16A	0.0	0.0	0.0	20.5	79.5	6.76	
GP-16B	0.0	0.0	0.0	20.5	79.5	5.32	
GP-16C	0.0	0.0	0.0	20.5	79.5	8.12	
GP-29A	0.0	0.0	0.0	20.5	79.5	6.81	
GP-29B	0.0	0.0	0.0	20.1	79.9	11.39	
G-110	0.0	0.0	0.0	20.4	79.6	10.71	
GP-17	0.0	0.0	0.0	20.5	79.5	6.14	
GP-18	0.0	0.0	0.0	20.5	79.5	10.13	
GP-19	0.0	0.0	0.0	20.5	79.5	14.05	
GP-20	0.0	0.0	0.0	20.5	79.5	13.01	
GP-21A	0.0	0.0	0.0	20.2	79.8	10.12	
GP-21B	0.0	0.0	0.0	20.2	79.8	12.89	
GP-22A	0.0	0.0	0.0	19.8	80.2	10.30	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.0	0.0	20.5	79.5	22.02	
GP-30A	0.0	0.0	0.4	20.2	79.4	5.45	
GP-30B	0.0	2.7	0.6	19.8	76.9	10.21	
MW-204 East	0.0	50.9	8.0	4.8	36.3	23.09	
MW-204 West	0.0	0.0	0.0	20.5	79.5	27.00	
GP-23A	0.0	0.0	0.3	20.2	79.5	7.80	
GP-23B	0.0	0.0	0.1	20.2	79.7	14.95	
GP-24A	0.0	0.0	0.1	20.4	79.5	8.25	
GP-24B	0.0	4.2	1.2	19.9	74.7	21.35	
GP-25A	0.0	0.0	0.3	19.8	79.9	11.44	
GP-25B	0.0	0.0	0.0	20.5	79.5	24.57	
GP-31A	0.0	0.0	2.5	18.6	78.9	Dry	TD = 9.33'
GP-31B	0.0	0.0	0.0	19.5	80.5	20.50	
GP-26A	0.0	0.0	0.0	20.4	79.6	14.20	
GP-26B	0.0	0.0	0.2	20.2	79.6	20.44	
GP-27A	0.0	0.0	2.5	18.5	79.0	6.31	
GP-27B	0.0	0.0	0.1	20.1	79.8	24.71	
GP-35A	0.0	0.0	1.4	19.5	79.1	Dry	TD = 11.04'
GP-35B	0.0	0.0	0.1	20.0	79.9	16.99	
G-113	0.0	0.0	4.8	17.1	78.1	12.78	
G-121	0.0	0.0	1.9	18.6	79.5	7.50	
GP-32A	0.0	0.0	0.1	20.1	79.8	12.22	
GP-32B	0.0	0.0	0.2	20.0	79.8	13.29	
GP-37A	0.0	0.0	0.0	20.1	79.9	13.27	
GP-37B	0.0	0.0	0.0	20.2	79.8	13.75	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED
TD=Total Depth

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 1/13/2011

Pressure Device: Manometer
Water Level Device: Water Meter
Ground Conditions: Snowy

Date: 1/13/2011
Weather: 26.4 F
Barometric Pressure: 30.39

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.2	20.6	79.2	19.44	
GP-33A	0.0	0.5	0.3	20.2	79.0	14.45	
GP-33B	0.0	1.9	0.7	19.7	77.7	14.29	
G-116	0.0	71.8	23.8	1.4	3.0	14.26	
GP-2A	0.0	5.3	2.0	18.9	73.8	14.99	
GP-2B	0.0	0.0	0.1	20.4	79.5	17.78	
GP-34A	0.0	0.0	0.2	20.4	79.4	16.43	
GP-34B	0.0	0.0	0.1	20.4	79.5	16.59	
GP-3	0.0	0.0	0.1	20.3	79.6	13.61	
GP-4A	0.0	0.0	0.2	20.3	79.5	13.73	
GP-4B	0.0	0.0	0.1	20.3	79.6	10.69	
GP-4C	0.0	0.0	0.1	20.3	79.6	20.96	
GP-5	0.0	0.0	0.0	20.1	79.9	21.87	
P-1A	0.0	0.0	0.5	20.0	79.5	25.39	
GP-6	0.0	0.0	5.1	20.0	74.9	14.40	TD=14.4
GP-7A	0.0	0.0	2.2	17.9	79.9	14.50	
GP-7B	0.0	0.0	0.2	20.1	79.7	43.75	TD=43.75
GP-8A	0.0	0.1	4.0	14.6	81.3	6.61	
GP-8B	0.0	0.0	0.4	19.8	79.8	25.41	
P-3A	2.5	0.0	11.6	7.3	81.1	24.31	
GP-9A	0.0	0.0	0.2	19.9	79.9	8.86	
GP-9B	0.0	0.0	1.3	19.6	79.1	25.02	
P-4C	0.0	0.0	1.7	19.2	79.1	6.91	TD=6.91
GP-10A	0.0	0.0	2.2	18.9	78.9	8.93	TD=8.93
GP-10B	0.0	0.0	0.3	20.0	79.7	14.41	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10C	0.0	0.0	0.3	20.1	79.6	16.80	
P-5A	0.0	0.0	0.1	20.3	79.6	11.06	
GP-11A	1.1	0.0	2.0	18.8	79.2	9.93	TD=9.93
GP-11B	3.6	0.0	0.7	20.2	79.1	11.09	
P-6C	3.6	0.0	7.5	15.0	77.5	6.61	
GP-12	0.0	0.0	1.0	20.3	78.7	5.51	
P-7A	0.0	0.0	1.4	19.9	78.7	5.30	
P-7B	0.0	0.0	0.4	20.0	79.6	4.81	
GP-13	0.0	0.0	0.3	20.3	79.4	6.01	
GP-14	0.0	0.0	0.1	20.2	79.7	5.21	
G-109	0.0	0.0	1.7	19.7	78.6	6.09	
GP-15A	0.1	0.1	4.6	19.1	76.2	4.84	
GP-15B	0.0	1.1	4.6	18.6	75.7	7.35	
GP-28A	0.0	0.0	4.5	18.8	76.7	3.51	
GP-28B	0.0	0.0	0.6	19.9	79.5	4.00	
GP-28C	0.0	0.0	1.4	19.7	78.9	8.63	
GP-16A	0.0	0.0	2.9	18.6	78.5	5.45	
GP-16B	0.0	0.0	0.2	20.5	79.3	3.66	
GP-16C	0.0	0.0	3.9	18.8	77.3	8.29	
GP-29A	0.0	0.1	7.6	18.3	74.0	4.31	
GP-29B	0.0	0.0	0.6	20.3	79.1	10.75	
G-110	0.0	0.0	2.6	17.1	80.3	10.81	
GP-17	0.1	0.0	1.5	19.9	78.6	4.50	
GP-18	0.0	0.0	0.2	20.7	79.1	9.52	
GP-19	1.2	0.1	0.7	20.4	78.8	11.90	
GP-20	0.3	0.0	0.8	20.6	78.6	11.10	
GP-21A	0.0	0.0	2.8	19.0	78.2	7.91	
GP-21B	0.0	0.0	1.0	20.3	78.7	12.12	
GP-22A	0.0	0.0	2.6	17.1	80.3	8.76	
GP-22B	0.0	42.5	2.4	7.2	47.9	21.96	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-30A	1.7	0.0	2.1	20.2	77.7	3.65	
GP-30B	0.0	0.4	1.0	21.0	77.6	10.12	
MW-204 East	0.0	69.8	10.0	1.3	18.9	22.93	
MW-204 West	0.0	0.0	0.1	19.7	80.2	26.62	
GP-23A	7.5	0.7	3.5	19.3	76.5	5.50	
GP-23B	0.3	0.0	0.2	20.9	78.9	14.16	
GP-24A	0.3	0.2	10.3	17.4	72.1	6.29	
GP-24B	0.0	0.4	0.3	20.8	78.5	20.95	
GP-25A	0.0	0.0	1.4	18.4	80.2	7.46	
GP-25B	0.0	0.0	0.3	19.6	80.1	24.11	
GP-31A	0.0	0.0	1.3	18.8	79.9	9.32	
GP-31B	0.0	64.7	6.0	2.0	27.3	20.26	
GP-26A	0.0	0.1	4.3	19.5	76.1	9.92	
GP-26B	1.2	24.4	2.1	13.1	60.4	17.84	
GP-27A	2.2	0.0	1.0	18.8	80.2	5.79	
GP-27B	0.0	0.0	0.3	19.4	80.3	24.50	
GP-35A	1.1	0.0	0.9	19.9	79.2	5.50	
GP-35B	0.0	0.1	1.2	20.0	78.7	13.21	
G-113	0.9	0.0	4.5	17.9	77.6	12.53	
G-121	0.6	0.0	1.4	18.4	80.2	12.39	
GP-32A	0.0	0.1	0.1	21.3	78.5	11.64	
GP-32B	0.3	0.0	0.3	21.1	78.6	12.76	
GP-37A	0.0	0.1	0.1	20.9	78.9	12.96	
GP-37B	0.0	0.0	0.2	20.7	79.1	13.49	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	12/3/2010					
Person (s) sampling	Frank Silva		Weather Conditions:	mostly sunny		
Ambient Temperature:	36	^oF	Ground Conditions:	Dry		
Barometric Pressure:	30.25	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM12543
Trend in barometric pressure:	Falling		Date Last Calibrated:	12/3/2010		
Notes:						

	Blower/Flare Data					
	South Central		North West			
Date / Time / Location	9:39am	1:25pm	10:44am	1:32pm		
Blower Inlet Vacuum (in H_2O)	-4.00		-4.1			
Inlet Valve (Turns) Open / 6	Fully Open		Fully Open			
Gas Inlet Temperature (^oF)	42		47			
Blower Outlet Pressure (in H_2O)	2.9		1.3			
Orifice Plate DP (in H_2O)	-0.55		-0.01			
Approximate Flow (scfm)	37		5			
% CH_4	35.1	38.7	31.7	40.4		
% CO_2	20.4	22.8	25.5	29.3		
% O_2	5.9	4.7	4.1	1.1		
% Balance Gas	39.1	33.8	38.7	29.2		
Combustion Temperature(^oF)	713		530			
Blower SPD%	35		40			
Blower Hours	2619		2575			
Blower Cycles	4		573			
Blower Amps	3.2		3.2			
Blower RPM	1279		1470			
Air Compressor Pressure (psi)	80		80			
Air Compressor Hours	5790		5790			
Well Field Air Pressure (psi)	75		75			
Approx. Leachate Tank Level	90"		90"			
Comments	Flow rates may be affected by icing inside of header piping.					

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	1/14/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Cloudy/Cold		
Ambient Temperature:	31.4	^oF	Ground Conditions:	Snowy		
Barometric Pressure:	30.47	in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM12543
Trend in barometric pressure:	Steady		Date Last Calibrated:	1/4/2011		
Notes:						

	Blower/Flare Data					
	South Central		North West	North West		
Date / Time / Location	7:30 AM	11.11AM	7:32AM	9:39AM		
Blower Inlet Vacuum (in H_2O)	1.20	1.4	1.1	1.2		
Inlet Valve (Turns) Open / 6	6	6	6	6		
Gas Inlet Temperature (^oF)	5	15	10	10		
Blower Outlet Pressure (in H_2O)	4.6	4.3	5.6	5.5		
Orifice Plate DP (in H_2O)	0.10	1.10	0.10	0.18		
Approximate Flow (scfm)	16	55	16	22		
% CH_4	40.5	52.5	47.5	46.9		
% CO_2	16.4	21.4	28.0	29.7		
% O_2	6.3	2.6	2.2	1.7		
% Balance Gas	36.8	23.5	22.3	21.7		
Combustion Temperature(^oF)	355	720	1156	1142		
Blower SPD%	40	40	42	42		
Blower Hours	3296	3299	3494	3496		
Blower Cycles	193	193	573	573		
Blower Amps	3.2	3.2	3.2	3.2		
Blower RPM	1466	1644	1544	1542		
Air Compressor Pressure (psi)	149		149			
Air Compressor Hours	655272		655272			
Well Field Air Pressure (psi)	75		75			
Approx. Leachate Tank Level	13,289 Usgal		13,289 Usgal			
Comments	Flow readings may be affected by icing in the header piping.					

DATE: 12/3/10

Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	3.1	0.8	NC	1.95	NC	4.3	43.3	26.6	2.3	27.8	60			NM
DV-8	3.2	0.2	NC	0.49	NC	2.2	36.6	29.4	1.3	32.7	42			NM
EWL-10	3.0	0.2	NC	0.05	NC	0.3	39.3	28.5	1.3	30.9	36			NM
EWL-11	3.0	3.0	NC	0.26	NC	1.6	14.7	21.5	2.0	61.8	34			NM
EWL-12	3.0	0.30	NC	0.60	NC	2.4	2.0	12.5	13.6	71.9	32			NM
GEW-1	3.2	3.2	NC	1.03	NC	3.2	53.5	31.4	1.9	13.2	48			NM
GEW-2	3.0	3.0	NC	0.05	NC	0.7	62.4	31.4	1.9	4.3	38			NM
UAV-1	3.1	0.6	NC	1.66	NC	4.0	35.9	28.2	1.6	34.3	50			NM
UAV-6	3.3	0.0	NC	0.01	NC	0.4	23.3	14.2	11.5	51.0	40			NM
SOUTHCENTRAL WELLS														
DV-3	2.9	2.9	NC	-1.45	NC	3.8	39.8	25.0	1.8	33.4	46			NM
DV-6	2.9	0.5	NC	0.013	NC	0.4	0.8	2.1	19.1	78.0	28			NM
DV-12	1.2	1.0	NC	0.50	NC	2.2	47.5	24.4	5.6	22.5	42			NM
DV-13	2.9	0.70	NC	0.119	NC	1.1	11.0	4.9	17.3	66.8	40			NM
EWL-2	0.9	0.2	NC	0.60	NC	2.4	2.0	12.5	13.6	71.9	32			NM
SV-12	3.9	0.0	NC	0.02	NC	0.4	27.2	12.9	11.8	48.1	40			NM
UAV-2	2.9	0.2	NC	0.189	NC	1.4	27.3	13.7	10.3	48.7	42			NM

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	63.5	35	0.8	0.7	NO	NO	YES	

DATE: 1/14/11

Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	0.6	0.5	NC	0.165	NC	4.3	50.0	27.1	2.3	20.6	30	1	2	22.90
DV-8	0.5	0.2	NC	0.173	NC	2.2	37.3	26.2	1.8	34.7	20	1/4	1/2	20.46
EWL-10	1.5	1.2	NC	0.119	NC	0.3	31.4	23.3	2.5	42.8	19	1/4	1/2	18.66
EWL-11	1.5	1.5	NC	0.623	NC	1.6	17.1	20.6	2.9	59.4	20	1/8	Closed	18.59
EWL-12	1.3	0.00	NC	0.001	NC	0.1	3.1	3.2	17.0	76.7	19	14/	1/2	15.36
GEW-1	0.6	0.6	NC	0.311	NC	1.8	59.6	29.3	3.3	7.8	32	3/4	1	26.16
GEW-2	1.4	1.4	NC	0.254	NC	1.6	60.2	31.5	2.5	5.8	22	3/4	1	16.96
UAV-1	0.5	0.2	NC	0.003	NC	0.2	44.4	28.6	1.7	25.3	32	1/4/	1/2	7.50
UAV-6	0.8	0.5	NC	0.583	NC	2.4	52.0	28.3	2.5	17.2	24	1/2	3/4	7.50
SOUTHCENTRAL WELLS														
DV-3	1.2	0.8	NC	0.461	NC	2.0	50.3	21.9	1.5	26.3	36	Fully open	Fully open	12.31
DV-6	0.7	0.0	NC	0.005	NC	0.0	1.3	4.0	18.2	76.5	20	Closed	Closed	11.02
DV-12	0.8	0.3	NC	0.188	NC	0.0	65.7	24.4	1.5	8.4	30	Fully open	Fully open	26.52
DV-13	1.9	0.00	NC	0.018	NC	1.8	60.8	21.2	3.3	14.7	28	3/4	1	14.73
EWL-2	2.0	0.0	NC	0.017	NC	0.0	1.4	3.0	19.8	75.8	38	1/8	Closed	10.20
SV-12	1.4	1.4	NC	1.439	NC	3.5	68.8	21.1	1.5	8.6	10	Fully open	Fully open	5.05
UAV-2	1.9	0.3	NC	0.021	NC	3.0	58.6	17.9	4.3	19.2	20	1/8	1/2	8.97

Notes:

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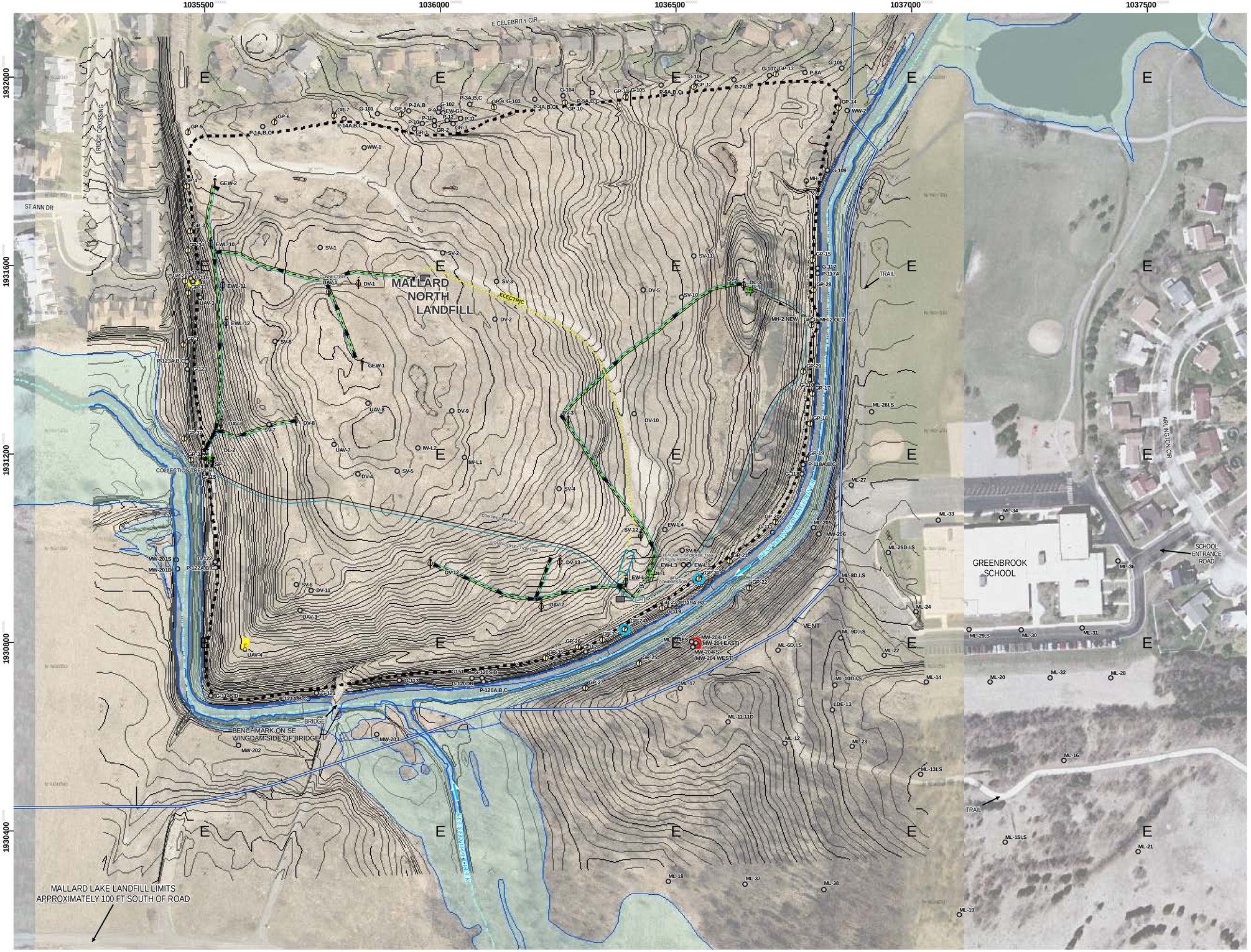
LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0.1	45.8	32.5	2.9	18.8	Yes	Yes	YES	

Methane Detections Figures (December 2010, January 2011)



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC DECEMBER 3, 2010.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(DECEMBER 2010 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931Dec2010
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: FEBRUARY 2011	02/03/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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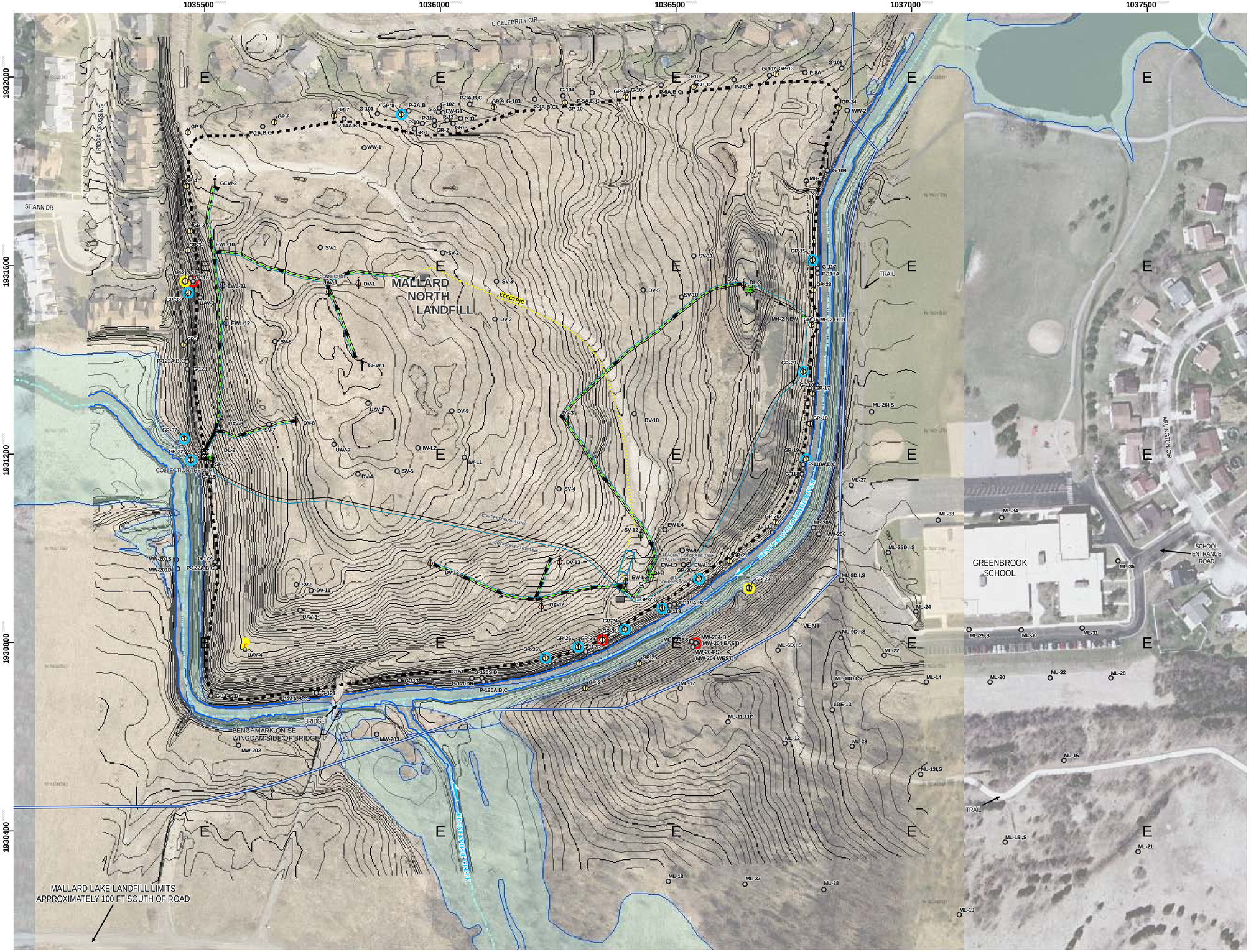

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- % METHANE > 50%
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10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC JANUARY 14, 2011.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(JANUARY 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931Jan2011.pdf
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: FEBRUARY 4, 2011	02/04/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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Gas Probes with Significant Methane Detections Table

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2***	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1***	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
	11/15/2010	**49.9**	+0.1	19.11		
	12/1/2010	0.0	0.00	15.45		
	1/13/2011	**5.3**	0.00	14.99		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2***	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3***	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1***	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
	11/15/2010	**0.3***	0.00	13.54		
	12/1/2010	0.0	0.00	12.79		
	1/13/2011	0.0	0.00	17.78		
GP-3	11/15/2010	**0.2***	+0.1	15.18	29.70	
	12/1/2010	0.0	0.00	15.11		
	1/13/2011	0.0	0.00	13.61		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1***	-5.0	NM		
	9/16/2010	**0.1***	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		
	11/15/2010	0.0	0.0	NM		Removed hose extraction
	12/1/2010	0.0	0.0	20.72		
	1/13/2011	0.0	+0.01	20.96		
GP-8A	1/13/2011	**0.1***	0.0	6.61	7.53	
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3***	0.00	4.92		
	3/17/2010	**0.3***	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
	11/15/2010	0.0	0.00	6.22		
	12/1/2010	0.0	0.00	6.10		
	1/13/2011	**0.1***	+0.08	4.84		
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1***	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
	11/15/2010	0.0	0.00	7.16		
	12/1/2010	0.0	0.00	7.25		
	1/13/2011	**1.1**	0.00	7.35		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
	11/15/2010	0.0	0.00	7.36		
	12/1/2010	0.0	0.00	6.14		
	1/13/2011	0.0	+0.14	4.50		
GP-19	2/23/2010	**0.2***	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
	11/15/2010	0.0	0.00	12.89		
	12/1/2010	0.0	0.00	14.05		
	1/13/2011	**0.1***	+1.22	11.90		
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
	11/15/2010	0.0	0.00	11.72		
	12/1/2010	0.0	0.00	10.30		
	1/13/2011	0.0	0.00	8.76		
GP-22B	6/28/2010	**0.2***	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
	11/15/2010	0.0	0.00	11.76		
	12/1/2010	0.0	0.00	22.02		
	1/13/2011	**42.5**	+0.02	21.96		
GP-23A	1/13/2011	**0.7**	+7.5	5.50		PRESSURE DIMINISHED DURING MEAS.

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-23B	2/23/2010	**0.3***	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2***	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1***	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
	11/15/2010	0.0	0.00	14.08		
	12/1/2010	0.0	0.00	14.95		
	1/13/2011	0.0	+0.31	14.16		
GP-24A	9/16/2010	**0.1***	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
	11/15/2010	0.0	-0.20	9.36		
	12/1/2010	0.0	0.00	8.25		
	1/13/2011	**0.2***	+0.30	6.26		
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7
	11/15/2010	**46.1**	0.00	NM		Removed hose extraction
	12/1/2010	**4.2**	0.00	21.35		
	1/13/2011	**0.4**	+0.02	20.95		
GP-26A	1/13/2011	**0.1***	0.00	9.92	16.65	
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1***	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1***	0.00	19.20		
	10/14/2010	**0.2***	+0.1	20.23		
	11/15/2010	**0.9**	+0.2	21.16		
	12/1/2010	0.0	0.00	20.44		
	1/13/2011	**24.4**	1.23	17.84		
GP-29A	1/13/2011	**0.1***	0.00	4.31	13.36	

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Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3***	-6.00	NM		
	6/28/2010	**0.1***	-6.50	NM		
	7/20/2010	**0.2***	-3.50	NM		
	8/16/2010	**0.3***	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
	11/15/2010	**0.4***	0.00	NM		Removed hose extraction
	12/1/2010	**2.7**	0.00	5.45		
	1/13/2011	**0.4***	+0.01	10.12		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2***	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1***	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10
	11/15/2010	**50.1**	0.00	20.03		
	12/1/2010	0.0	0.00	20.50		
	1/13/2011	**64.7**	+0.01	20.26		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-32A	8/16/2010	**0.2***	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
	11/15/2010	0.0	0.00	12.33		
	12/1/2010	0.0	0.00	12.22		
	1/13/2011	**0.1***	0.00	11.64		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1***	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2***	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0	13.93		
	6/28/2010	0.0	0	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0	13.94		
	9/16/2010	0.0	0	15.41		
	10/14/2010	0.0	0	16.39		
	11/15/2010	**18.4**	0	17.16		
	12/1/2010	0.0	0	14.91		
	1/13/2011	**0.5**	0	14.45		
GP-33B	1/13/2011	**1.9**	0	14.29	30.44	
GP-35B	1/13/2011	**0.1***	0	13.21	18.23	

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-37A	6/17/2009	**0.2***	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1***	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1***	-6.00	NM		
	7/20/2010	**0.3***	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
	11/15/2010	**0.5**	0.00	NM		Removed hose extraction
	12/1/2010	0.0	0.00	13.27		
	1/13/2011	**0.1***	0.00	12.96		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2***	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		
	11/15/2010	**13.1**	0.00	NM		
	12/1/2010	0.0	0.00	12.78		
	1/13/2011	0.0	+0.86	12.53		

Gas Probes With Methane Detections
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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
	11/15/2010	**57.8**	0.00	NM		Removed hose extraction
	12/1/2010	**31.0**	0.00	14.00		
	1/13/2011	**71.8**	0.00	14.26		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft B/TOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East	2/9/2009	**30.3**	0.00	21.49	22.02	
(Shallow)	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		
	11/15/2010	**44.1**	0.00	22.26		
	12/1/2010	**50.9**	0.00	23.09		
	1/13/2011	**69.8**	+0.01	22.93		

1. NM= not measured
2. Measurements prior to 12/1/10 were by RMT, Inc. Measurements on or after 12/1/10 were by FPDDC.
3. * Methane measurement within the margin of error for accuracy of the measuring instrument, and therefore may or may not indicate the presence of methane.
4. Updated by: D. Zinnen, 01/19/10

Liquid Pumping Volumes and Rates Table

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
EWL-2	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
EWL-2	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
EWL-2	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
EWL-2	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
EWL-2	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
EWL-2	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
EWL-2	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
EWL-2	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
EWL-2	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
EWL-2	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
EWL-2	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
EWL-2	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
EWL-2	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
EWL-2	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
EWL-2	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
EWL-2	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
EWL-2	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
EWL-2	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
EWL-2	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
EWL-2	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
EWL-2	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
EWL-2	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
EWL-2	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
EWL-2	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
EWL-2	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
EWL-2	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
EWL-2	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
EWL-2	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
EWL-2	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
EWL-2	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
EWL-2	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
EWL-2	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
EWL-2	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
EWL-2	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
EWL-2	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
EWL-2	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
EWL-2	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
EWL-2	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
EWL-2	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
EWL-2	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
EWL-2	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
EWL-2	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
EWL-2	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
EWL-2	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
EWL-2	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
EWL-2	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
EWL-2	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
EWL-2	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
EWL-2	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
EWL-2	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
EWL-2	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
EWL-2	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
EWL-2	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
EWL-2	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
EWL-2	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
EWL-2	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
EWL-2	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
EWL-2	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
EWL-2	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
EWL-2	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
EWL-2	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
EWL-2	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
EWL-2	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
EWL-2	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
EWL-2	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
EWL-2	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
EWL-2	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
EWL-2	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
EWL-2	10/22/2010	9.90	773.33	4,940,368	6,849	1,231,941	NA	NA	856	Repaired slight air leak
EWL-2	10/29/2010	-	-	4,988,452	12,021	1,243,962	NA	NA	1,717	Pump off due to leaking tank
EWL-2	11/5/2010	9.15	774.08	5,018,662	7,553	1,251,515	NA	NA	1,079	Counter not counting upon arrival, fixed
EWL-2	11/9/2010	9.05	774.18	5,038,101	4,860	1,256,374	NA	NA	1,215	
EWL-2	11/16/2010	-	-	5,072,572	8,618	1,264,992	NA	NA	1,231	
EWL-2	11/23/2010	9.20	774.03	5,106,373	8,450	1,273,442	NA	NA	1,207	
EWL-2	11/29/2010	8.60	774.63	5,132,434	6,515	1,279,958	NA	NA	1,086	
EWL-2	12/3/2010	8.29	774.94	5,258,014	31,395	1,311,353	NA	NA	7,849	
EWL-2	12/21/2010	8.19	775.04	5,267,780	2,442	1,313,794	NA	NA	136	
EWL-2	12/30/2010	10.30	772.93	5,339,165	17,846	1,331,640	NA	NA	1,983	
EWL-2	1/4/2011	9.87	773.36	5,351,855	3,173	1,334,813	NA	NA	635	
EWL-2	1/14/2011	10.51	772.72	5,377,783	6,482	1,341,295	NA	NA	648	
EWL-2	12/31/2050									
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
MH-2	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
MH-2	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
MH-2	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
MH-2	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
MH-2	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
MH-2	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
MH-2	9/8/2009	NR		NR	NA	NA	63,058	818	68	
MH-2	9/14/2009	NR		NR	NA	NA	63,419	361	60	
MH-2	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
MH-2	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
MH-2	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
MH-2	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
MH-2	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
MH-2	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
MH-2	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
MH-2	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
MH-2	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
MH-2	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
MH-2	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
MH-2	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
MH-2	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
MH-2	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
MH-2	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
MH-2	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
MH-2	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
MH-2	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
MH-2	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
MH-2	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
MH-2	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
MH-2	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
MH-2	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
MH-2	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
MH-2	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
MH-2	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
MH-2	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
MH-2	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
MH-2	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
MH-2	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
MH-2	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
MH-2	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
MH-2	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
MH-2	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
MH-2	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
MH-2	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
MH-2	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
MH-2	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
MH-2	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
MH-2	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
MH-2	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
MH-2	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
MH-2	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
MH-2	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
MH-2	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
MH-2	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
MH-2	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
MH-2	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
MH-2	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
MH-2	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
MH-2	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
MH-2	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	
MH-2	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
MH-2	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
MH-2	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
MH-2	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
MH-2	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
MH-2	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	
MH-2	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
MH-2	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
MH-2	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
MH-2	10/22/2010	5.41	769.53	3,794,068	83,053	964,712	NA	NA	10,382	
MH-2	10/29/2010	NR	NR	3,871,264	85,842	1,050,554	NA	NA	12,263	Pump off due to leaking tank
MH-2	11/5/2010	5.30	769.64	4,024,543	38,320	2,430,169	NA	NA	5,474	
MH-2	11/9/2010	4.88	770.06	4,089,583	16,260	2,446,429	NA	NA	4,065	Cut-off wall installed 11/9-11/11
MH-2	11/23/2010	4.20	770.74	4,302,141	53,140	2,499,568	NA	NA	3,796	
MH-2	11/29/2010	3.19	771.75	4,373,837	17,924	2,517,492	NA	NA	2,987	
MH-2	12/3/2010	3.37	771.57	4,731,348	89,378	2,606,870	NA	NA	22,344	
MH-2	12/21/2010	5.13	769.81	4,903,964	43,154	2,650,024	NA	NA	2,397	
MH-2	12/30/2010	3.36	771.58	4,991,078	21,779	2,671,803	NA	NA	2,420	
MH-2	1/4/2011	2.56	772.38	5,091,387	25,077	2,696,880	NA	NA	5,015	
MH-2	1/14/2011	2.82	772.12	5,095,504	1,029	2,697,909	NA	NA	103	
MH-2	12/31/2050									
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
SP-1	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
SP-1	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
SP-1	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
SP-1	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
SP-1	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
SP-1	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
SP-1	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
SP-1	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
SP-1	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
SP-1	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
SP-1	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
SP-1	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
SP-1	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
SP-1	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
SP-1	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
SP-1	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
SP-1	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
SP-1	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
SP-1	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
SP-1	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
SP-1	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
SP-1	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
SP-1	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
SP-1	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
SP-1	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
SP-1	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
SP-1	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
SP-1	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
SP-1	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
SP-1	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
SP-1	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
SP-1	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
SP-1	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
SP-1	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
SP-1	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
SP-1	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
SP-1	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
SP-1	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
SP-1	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
SP-1	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
SP-1	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
SP-1	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
SP-1	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
SP-1	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
SP-1	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
SP-1	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
SP-1	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
SP-1	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
SP-1	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
SP-1	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
SP-1	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
SP-1	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
SP-1	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
SP-1	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
SP-1	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
SP-1	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
SP-1	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
SP-1	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
SP-1	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
SP-1	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
SP-1	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
SP-1	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
SP-1	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump
SP-1	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
SP-1	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
SP-1	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
SP-1	10/22/2010	3.12	773.39	3,944,246	7,687	984,081	NA	NA	961	
SP-1	10/29/2010	NR	NR	3,973,045	7,200	991,281	NA	NA	1,029	Pump off due to leaking tank
SP-1	11/5/2010	3.10	773.41	3,994,762	5,429	996,710	NA	NA	776	
SP-1	11/9/2010	2.83	773.68	4,008,694	3,483	1,000,193	NA	NA	871	
SP-1	11/23/2010	2.78	773.73	4,047,147	9,613	1,009,806	NA	NA	687	Regulator removed due to leak
SP-1	11/29/2010	2.31	774.20	4,054,706	1,890	1,011,696	NA	NA	315	
SP-1	12/3/2010	2.23	774.28	4,080,361	6,414	1,018,110	NA	NA	1,603	
SP-1	12/21/2010	2.00	774.51	4,080,889	132	1,018,242	NA	NA	7	
SP-1	12/30/2010	3.61	772.90	4,125,983	11,274	1,029,515	NA	NA	1,253	
SP-1	1/4/2011	2.35	774.16	4,140,614	3,658	1,033,173	NA	NA	732	
SP-1	1/14/2011	2.21	774.30	4,145,475	1,215	1,034,388	NA	NA	122	
	12/31/2050									
					Total System Gallons Pumped	**3,760,571**			**6,862**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: D. Zinnen 02/04/11.

Southcentral Blower/Flare Summary Table

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
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NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM	9:30 AM	10:23 AM	9:30	11:00	10:00	10:50
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9	4.0	3.7	4.20	4.0	3.90	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6	6	6	6
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82	66	65	50	72	NR	51
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30	0.30	0.22	0.5	0.26	0.2	0.3
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010	0.025	0.025	0.02	0.02	0.02	0.23
Approximate Flow (scfm)	13	8	10	8	5	6	12	5	8	8	8	8	8	25
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2	41.0	38.4	36.8	35.5	37.7	28.1
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0	23.8	24.3	23.9	23.0	23.7	20.2
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3	4.3	4.1	5.4	4.8	3.1	6.2
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5	30.9	33.2	33.9	36.7	35.5	45.5
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531	711	632	714 - 908	530	NR	861
Blower SPD%	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717	1858.9	1999	2138	2221	NR	2500
Blower Cycles	3	3	4	4	4	4	4	4	4	4	4	4	NR	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.1	3.1	NR	3.1
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR	1280	1280	1280	1280	1279	1280
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140	140	-	150	-	140	135
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75	78	-	75	-	80	73
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in	12.5 in	30 in	-	-	-	-
Comments														
	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower								Post Adjustment	
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%								CH4-35.7%	
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%								CO2-22.1%	
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%								O2-4.7%	
			Compressor											
			off due to full											
			frac tank.											

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Northwest Blower/Flare Summary Table

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

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[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0
					23.5 BAL	23.6 BAL	22.2 BAL					22.3
									No flame			
									Sparker on			

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Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM
Blower Inlet Vacuum (in H_2O)	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70
Blower Outlet Pressure (in H_2O)	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8
Orifice Plate DP (in H_2O)	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14
Approximate Flow (scfm)	22	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20
% CH_4	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0
% CO_2	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2
% O_2	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2
% Balance Gas	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6
Combustion Temperature(^oF)	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602
Blower SPD%	40	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45
Blower Hours	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535
Blower Cycles	114	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127
Blower Amps	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3
Blower RPMs	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652
Air Compressor Pressure (psi)	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160
Well Field Air Pressure (psi)	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA
Comments	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3	HI 1500 LO 200 HI HI 1900 LO LO 200	*Low value due to position of thermo-couple. Pre-blower: CH_4 43.6 CO_2 25.6 O_2 2.3	Gas readings are pre-blower values.	Pre-blower: CH_4 40.4 CO_2 25.2 O_2 2.2	Pre-blower: CH_4 40.5 CO_2 25.3 O_2 2.3	Post-blower: CH_4 46.1 CO_2 27.4 O_2 2.0	Post-blower: CH_4 43.5 CO_2 25.2 O_2 2.9

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Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010
Time	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM
Blower Inlet Vacuum (in H_2O)	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	64	69	NR	70	NR	72	61	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00
Orifice Plate DP (in H_2O)	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18
Approximate Flow (scfm)	NR	NA	25	NR	24	NR	25	22	22	24	24	16	17	20	22	26	23	22	22
% CH_4	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0
% CO_2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2
% O_2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0
% Balance Gas	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8
Combustion Temperature(^oF)	460	761	337	NR	625	NR	356	615	770	262	415	232	NA	1200	1002	938	933	832	800
Blower SPD%	50	50	50	NR	50	50	50	50	50	50	50	35 - 45*	45	45	50	50	50	50	50
Blower Hours	107	NR	227	NR	344	NR	506	665	765	906	956	2	102	522	701	821	1005	1103	1261
Blower Cycles	1	NR	1	NR	3	NR	3	3	4	398	862	13	270	272	272	272	272	272	273
Blower Amps	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4
Blower RPMs	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments																			
			Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower
			CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%
			CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%
	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%
	CH_4 43.6	was taken																	
	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf					*Blower SPD		*Blower speed					
	O_2 2.10	No post-					card					increased to		increased to					
		blower reading										45% on 7/21		50%					
		was recorded.																	

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010
Time	12:00 PM	11:15 AM	11:25 AM	10:15 AM	12:22 PM	9:40	10:30	NR	11:10
Blower Inlet Vacuum (in H_2O)	6.5	6.3	6.9	6.5	4.1	4.5	4.30	4.00	4.50
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6	6	6	6
Gas Inlet Temperature (^oF)	NA	NA	NA	68	60	50	75	68	48
Blower Outlet Pressure (in H_2O)	2.30	2.70	2.20	2.00	1.30	1.6	1.5	4.7	2.5
Orifice Plate DP (in H_2O)	0.14	0.20	0.18	0.18	0.14	0.10	0.14	0.19	0.09
Approximate Flow (scfm)	20	24	22	22	20	17	20	23	16
% CH_4	38.4	36.5	35.3	32.6	37.1	34.3	34.0	33.4	33.6
% CO_2	27.0	27.2	26.8	25.3	27.3	26.5	26.1	25.0	26.7
% O_2	2.0	1.8	1.9	2.6	2.8	6.3	3.1	3.6	3.4
% Balance Gas	32.6	34.5	36.0	39.5	32.8	32.9	36.8	38.0	36.3
Combustion Temperature(^oF)	810	759	573	769	1054	894	690	580	950
Blower SPD%	50	50	50	50	40	40	40	40	40
Blower Hours	1381	1561	1697	1837.3	1957	2095	2176	2318	2457
Blower Cycles	273	274	426	426	571	571	NR	573	579
Blower Amps	3.4	3.4	NR	3.4	3.2	3.3	3.2	3.2	3.2
Blower RPMs	1838	1838	NR	1838	1470	1470	1468	1469	1470
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments				Replaced	down on arrival				
				temp	had difficulties getting			Post Adjustment	
				probe	started. Turned off			CH4-34.7%	
					blower and let sit			CO2-25.8%	
					2 hrs to build up			O2-3.3%	
					methane conc.				
					After 2hr wait, flare				
					lit on first startup				
					attempt.				

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: J. Schoephoester, 11/29/10
Checked by: S. Jorgensen, 11/30/10

Gas Extraction Well Summary Tables

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR
Orifice Plate DP (in H_2O)	1.80	1.80	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR
% CH_4	51.3		50.7		53.3		60.5		60.5		48.0		41.5	
% CO_2	27.2		26.5		27.4		34.1		30.9		29.5		28.3	
% O_2	0.4		0.0		0.0		0.0		0.0		0.0		0.6	
% Balance Gas	21.1		22.8		19.3		5.4		8.6		22.5		29.6	
Gas Temperature(^oF)	82		64		70		73		72		72		68	
Valve Turns Open	8	10	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.1		-0.6	
Well Side Pressure (in H_2O)	-3.7	-3.5	-0.8	NC	-0.5	NC
Orifice Plate DP (in H_2O)	1.80	1.10	1.95	NC	0.165	NC
% CH_4	37.2		43.3		50.0	
% CO_2	26.2		26.6		27.1	
% O_2	1.9		2.3		2.3	
% Balance Gas	34.7		27.8		20.6	
Gas Temperature(^oF)	68		60		30	
Valve Turns Open	8	2	NR	NR	1	2
Liquid Level (ft BTOC)	NR		NM		22.90	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.5	
Well Side Pressure (in H_2O)	-1.30	-0.8	-0.20	NC	-0.20	NC
Orifice Plate DP (in H_2O)	0.75	0.55	0.49	NC	0.173	NC
% CH_4	35.3		36.6		37.3	
% CO_2	28.9		29.4		26.2	
% O_2	0.1		1.3		1.8	
% Balance Gas	35.7		32.7		34.7	
Gas Temperature(^oF)	53		42		20	
Valve Turns Open	0.75	0.25	NR	NR	1/4	1/2
Liquid Level (ft BTOC)	20.32		NM		20.46	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7		-3.0	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC	-3.2	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC	0.030	NC	0.050	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8		26.3		39.3	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7		25.3		28.5	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5		0.4		1.3	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0		48.0		30.9	
Gas Temperature(^oF)	76		88		84		90		84		62		50		36	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC	0.25	NC	NR	NR
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26		17.79		NM	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	1/14/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-1.5	
Well Side Pressure (in H_2O)	-1.2	NC
Orifice Plate DP (in H_2O)	0.119	NC
% CH_4	31.4	
% CO_2	23.3	
% O_2	2.5	
% Balance Gas	42.8	
Gas Temperature(^oF)	19	
Valve Turns Open	1/4	1/2
Liquid Level (ft BTOC)	18.66	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8	
Gas Temperature(^oF)	60		NR		58		80		88		88	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.0		-5.5		-6.6		-3.8		-3.0		-1.5	
Well Side Pressure (in H_2O)	-5.0	NC	-5.5	NC	-6.6	NC	-3.8	NC	-3.0	NC	-1.5	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.85	NC	0.45	NC	0.29	NC	0.623	NC
% CH_4	19.1		16.0		13.5		16.5		14.7		17.1	
% CO_2	19.8		19.6		19.4		23.7		21.5		20.6	
% O_2	3.9		2.9		3.8		0.2		2.0		2.9	
% Balance Gas	57.2		61.5		63.3		59.6		61.8		59.4	
Gas Temperature(^oF)	90		82		62		50		34		20	
Valve Turns Open	7	NC	7	NC	7	NC	7	NC	NR	NR	1/8	CLOSED
Liquid Level (ft BTOC)	15.65		15.59		17.38		17.82		NM		18.59	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6		-3.8		-3.0	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC	-1.60	-0.2	-0.30	NC
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC	1.20	0.10	0.60	NC
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0		2.1		2.0	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2		16.1		12.5	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1		15.4		13.6	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7		66.4		71.9	
Gas Temperature(^oF)	78		84		84		82		78		60		50		32	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC	1	0.5	NR	NR
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41		17.48		NM	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	1/14/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-1.3	
Well Side Pressure (in H_2O)	0.00	NC
Orifice Plate DP (in H_2O)	0.001	NC
% CH_4	3.1	
% CO_2	3.2	
% O_2	17.0	
% Balance Gas	76.7	
Gas Temperature(^oF)	19	
Valve Turns Open	1/4	1/2
Liquid Level (ft BTOC)	15.36	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.6	
Well Side Pressure (in H_2O)	-3.8	NC	-3.2	NC	-0.6	NC
Orifice Plate DP (in H_2O)	2.40	NC	1.03	NC	0.311	NC
% CH_4	54.9		53.5		59.6	
% CO_2	33.7		31.4		29.3	
% O_2	0.2		1.9		3.3	
% Balance Gas	11.2		13.2		7.8	
Gas Temperature(^oF)	60		48		32	
Valve Turns Open	10.25	NC	NR	NR	3/4	1
Liquid Level (ft BTOC)	NR		NM		26.16	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20
% CH_4	58		71.1		43.6		37.1		54.4		47.9	
% CO_2	29		28		28.8		23.1		27.0		26.0	
% O_2	1.9		0		1.9		3.9		0.9		1.3	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8	
Gas Temperature(^oF)	36		40		34		46		50		NR	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0	
Well Side Pressure (in H_2O)	-4.4	-4.4	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NR
Orifice Plate DP (in H_2O)	0.05	0.08	0.02	NC	0.03	NC	0.01	NC	0.04	NR
% CH_4	48.9		56.1		67.8		65.3		66.4	
% CO_2	26.7		29.4		30.6		30.7		31.9	
% O_2	1.4		0.0		0.4		0.9		1.0	
% Balance Gas	23.0		14.5		1.2		3.1		0.7	
Gas Temperature(^oF)	68		74		84		85		90	
Valve Turns Open	7.5	10	10	NC	10	NC	10	NC	10	10.25
Liquid Level (ft BTOC)	17.3		NR		17.22		17.28		17.00	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6		-3.7		-3.0		-1.4	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC	NR	NC	-3.0	NC	-1.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	0.03	NC	0.02	NC	0.05	NC	0.254	NC
% CH_4	66.2		63.3		65.4		62.4		60.2	
% CO_2	33.5		32.7		34.0		31.4		31.5	
% O_2	0.1		0.7		0.4		1.9		2.5	
% Balance Gas	0.2		3.3		0.2		4.3		5.8	
Gas Temperature(^oF)	88		64		63		38		22	
Valve Turns Open	10.25	NC	10.25	NC	10.25	NC	NR	NR	3/4	1
Liquid Level (ft BTOC)	17.04		17.18		17.04		NM		16.96	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date
Header Side Pressure[1] (in H_2O)
Well Side Pressure (in H_2O)
Orifice Plate DP (in H_2O)
% CH_4
% CO_2
% O_2
% Balance Gas
Gas Temperature(^oF)
Valve Turns Open
Liquid Level (ft BTOC)
Comments

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.1		-0.5	
Well Side Pressure (in H_2O)	-3.8	-2.8	-0.6	NC	-0.2	NC
Orifice Plate DP (in H_2O)	3.20	2.20	1.66	NC	0.003	NC
% CH_4	37.5		35.9		44.4	
% CO_2	30.0		28.2		28.6	
% O_2	0.3		1.6		1.7	
% Balance Gas	32.2		34.3		25.3	
Gas Temperature(^oF)	60		50		32	
Valve Turns Open	8.5	4.5	NR	NR	1/4	1/2
Liquid Level (ft BTOC)	22.5		NM		7.50	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9	
Gas Temperature(^oF)	38		44		38		46		52		NR	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.5		-5.0		-5.25		-6.60	
Well Side Pressure (in H_2O)	-0.8	-0.9	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR
Orifice Plate DP (in H_2O)	0.65	0.85	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR
% CH_4	34.4		21.1		21.2		21.7		32.5		19.8		21.2	
% CO_2	16.5		12.9		11.5		12.9		19.7		11.6		14.0	
% O_2	8.8		10.5		10.6		10.7		6.9		11.2		11.2	
% Balance Gas	40.3		55.5		56.7		54.7		40.9		57.4		53.6	
Gas Temperature(^oF)	74		72		80		84		84		84		64	
Valve Turns Open	1	1.25	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25
Liquid Level (ft BTOC)	12.8		11.95		NR		DRY		DRY		DRY		12.34	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.80		-3.30		-0.80	
Well Side Pressure (in H_2O)	0.1	NC	0.0	NC	-0.5	NC
Orifice Plate DP (in H_2O)	0.10	NC	0.01	NC	0.583	NC
% CH_4	27.5		23.3		52.0	
% CO_2	16.4		14.2		28.3	
% O_2	9.4		11.5		2.5	
% Balance Gas	46.7		51.0		17.2	
Gas Temperature(^oF)	58		40.0		24.0	
Valve Turns Open	0.5	NC	NR	NR	1/2	3/4
Liquid Level (ft BTOC)	12.51		NM		7.50	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8		-3.8		-2.9		-1.2	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC	-3.8	NC	-2.9	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC	2.00	NC	1.45	NC	0.461	NC
% CH_4	67.3		60.9		52.8		39.3		39.8		50.3	
% CO_2	28.9		30.3		30.1		27.4		25.0		21.9	
% O_2	0.2		0.3		0.4		0.1		1.8		1.5	
% Balance Gas	3.6		8.5		16.7		33.2		33.4		26.3	
Gas Temperature(^oF)	72		70		58		54		46		36	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC	12.25	NC	NR	NR	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NR		NM		12.31	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1	
% O_2	18.0		NR		19.2		18.8		20.2		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4	
Gas Temperature(^oF)	46		NR		NR		58		76		84	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/19/2010		7/21/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0.0		-3.5		-3.5		-3.7		-3.9		-3.8		-2.9	
Well Side Pressure (in H_2O)	0.0	NC	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC	-1.3	-0.1	-2.9	NC
Orifice Plate DP (in H_2O)	0.00	NC	0.03	NC	0.015	NC	0.005	NC	0.030	NC	0.01	0.01	1.45	NC
% CH_4	0.5		0.1		0.3		0.3		0.0		0.2		0.8	
% CO_2	0.6		0.4		0.4		0.5		0.6		0.7		2.1	
% O_2	19.3		18.6		19.7		19.9		19.3		19.5		19.1	
% Balance Gas	79.6		80.9		79.6		79.3		80.1		79.6		78.0	
Gas Temperature(^oF)	82		98		88		80		58		58		28	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.25	NR	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NM	
Comments														

Notes:
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NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	1/14/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-0.7	
Well Side Pressure (in H_2O)	0.0	NC
Orifice Plate DP (in H_2O)	0.005	NC
% CH_4	1.3	
% CO_2	4.0	
% O_2	18.2	
% Balance Gas	76.5	
Gas Temperature(^oF)	20	
Valve Turns Open	CLOSED	CLOSED
Liquid Level (ft BTOC)	11.02	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8	
Gas Temperature(^oF)	NR		50		72		76		88		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.8		-3.8		-1.2		-0.8	
Well Side Pressure (in H_2O)	-1.3	NR	-0.9	-0.2	-0.2	-0.2	-1.0	-0.2	-0.3	NC
Orifice Plate DP (in H_2O)	1.30	NR	0.50	0.10	0.22	0.10	0.50	0.10	0.188	NC
% CH_4	34.5		29.4		36.7		47.5		65.7	
% CO_2	17.9		16.1		20.1		24.4		24.4	
% O_2	8.7		10.2		7.1		5.6		1.5	
% Balance Gas	38.9		44.3		36.1		22.5		8.4	
Gas Temperature(^oF)	72		62		58		42		30	
Valve Turns Open	0.75	0.5	1	0.75	0.75	0.25	NR	NR	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NM		26.52	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8	
Gas Temperature(^oF)	NR		62		88		90		100		88	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9		-2.9		-1.9	
Well Side Pressure (in H_2O)	-0.70	NR	0.01	-0.1	-0.01	-0.2	-0.70	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.045	NR	0.010	0.08	0.010	0.12	0.119	NC	0.018	NC
% CH_4	17.5		71.9		72.6		11.0		60.8	
% CO_2	7.4		28.1		27.1		4.9		21.2	
% O_2	14.9		0.0		0.2		17.3		3.3	
% Balance Gas	60.2		0.0		0.1		66.8		14.7	
Gas Temperature(^oF)	80		62		72		40		28	
Valve Turns Open	1.5	1.0	0.25	0.75	1.5	0.75	NR	NR	3/4	1.00
Liquid Level (ft BTOC)	NR		NR		NR		NM		14.73	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC	0.02	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC	0.01	NC
% CH_4	14.1		1.1		35.8	
% CO_2	6.1		2.5		16.6	
% O_2	15.3		19.1		7.5	
% Balance Gas	64.5		77.3		40.1	
Gas Temperature(^oF)	79		54		56	
Valve Turns Open	0	NC	0.25	NC	0.125	NC
Liquid Level (ft BTOC)	10.24		8.54		8.75	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.9		-2.0	
Well Side Pressure (in H_2O)	-0.20	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.60	NC	0.017	NC
% CH_4	2.0		1.4	
% CO_2	12.5		3.0	
% O_2	13.6		19.8	
% Balance Gas	71.9		75.8	
Gas Temperature(^oF)	32		38	
Valve Turns Open	NR	NR	1/8	CLOSED
Liquid Level (ft BTOC)	NM		10.20	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC	0.05	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5		34.0	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0		16.3	
% O_2	0.1		NR		4.1		6.5		7.8		8.6		8.0	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9		41.7	
Gas Temperature(^oF)	44		NR		56		76		80		98		84	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.8		-3.9		-1.4	
Well Side Pressure (in H_2O)	-0.025	NR	-0.400	-0.10	-0.1	-3.0	0.0	NC	-1.4	NC
Orifice Plate DP (in H_2O)	0.02	NR	0.24	0.05	0.05	0.23	0.02	NC	1.439	NC
% CH_4	64.6		23.7		61.5		27.2		68.8	
% CO_2	27.0		13.2		25.9		12.9		21.1	
% O_2	1.5		11.0		0.2		11.8		1.5	
% Balance Gas	6.9		52.1		12.4		48.1		8.6	
Gas Temperature(^oF)	80		64		60		40		10	
Valve Turns Open	0.125	0.25	1	0.75	0.25	0.5	NR	NR	FULL OPEN	FULLOPEN
Liquid Level (ft BTOC)	NR		NR		NR		NM		5.05	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2		NR	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2	NR	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01	NR	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9		NR	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8		NR	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5		NR	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8		NR	
Gas Temperature(^oF)	36		38		24		36		54	54	48		NR	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.5		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR	-3.50	NC	-3.40	NC
Orifice Plate DP (in H_2O)	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR	0.06	NC	0.035	NC
% CH_4	62.2		1.8		77.4		73.5		67.8		31.7		19.8	
% CO_2	4.3		2.0		20.4		25.6		31.8		17.6		18.3	
% O_2	0.8		18.4		0.1		0.0		0.4		9.3		5.7	
% Balance Gas	32.7		77.8		2.1		0.9		0.0		41.4		56.2	
Gas Temperature(^oF)	NR		64		82		88		98		90		87	
Valve Turns Open	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9	
Well Side Pressure (in H_2O)	-3.30	-1.6	-0.60	-0.3	0.20	-0.3	-0.30	NC
Orifice Plate DP (in H_2O)	0.010	0.01	0.01	0.01	0.19	0.01	0.021	NC
% CH_4	10.0		31.7		27.3		58.6	
% CO_2	11.2		21.8		13.7		17.9	
% O_2	11.1		5.6		10.3		4.3	
% Balance Gas	67.7		40.9		48.7		19.2	
Gas Temperature(^oF)	58		58		42		20	
Valve Turns Open	1	0.75	0.5	NR	NR	NR	1/8	1/2
Liquid Level (ft BTOC)	NR		NR		NM		8.97	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
April 14, 2011

Meeting Logistics

- Location: Mallard Lake Landfill (MLL) conference room
- Time: Following 10 AM MLL meeting.

Discussion Topics

- USEPA – IEPA transition status
- Groundwater monitoring schedule
- O&M Plan review status
- Ongoing OM&M activities
- Leachate force main connection status

Attached Data

- Gas Probe Monitoring Data Tables (February and March 2011)
- Methane Detections Figures (February and March 2011)
- Gas Probes with Significant Methane Detections Table
- Liquid Pumping Volumes and Rates Table
- Southcentral Blower/Flare Summary Table
- Northwest Blower/Flare Summary Table
- Gas Extraction Well Summary Tables

Gas Probe Monitoring Data Tables (February and March 2011)

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 2/14/2011

Pressure Device: Manometer
Water Level Device: Solinst water meter
Ground Conditions: Snow covered

Date: 2/14/2011
Weather: Partly cloudy
Barometric Pressure 30.01

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.2	20.1	79.7	19.71	
GP-33A	3.3	11.4	6.5	14.7	67.4	16.67	
GP-33B	-1.5	5.3	1.8	17.9	75.0	14.01	
G-116	0.0	69.1	21.2	1.6	8.1	14.15	
GP-2A	0.0	77.3	22.3	0.0	0.4	16.85	
GP-2B	-0.1	0.0	0.5	19.8	79.7	13.27	
GP-34A	0.0	0.0	0.4	19.7	79.9	16.41	
GP-34B	0.0	0.0	0.1	20.1	79.8	15.94	
GP-3	-0.1	0.0	0.1	20.0	79.9	14.72	
GP-4A	0.0	0.0	0.6	19.4	80.0	Dry	TD = 15.37
GP-4B	-3.5	0.0	6.6	17.9	75.5	15.41	TD = 21.42
GP-4C	-0.6	0.0	0.6	19.4	80.0	21.18	
GP-5	0.0	0.0	0.1	19.8	80.1	22.29	TD = 29.41
P-1A	-0.1	0.0	0.5	19.5	80.0	25.20	
GP-6	0.0	0.0	0.1	19.8	80.1	Dry	TD = 12.37
GP-7A	0.0	0.0	0.7	19.0	80.3	Dry	TD = 14.07
GP-7B	0.0	0.0	0.1	19.8	80.1	26.94	
GP-8A	0.0	0.0	1.1	18.6	80.3	8.27	
GP-8B	0.0	0.0	0.4	19.4	80.2	25.30	
P-3A	-0.1	0.0	10.9	6.5	82.6	24.30	
GP-9A	-0.8	0.0	1.7	18.7	79.6	9.56	
GP-9B	0.0	0.0	0.1	19.9	80.0	25.54	
P-4C	0.0	0.0	1.7	18.7	79.6	Dry	TD = 12.37

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	2.1	18.5	79.4	Dry	TD = 14.07
GP-10B	0.0	0.0	0.4	17.9	81.7	13.71	
GP-10C	0.0	0.0	0.2	19.7	80.1	16.08	
P-5A	0.0	0.0	0.1	19.9	80.0	10.94	
GP-11A	0.0	0.0	0.4	19.6	80.0	Dry	TD = 9.91
GP-11B	0.0	0.0	0.7	19.5	79.8	11.31	
P-6C	0.0	0.0	0.9	19.4	79.7	7.37	
GP-12	-0.2	0.0	0.2	19.9	79.9	5.68	
P-7A	0.0	0.0	0.1	19.9	80.0	4.68	
P-7B	0.0	0.0	0.1	19.8	80.1	4.97	
GP-13	-0.3	0.0	0.1	19.9	80.0	4.98	
GP-14	0.0	0.0	0.1	19.9	80.0	5.45	
G-109	0.0	0.0	0.2	20.0	79.8	6.09	
GP-15A	0.0	0.0	1.4	19.7	78.9	3.60	
GP-15B	0.0	0.0	0.1	20.9	79.0	7.38	
GP-28A	0.0	0.0	0.2	20.0	79.8	8.69	TD = 26.02
GP-28B	0.0	0.0	0.1	19.2	80.7	3.82	TD = 17.45
GP-28C	0.0	0.0	1.2	19.2	79.6	3.85	TD = 12.40
GP-16A	0.0	0.0	0.1	20.0	79.9	5.79	
GP-16B	-0.1	0.0	0.1	20.0	79.9	3.41	TD = 22.85
GP-16C	0.0	0.0	0.4	19.9	79.7	8.44	
GP-29A	0.0	0.0	0.8	19.5	79.7	4.54	TD = 12.7
GP-29B	0.0	0.0	0.2	19.8	80.0	10.96	
G-110	0.0	0.0	0.2	19.8	80.0	10.54	
GP-17	0.0	0.0	0.1	20.0	79.9	2.57	TD = 3.6 FROZEN?
GP-18	0.0	0.0	0.1	20.0	79.9	9.03	
GP-19	-0.4	0.0	1.0	18.8	80.2	12.85	
GP-20	0.2	0.0	0.5	19.9	79.6	5.39	
GP-21A	0.0	0.0	2.4	16.9	80.7	8.01	
GP-21B	0.0	0.0	1.2	18.9	79.9	11.70	
GP-22A	0.0	0.0	0.5	19.5	80.0	6.38	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	51.2	2.2	6.3	40.3	21.54	
GP-30A	0.0	0.0	0.5	19.0	80.5	5.34	
GP-30B	0.0	0.0	0.1	20.0	79.9	10.04	
MW-204 East	0.0	32.8	5.9	9.4	51.9	22.95	
MW-204 West	0.0	0.0	0.1	20.3	79.6	26.63	
GP-23A	0.0	1.0	4.7	17.6	76.7	4.02	
GP-23B	0.0	0.0	0.2	19.9	79.9	12.85	TD = 29.6
GP-24A	0.0	0.5	1.9	18.7	78.9	11.77	
GP-24B	0.0	1.3	0.1	20.1	78.5	23.95	
GP-25A	0.0	0.0	1.3	19.1	79.6	7.93	
GP-25B	0.0	0.0	0.3	19.4	80.3	18.92	
GP-31A	0.0	0.0	1.2	18.3	80.5	7.53	
GP-31B	-0.1	81.7	4.6	1.5	12.2	18.80	
GP-26A	0.0	0.0	2.1	17.9	80.0	9.07	
GP-26B	0.0	2.4	0.1	20.0	77.5	23.84	
GP-27A	0.0	0.0	0.4	19.5	80.1	12.67	
GP-27B	0.0	0.0	0.4	18.8	80.8	18.28	
GP-35A	-2.3	0.0	1.0	19.0	80.0	6.61	
GP-35B	0.0	0.0	0.1	19.5	80.4	12.46	
G-113	-0.6	0.0	4.1	17.6	78.3	12.73	
G-121	0.0	0.0	0.9	19.5	79.6	12.76	
GP-32A	0.0	0.0	0.5	20.0	79.5	14.00	
GP-32B	1.1	0.0	2.2	18.8	79.0	12.89	
GP-37A	0.0	0.0	0.1	20.1	79.8	13.25	
GP-37B	-0.6	0.0	2.2	19.1	78.7	13.94	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	2/16/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Partly / Sunny		
Ambient Temperature:	34.9	^{o}F	Ground Conditions:	Snowy / Wet		
Barometric Pressure:	30.02	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Steady		Date Last Calibrated:	2/16/2011		
Notes:	Weekly Readings					

	Blower/Flare Data					
	10:07	11:57				
Date / Time / Location	SC-Flare	SC				
Blower Inlet Vacuum (in H_2O)	-6.70	-8.0				
Inlet Valve (Turns) Open / 6	6	6				
Gas Inlet Temperature (^{o}F)	61	72				
Blower Outlet Pressure (in H_2O)	4.3	2.4				
Orifice Plate DP (in H_2O)	0.05	0.14				
Approximate Flow (scfm)	12	21				
% CH_4	22.1	41.1				
% CO_2	11.8	19.8				
% O_2	10.1	3.8				
% Balance Gas	56.0	35.3				
Combustion Temperature(^{o}F)	576	501				
Blower SPD%	55	55				
Blower Hours	342	344				
Blower Cycles	149	149				
Blower Amps	3.7	3.6				
Blower RPM	2020	2020				
Air Compressor Pressure (psi)	0.55	0.55				
Air Compressor Hours	7524.09	7524.09				
Well Field Air Pressure (psi)	80	80				
Approx. Leachate Tank Level	17199	17199				
Comments						

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	2/17/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Partly / Sunny		
Ambient Temperature:	31.6	^{o}F	Ground Conditions:	Snowy / Wet		
Barometric Pressure:	30.22	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Slightly Dropping		Date Last Calibrated:	2/17/2011		
Notes:	Weekly Readings					

	Blower/Flare Data					
	8:38	10:37				
Date / Time / Location	NW-Flare	NW				
Blower Inlet Vacuum (in H_2O)	-7.1	-6.5				
Inlet Valve (Turns) Open / 6	6	6				
Gas Inlet Temperature (^{o}F)	54	56				
Blower Outlet Pressure (in H_2O)	2.6	3.2				
Orifice Plate DP (in H_2O)	0.26	0.33				
Approximate Flow (scfm)	28	32				
% CH_4	40.5	35.7				
% CO_2	27.4	24.3				
% O_2	1.4	3.8				
% Balance Gas	30.7	36.2				
Combustion Temperature(^{o}F)	1040	1178				
Blower SPD%	52	52				
Blower Hours	4174	4176				
Blower Cycles	574	574				
Blower Amps	35.0	3.5				
Blower RPM	1914	1912				
Air Compressor Pressure (psi)	0.55	0.55				
Air Compressor Hours	7524.09	7524.09				
Well Field Air Pressure (psi)	80	80				
Approx. Leachate Tank Level	17199	17199				
Comments						

DATE: 2/16/11, 02/17/11

Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-7.1	-6.9	NC	3.2	NC	5.7	44.6	28.8	0.0	26.6	50	2	4	21.37
DV-8	-5.7	-5.3	NC	3.14	NC	5.5	32.0	26.6	1.9	39.5	49	1/2	7/8	8.65
EWL-10	-6.5	-6.5	NC	1.74	NC	4.2	21.5	15.8	6.0	56.7	48	1/2	1/2	16.78
EWL-11	-6.5	-6.5	NC	0.67	NC	2.9	10.0	19.4	2.4	68.2	46	Closed	1/4	17.27
EWL-12	-5.6	-4.80	NC	0.937	NC	3.0	16.5	17.2	4.2	62.1	40	1/2	1/2	13.03
GEW-1	-6.9	-6.6	NC	3.98	NC	6.3	62.0	33.5	0.0	4.5	52	1	3	26.29
GEW-2	-6.6	-6.5	NC	0.003	NC	0.0	65.7	33.4	0.0	0.9	50	1	2	16.91
UAV-1	-6.6	-6.5	NC	3.21	NC	5.1	45.4	30.7	0.0	23.9	50	1/2	2	23.46
UAV-6	-5.7	0.5	NC	0.236	NC	4.9	21.3	10.3	12.9	55.5	52	3/4	1/2	4.51
SOUTHCENTRAL WELLS														
DV-3	-8.0	-7.9	NC	3.25	NC	5.5	52.0	24.0	0.5	23.5	38	Fully open	Fully open	20.13
DV-6	-8.3	0.0	NC	0	NC	0.0	1.2	1.1	19.1	78.6	50	Closed	Closed	11.55
DV-12	-6.7	-6.5	NC	1.08	NC	3.8	23.0	16.0	5.9	55.1	48	Fully open	Fully open	26.63
DV-13	-7.3	-4.80	NC	0.08	NC	0.5	14.3	6.0	15.9	63.8	42	1	2	15.21
EWL-2	-6.7	0.0	NC	0	NC	0.0	1.1	1.3	19.4	78.2	42	1/8	Closed	11.40
SV-12	-7.5	-6.8	NC	0.32	NC	1.6	10.6	5.3	15.8	68.3	38	Fully open	Fully open	5.03
UAV-2	-6.7	-6.7	NC	0.06	NC	0.4	46.8	13.1	7.1	33.0	50	1/2	3/8	8.79

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	39.8	27.6	5.7	26.9	Yes	Yes	YES	

NORTHWEST WELLS AND UAV-4 WERE MONITORED ON 02/17/11.
SOUTHCENTRAL WELLS WERE MONITORED ON 02/16/11.

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 3/16/2011

Pressure Device: Dewyer Manometer
Water Level Device: Solinst Water Meter
Ground Conditions: Slightly Moist

Date: 3/16/2011
Weather: Sunny
Barometric Pressure 30.03

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.01	0.0	0.2	19.8	80.0	18.91	
GP-33A	0.0	1.1	1.1	19.2	78.6	12.01	
GP-33B	0.0	4.0	2.4	17.5	76.1	12.21	
G-116	0.9	78.1	2.1	0.0	19.8	13.46	
GP-2A	0.0	11.9	5.3	16.2	66.6	13.53	
GP-2B	0.0	0.0	0.8	19.9	79.3	11.67	
GP-34A	0.0	0.0	0.1	20.1	79.8	6.36	
GP-34B	0.0	0.0	0.4	19.9	79.7	11.64	
GP-3	0.0	0.0	0.6	19.9	79.5	10.36	
GP-4A	0.0	0.0	0.1	20.1	79.8	8.50	
GP-4B	0.0	0.0	2.0	19.5	78.5	8.57	
GP-4C	0.0	0.0	0.5	19.6	79.9	20.64	
GP-5	0.02	0.0	0.0	19.9	80.1	21.16	
P-1A	0.02	0.0	0.4	19.4	80.2	19.22	
GP-6	0.0	0.0	3.3	11.3	85.4	11.36	
GP-7A	0.0	0.0	2.2	15.3	82.5	9.82	
GP-7B	0.0	0.0	0.1	19.6	80.3	18.94	
GP-8A	0.03	0.0	0.2	19.7	80.1	6.61	
GP-8B	0.0	0.0	0.2	19.5	80.3	25.06	
P-3A	0.0	0.0	5.2	2.7	92.1	9.03	
GP-9A	0.0	0.0	0.1	19.6	80.3	5.04	
GP-9B	0.0	0.0	0.0	19.7	80.3	22.35	
P-4C	0.0	0.0	0.7	18.1	81.2	5.57	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	1.1	16.1	82.8	8.84	
GP-10B	0.0	0.0	0.6	19.4	80.0	8.82	
GP-10C	0.0	0.0	0.4	19.3	80.3	11.31	
P-5A	0.04	0.0	0.0	19.7	80.3	7.44	
GP-11A	0.0	0.0	0.0	19.7	80.3	6.81	
GP-11B	0.09	0.0	0.4	19.5	80.1	9.01	
P-6C	0.09	0.0	1.0	19.3	79.7	5.41	
GP-12	0.0	0.0	0.2	19.6	80.2	4.41	
P-7A	0.0	0.0	0.0	19.5	80.5	4.46	
P-7B	0.0	0.0	0.0	19.5	80.5	4.12	
GP-13	0.02	0.0	0.1	19.4	80.5	5.59	
GP-14	0.01	0.0	0.0	19.5	80.5	4.29	
G-109	0.0	0.0	0.3	19.7	80.0	5.71	
GP-15A	0.0	0.0	0.3	19.5	80.2	3.50	
GP-15B	0.03	0.0	0.1	19.6	80.3	7.37	
GP-28A	0.02	0.0	0.4	19.4	80.2	8.66	
GP-28B	0.0	0.0	0.4	19.7	79.9	3.86	
GP-28C	0.0	0.0	0.0	19.3	80.7	3.22	
GP-16A	0.01	0.0	0.7	19.7	79.6	4.93	
GP-16B	0.67	0.0	0.0	19.6	80.4	3.30	
GP-16C	0.0	0.0	0.1	19.5	80.4	8.56	
GP-29A	0.0	0.0	0.3	19.7	80.0	4.84	
GP-29B	0.0	0.0	0.0	19.6	80.4	9.71	
G-110	0.03	0.0	0.1	19.5	80.4	9.73	
GP-17	0.0	0.0	0.5	19.5	80.0	2.44	
GP-18	0.0	0.0	0.0	19.7	80.3	8.29	
GP-19	0.0	0.0	0.4	19.0	80.6	6.14	
GP-20	0.0	0.0	0.1	19.6	80.3	3.81	
GP-21A	0.0	0.0	0.2	19.7	80.1	6.78	
GP-21B	0.0	0.0	0.2	19.6	80.2	11.23	
GP-22A	0.0	0.0	0.2	19.4	80.4	3.51	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	2.4	0.2	18.8	78.6	20.66	
GP-30A	0.0	0.0	0.2	19.7	80.1	4.21	
GP-30B	0.0	0.5	0.1	19.5	79.9	9.59	
MW-204 East	0.0	28.2	4.6	10.0	57.2	20.22	
MW-204 West	0.0	0.0	0.0	19.5	80.5	24.61	
GP-23A	0.0	0.3	2.9	17.8	79.0	4.53	
GP-23B	0.02	0.0	0.4	19.5	80.1	11.98	
GP-24A	0.0	0.0	0.3	19.7	80.0	4.99	
GP-24B	0.0	0.0	0.3	19.6	80.1	17.33	
GP-25A	0.0	0.0	0.8	18.6	80.6	5.02	
GP-25B	0.0	0.0	0.2	19.3	80.5	19.06	
GP-31A	0.0	0.0	0.1	19.7	80.2	6.79	
GP-31B	0.0	2.3	0.7	18.5	78.5	15.97	
GP-26A	0.0	0.0	0.1	19.7	80.2	5.71	
GP-26B	0.0	0.0	0.2	19.5	80.3	15.73	
GP-27A	0.0	0.0	0.2	19.4	80.4	4.21	
GP-27B	0.0	0.0	0.2	19.3	80.5	21.51	
GP-35A	0.0	0.0	0.4	19.3	80.3	4.34	
GP-35B	0.0	0.0	0.1	19.6	80.3	5.31	
G-113	0.0	0.0	5.1	19.7	75.2	11.79	
G-121	0.0	0.0	0.7	17.4	81.9	11.77	
GP-32A	0.0	0.0	4.5	19.0	76.5	11.09	
GP-32B	0.0	0.0	1.3	18.7	80.0	11.99	
GP-37A	0.0	0.1	0.2	19.0	80.7	12.21	
GP-37B	0.0	0.0	1.6	19.1	79.3	12.55	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	3/22/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Mostly Sunny		
Ambient Temperature:	47.7	^{o}F	Ground Conditions:	Soggy		
Barometric Pressure:	30.11	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Slightly Droping		Date Last Calibrated:	3/22/2011		
Notes:	Weekly Readings					

	Blower/Flare Data					
	7:36AM	12:09pm				
Date / Time / Location	SC-Flare	SC				
Blower Inlet Vacuum (in H_2O)	-4.5	-4.8				
Inlet Valve (Turns) Open / 6	6	6				
Gas Inlet Temperature (^{o}F)	50	48				
Blower Outlet Pressure (in H_2O)	1.3	0.4				
Orifice Plate DP (in H_2O)	0.08	0.18				
Approximate Flow (scfm)	16	23				
% CH_4	50.3	41.2				
% CO_2	21.5	27.3				
% O_2	3.9	0.4				
% Balance Gas	24.3	31.1				
Combustion Temperature(^{o}F)	687	734				
Blower SPD%	40	42				
Blower Hours	115	4877				
Blower Cycles	2	574				
Blower Amps	3.2	3.2				
Blower RPM	1466	1544				
Air Compressor Pressure (psi)	125	125				
Air Compressor Hours	8035.31	8035.31				
Well Field Air Pressure (psi)	65	65				
Approx. Leachate Tank Level	8401	8401				
Comments						

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	3/24/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	MOSTLY CLOUDY		
Ambient Temperature:	41.4	^oF	Ground Conditions:	SOGGY		
Barometric Pressure:	30.5	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Slightly Rising		Date Last Calibrated:	3/24/2011		
Notes:	Weekly Readings					

	Blower/Flare Data					
	7:36AM	12:09pm				
Date / Time / Location	NW-Flare	NW				
Blower Inlet Vacuum (in H_2O)	-4.5	-4.8				
Inlet Valve (Turns) Open / 6	6	6				
Gas Inlet Temperature (^oF)	36	48				
Blower Outlet Pressure (in H_2O)	0.5	0.4				
Orifice Plate DP (in H_2O)	0.14	0.18				
Approximate Flow (scfm)	21	23				
% CH_4	33.5	41.2				
% CO_2	22.1	27.3				
% O_2	5.5	0.4				
% Balance Gas	38.9	31.1				
Combustion Temperature(^oF)	684	734				
Blower SPD%	42	42				
Blower Hours	4873	4877				
Blower Cycles	574	574				
Blower Amps	3.3	3.2				
Blower RPM	1541	1544				
Air Compressor Pressure (psi)						
Air Compressor Hours						
Well Field Air Pressure (psi)						
Approx. Leachate Tank Level						
Comments						

DATE: 3/22/11

Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
SOUTHCENTRAL WELLS														
DV-6	-3.5	0.0	NC	0	NC	0.0	0.0	0.2	19.7	80.1	40	Closed	Closed	8.86
DV-12	-4.3	-2.0	-0.8	1.27	0.5	3.5	48.8	22.5	3.7	25.0	46	Fully open	1/4	26.19
DV-13	-4.3	-1.00	NC	0.72	NC	2.5	30.3	10.9	11.5	47.3	40	2	NC	13.61
EWL-2	-4.3	0.0	NC	0	NC	0.0	2.0	0.8	18.6	78.6	42	CLOSED	CLOSED	10.38
SV-12	-4.3	-1.0	NC	0.82	NC	2.6	53.8	20.4	5.3	20.5	40	Fully open	1/4	5.02
DV-3	-3.9	-3.8	NC	2.51	NC	5.1	60.2	24.4	0.3	15.1	44	Fully open	Fully open	20.09
UAV-2	-4.3	-4.3	NC	0.07	NC	0.0	51.5	16.6	6.8	25.1	42	3/8	1/2	8.14

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	35.7	24.8	4.3	35.2	Y	Y	Y	

DATE: 3/24/11

Gas Extraction Wells

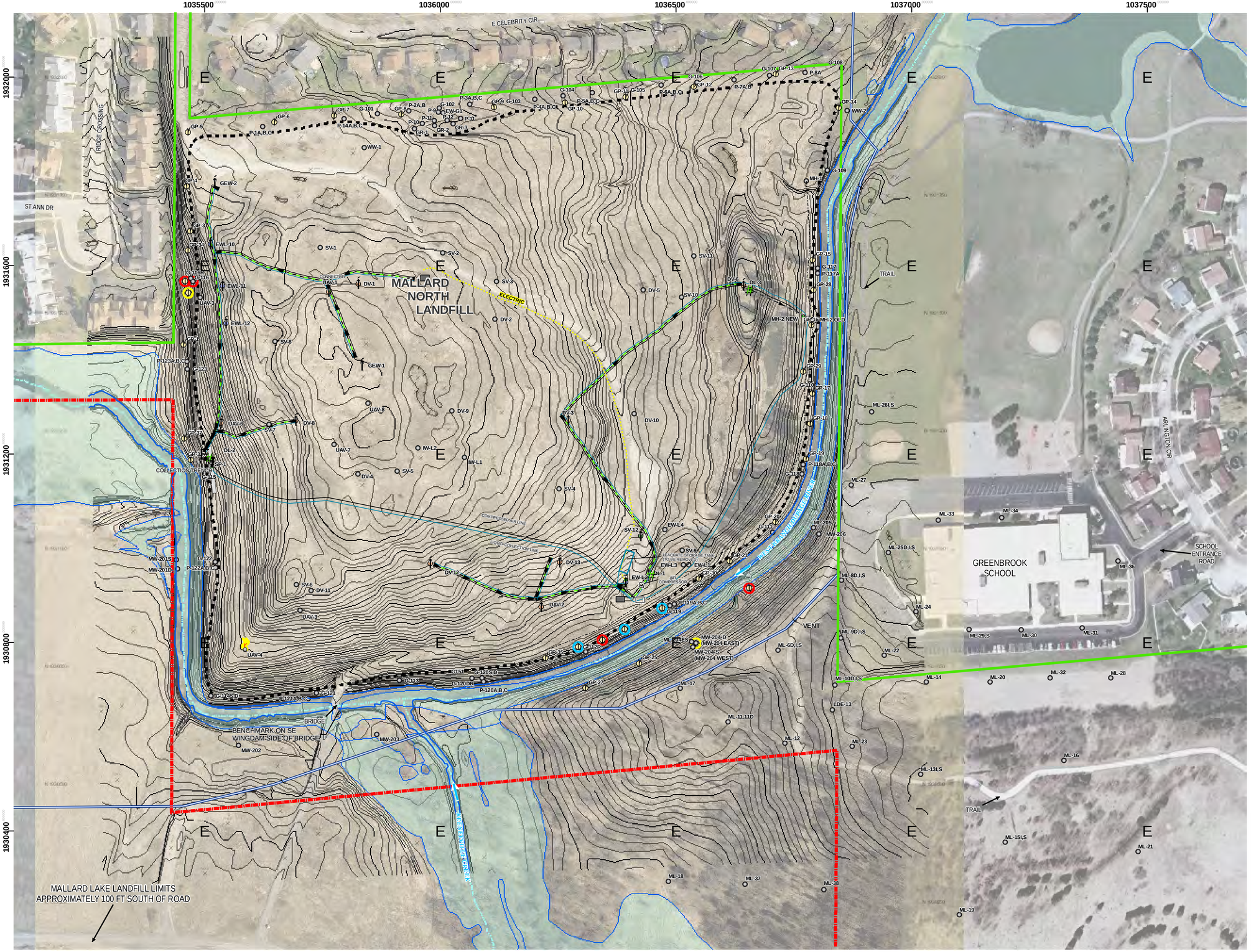
LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-4.7	-4.6	NC	1.39	NC	3.6	47.1	28.5	0.0	24.4	40	4	NC	20.84
DV-8	-4.2	-4.2	NC	2.08	NC	4.5	29.8	24.2	0.6	45.4	42	1	NC	7.93
EWL-10	-4.7	-4.7	NC	0.002	NC	0.0	56.0	24.4	0.0	19.6	30	1/2	1/4	16.78
EWL-11	-4.7	-0.8	NC	0.09	NC	0.5	20.3	22.1	0.3	57.3	30	1/4	NC	16.52
EWL-12	-4.2	0.00	NC	0.01	NC	0.0	5.2	4.8	16.6	73.4	32	1/2	Closed	10.11
GEW-1	-4.2	-4.2	NC	1.59	NC	4.5	64.9	34.8	0.1	0.2	52	3	NC	25.79
GEW-2	-4.7	-4.7	NC	0.02	NC	0.0	65.9	33.9	0.0	0.2	32	2	1/4	16.93
UAV-1	-4.7	-4.6	NC	3	NC	5.5	36.9	28.6	0.5	34.0	42	2	1/4	22.60
UAV-6	-3.8	-1.1	NC	0.01	NC	0.0	21.1	11.6	12.1	55.2	30	1/4	1/8	4.11
SOUTHCENTRAL WELLS														

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4									

Methane Detections Figures (February and March 2011)



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL
- MALLARD LAKE LANDFILL PROPERTY LINE
- FPDDC PRESERVE BOUNDARY

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON .
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 02/14/11 AND 02/16/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(FEBRUARY 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE: AS NOTED	PROJ. NO.	
CHECKED BY: DLZ		FILE NO. MallardNorth931Feb2011	
APPROVED BY:	DATE PRINTED: 04/04/11	**FIGURE 1**	
DATE: MARCH 4, 2011			

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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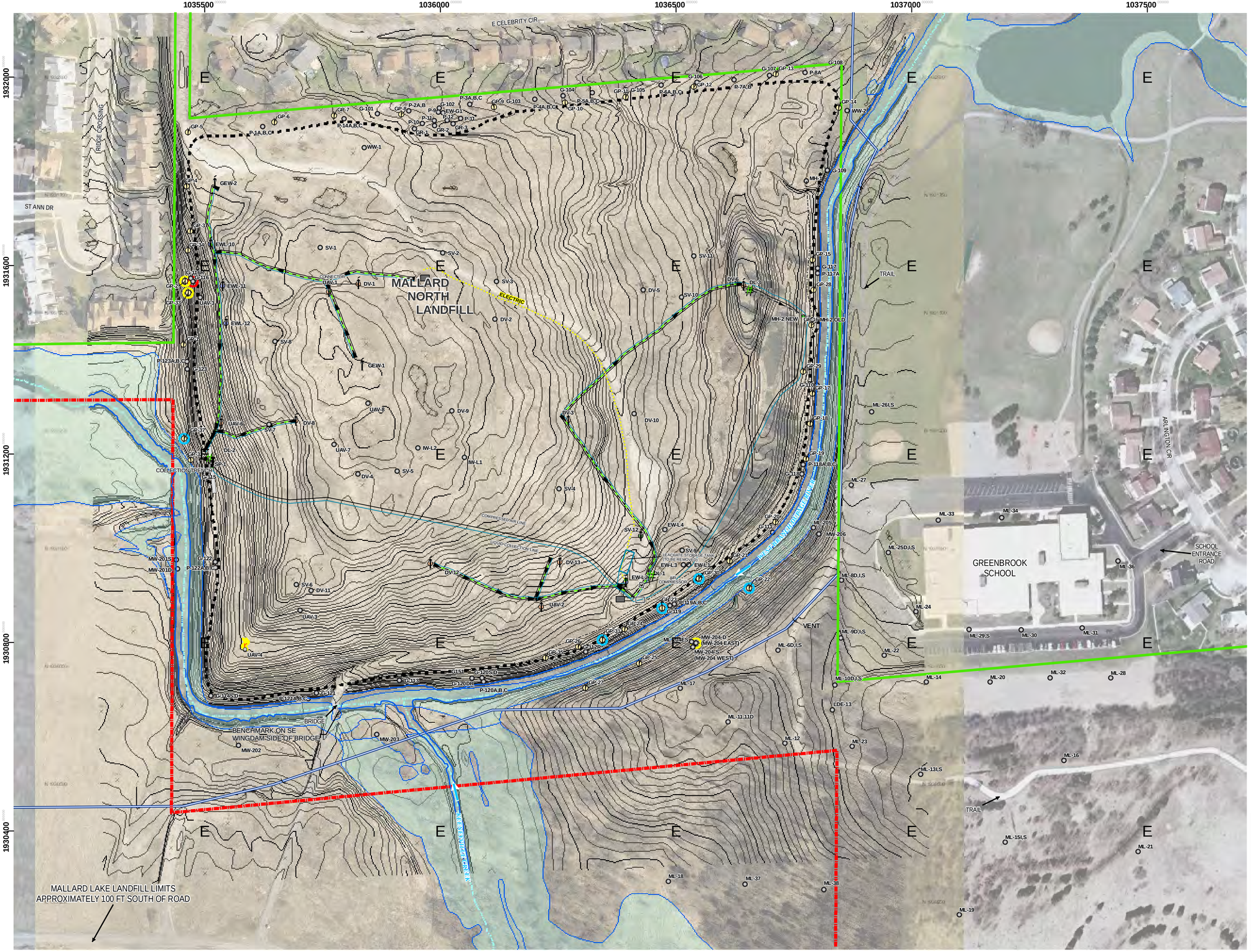

LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL
- MALLARD LAKE LANDFILL PROPERTY LINE
- FPDDC PRESERVE BOUNDARY

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 03/16/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(MARCH GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE: AS NOTED	PROJ. NO.	
CHECKED BY: DLZ		FILE NO. MallardNorth931Mar2011	
APPROVED BY:	DATE PRINTED: 04/08/11	**FIGURE 1**	
DATE: APRIL 8, 2011			

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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Gas Probes with Significant Methane Detections Table

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2***	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1***	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
	11/15/2010	**49.9**	+0.1	19.11		
	12/1/2010	0.0	0.00	15.45		
	1/13/2011	**5.3**	0.00	14.99		
	2/14/2011	**77.3**	0.00	16.85		
	3/16/2011	**11.9**	0.00	13.53		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2***	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3***	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1***	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
	11/15/2010	**0.3***	0.00	13.54		
	12/1/2010	0.0	0.00	12.79		
	1/13/2011	0.0	0.00	17.78		
	2/14/2011	0.0	-0.10	13.27		
	3/16/2011	0.0	0.00	11.67		
GP-3	11/15/2010	**0.2***	+0.1	15.18	29.70	
	12/1/2010	0.0	0.00	15.11		
	1/13/2011	0.0	0.00	13.61		
	2/14/2011	0.0	-0.10	14.72		
	3/16/2011	0.0	0.00	10.36		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1***	-5.0	NM		
	9/16/2010	**0.1***	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		
	11/15/2010	0.0	0.0	NM		Removed hose extraction
	12/1/2010	0.0	0.0	20.72		
	1/13/2011	0.0	+0.01	20.96		
	2/14/2011	0.0	-0.6	21.18		
	3/16/2011	0.0	0.0	20.64		
GP-8A	1/13/2011	**0.1***	0.0	6.61	7.53	
	2/14/2011	0.0	0.0	8.27		
	3/16/2011	0.0	+0.03	6.61		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3***	0.00	4.92		
	3/17/2010	**0.3***	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
	11/15/2010	0.0	0.00	6.22		
	12/1/2010	0.0	0.00	6.10		
	1/13/2011	**0.1***	+0.08	4.84		
	2/14/2011	0.0	0.00	3.60		
	3/16/2011	0.0	0.00	3.50		
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1***	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
	11/15/2010	0.0	0.00	7.16		
	12/1/2010	0.0	0.00	7.25		
	1/13/2011	**1.1**	0.00	7.35		
	2/14/2011	0.0	0.00	7.38		
	3/16/2011	0.0	+0.03	7.37		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
	11/15/2010	0.0	0.00	7.36		
	12/1/2010	0.0	0.00	6.14		
	1/13/2011	0.0	+0.14	4.50		
	2/14/2011	0.0	0.00	2.57		TD = 3.6' FROZEN?
	3/16/2011	0.0	0.00	2.44		
GP-19	2/23/2010	**0.2***	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
	11/15/2010	0.0	0.00	12.89		
	12/1/2010	0.0	0.00	14.05		
	1/13/2011	**0.1***	+1.22	11.90		
	2/14/2011	0.0	-0.40	12.85		
	3/16/2011	0.0	0.00	6.14		
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
	11/15/2010	0.0	0.00	11.72		
	12/1/2010	0.0	0.00	10.30		
	1/13/2011	0.0	0.00	8.76		
	2/14/2011	0.0	0.00	6.38		
	3/16/2011	0.0	0.00	3.51		
GP-22B	6/28/2010	**0.2***	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
	11/15/2010	0.0	0.00	11.76		
	12/1/2010	0.0	0.00	22.02		
	1/13/2011	**42.5**	+0.02	21.96		
	2/14/2011	**51.2**	0.00	21.54		
	3/16/2011	**2.4**	0.00	20.66		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-23A	1/13/2011	**0.7**	+7.5	5.50		PRESSURE DIMINISHED DURING MEAS.
	2/14/2011	**1.0**	0.00	4.02		
	3/16/2011	**0.3***	0.00	4.53		
GP-23B	2/23/2010	**0.3***	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2***	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1***	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
	11/15/2010	0.0	0.00	14.08		
	12/1/2010	0.0	0.00	14.95		
	1/13/2011	0.0	+0.31	14.16		
	2/14/2011	0.0	0.00	12.85		
	3/16/2011	0.0	+0.02	11.98		
GP-24A	9/16/2010	**0.1***	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
	11/15/2010	0.0	-0.20	9.36		
	12/1/2010	0.0	0.00	8.25		
	1/13/2011	**0.2***	+0.30	6.26		
	2/14/2011	**0.5**	0.00	11.77		
	3/16/2011	0.0	0.00	4.99		
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7
	11/15/2010	**46.1**	0.00	NM		Removed hose extraction
	12/1/2010	**4.2**	0.00	21.35		
	1/13/2011	**0.4**	+0.02	20.95		
	2/14/2011	**1.3**	0.00	23.95		
	3/16/2011	0.0	0.00	17.33		
GP-26A	1/13/2011	**0.1***	0.00	9.92	16.65	
	2/14/2011	0.0	0.00	9.07		
	3/16/2011	0.0	0.00	5.71		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1***	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1***	0.00	19.20		
	10/14/2010	**0.2***	+0.1	20.23		
	11/15/2010	**0.9**	+0.2	21.16		
	12/1/2010	0.0	0.00	20.44		
	1/13/2011	**24.4**	1.23	17.84		
	2/14/2011	**2.4**	0.00	23.84		
	3/16/2011	**0.0**	0.00	15.73		
GP-29A	1/13/2011	**0.1***	0.00	4.31	13.36	
	2/14/2011	0.0	0.00	4.54		
	3/16/2011	0.0	0.00	4.84		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3***	-6.00	NM		
	6/28/2010	**0.1***	-6.50	NM		
	7/20/2010	**0.2***	-3.50	NM		
	8/16/2010	**0.3***	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
	11/15/2010	**0.4***	0.00	NM		Removed hose extraction
	12/1/2010	**2.7**	0.00	5.45		
	1/13/2011	**0.4***	+0.01	10.12		
	2/14/2011	0.0	0.00	10.04		
	3/16/2011	**0.5**	0.00	9.59		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2***	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1***	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10
	11/15/2010	**50.1**	0.00	20.03		
	12/1/2010	0.0	0.00	20.50		
	1/13/2011	**64.7**	+0.01	20.26		
	2/14/2011	**81.7**	-0.10	18.80		
	3/16/2011	**2.3**	0.00	15.97		
GP-32A	8/16/2010	**0.2***	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
	11/15/2010	0.0	0.00	12.33		
	12/1/2010	0.0	0.00	12.22		
	1/13/2011	**0.1***	0.00	11.64		
	2/14/2011	0.0	0.00	14.00		
	3/16/2011	0.0	0.00	11.09		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1***	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2***	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0.00	13.93		
	6/28/2010	0.0	0.00	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0.0	13.94		
	9/16/2010	0.0	0.0	15.41		
	10/14/2010	0.0	0.0	16.39		
	11/15/2010	**18.4**	0.0	17.16		
	12/1/2010	0.0	0.0	14.91		
	1/13/2011	**0.5**	0.0	14.45		
	2/14/2011	**11.4**	3.3	16.67		
	3/16/2011	**1.1**	0.0	12.01		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33B	1/13/2011	**1.9**	0.0	14.29	30.44	
	2/14/2011	**5.3**	-1.5	14.01		
	3/16/2011	**4.0**	0.0	12.21		
GP-35B	1/13/2011	**0.1***	0.0	13.21	18.23	
	2/14/2011	0.0	0.0	12.46		
	3/16/2011	0.0	0.0	5.31		
GP-37A	6/17/2009	**0.2***	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1***	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1***	-6.00	NM		
	7/20/2010	**0.3***	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
	11/15/2010	**0.5**	0.00	NM		Removed hose extraction
	12/1/2010	0.0	0.00	13.27		
	1/13/2011	**0.1***	0.00	12.96		
	2/14/2011	0.0	0.00	13.25		
	3/16/2011	**0.1***	0.00	12.21		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2***	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		
	11/15/2010	**13.1**	0.00	NM		
	12/1/2010	0.0	0.00	12.78		
	1/13/2011	0.0	+0.86	12.53		
	2/14/2011	0.0	-0.60	12.73		
	3/16/2011	0.0	0.00	11.79		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
	11/15/2010	**57.8**	0.00	NM		Removed hose extraction
	12/1/2010	**31.0**	0.00	14.00		
	1/13/2011	**71.8**	0.00	14.26		
	2/14/2011	**69.1**	0.00	14.15		
	3/16/2011	**78.1**	+0.9	13.46		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		
	11/15/2010	**44.1**	0.00	22.26		
	12/1/2010	**50.9**	0.00	23.09		
	1/13/2011	**69.8**	+0.01	22.93		
	2/14/2011	**32.8**	0.00	22.95		
	3/16/2011	**28.2**	0.00	20.22		

1. NM= not measured
2. Measurements prior to 12/1/10 were by RMT, Inc. Measurements on or after 12/1/10 were by FPDDC.
3. * Methane measurement within the margin of error for accuracy of the measuring instrument, and therefore may or may not indicate the presence of methane.
4. Updated by: D. Zinnen, 04/08/11.

Liquid Pumping Volumes and Rates Table

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
EWL-2	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
EWL-2	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
EWL-2	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
EWL-2	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
EWL-2	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
EWL-2	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
EWL-2	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
EWL-2	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
EWL-2	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
EWL-2	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
EWL-2	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
EWL-2	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
EWL-2	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
EWL-2	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
EWL-2	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
EWL-2	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
EWL-2	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
EWL-2	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
EWL-2	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
EWL-2	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
EWL-2	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
EWL-2	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
EWL-2	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
EWL-2	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
EWL-2	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
EWL-2	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
EWL-2	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
EWL-2	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
EWL-2	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
EWL-2	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
EWL-2	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
EWL-2	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
EWL-2	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
EWL-2	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
EWL-2	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
EWL-2	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
EWL-2	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
EWL-2	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
EWL-2	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
EWL-2	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
EWL-2	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
EWL-2	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
EWL-2	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
EWL-2	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
EWL-2	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
EWL-2	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
EWL-2	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
EWL-2	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
EWL-2	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
EWL-2	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
EWL-2	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
EWL-2	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
EWL-2	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
EWL-2	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
EWL-2	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
EWL-2	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
EWL-2	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
EWL-2	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
EWL-2	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
EWL-2	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
EWL-2	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
EWL-2	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
EWL-2	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
EWL-2	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
EWL-2	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
EWL-2	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
EWL-2	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
EWL-2	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
EWL-2	10/22/2010	9.90	773.33	4,940,368	6,849	1,231,941	NA	NA	856	Repaired slight air leak
EWL-2	10/29/2010	-	-	4,988,452	12,021	1,243,962	NA	NA	1,717	Pump off due to leaking tank
EWL-2	11/5/2010	9.15	774.08	5,018,662	7,553	1,251,515	NA	NA	1,079	Counter not counting upon arrival, fixed
EWL-2	11/9/2010	9.05	774.18	5,038,101	4,860	1,256,374	NA	NA	1,215	
EWL-2	11/16/2010	-	-	5,072,572	8,618	1,264,992	NA	NA	1,231	
EWL-2	11/23/2010	9.20	774.03	5,106,373	8,450	1,273,442	NA	NA	1,207	
EWL-2	11/29/2010	8.60	774.63	5,132,434	6,515	1,279,958	NA	NA	1,086	
EWL-2	12/3/2010	8.29	774.94	5,258,014	31,395	1,311,353	NA	NA	7,849	
EWL-2	12/21/2010	8.19	775.04	5,267,780	2,442	1,313,794	NA	NA	136	
EWL-2	12/30/2010	10.30	772.93	5,339,165	17,846	1,331,640	NA	NA	1,983	
EWL-2	1/4/2011	9.87	773.36	5,351,855	3,173	1,334,813	NA	NA	635	
EWL-2	1/14/2011	10.51	772.72	5,377,783	6,482	1,341,295	NA	NA	648	
EWL-2	1/20/2011	12.00	771.23	5,094,899	-	1,341,295	NA	NA	-	COUNTER MALFUNCTION
EWL-2	1/26/2011	12.17	771.06	5,096,408	377	1,341,672	NA	NA	63	
EWL-2	2/2/2011	12.05	771.18	5,096,408	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/9/2011	11.91	771.32	5,974,854	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/14/2011	10.23	773.00	5,984,866	2,503	1,344,175	NA	NA	501	
EWL-2	2/25/2011	10.24	772.99	6,096,503	27,909	1,372,084	NA	NA	2,537	
EWL-2	3/4/2011	11.46	771.77	6,191,381	23,720	1,395,804	NA	NA	3,389	
EWL-2	3/11/2011	11.50	771.73	6,314,056	30,669	1,426,473	NA	NA	4,381	
EWL-2	3/18/2011	10.53	772.70	6,375,502	15,362	1,441,834	NA	NA	2,195	
EWL-2	3/22/2011	10.36	772.87	6,391,164	3,916	1,445,750	NA	NA	979	
EWL-2	12/31/2050									
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
MH-2	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
MH-2	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
MH-2	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
MH-2	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
MH-2	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
MH-2	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
MH-2	9/8/2009	NR		NR	NA	NA	63,058	818	68	
MH-2	9/14/2009	NR		NR	NA	NA	63,419	361	60	
MH-2	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
MH-2	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
MH-2	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
MH-2	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
MH-2	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
MH-2	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
MH-2	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
MH-2	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
MH-2	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
MH-2	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
MH-2	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
MH-2	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
MH-2	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
MH-2	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	

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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
MH-2	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
MH-2	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
MH-2	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
MH-2	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
MH-2	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
MH-2	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
MH-2	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
MH-2	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
MH-2	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
MH-2	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
MH-2	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
MH-2	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
MH-2	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
MH-2	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
MH-2	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
MH-2	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
MH-2	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
MH-2	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
MH-2	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
MH-2	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
MH-2	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
MH-2	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
MH-2	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
MH-2	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
MH-2	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
MH-2	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
MH-2	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
MH-2	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
MH-2	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
MH-2	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
MH-2	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
MH-2	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
MH-2	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
MH-2	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
MH-2	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
MH-2	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
MH-2	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
MH-2	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	
MH-2	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
MH-2	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
MH-2	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
MH-2	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
MH-2	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
MH-2	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	
MH-2	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
MH-2	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
MH-2	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
MH-2	10/22/2010	5.41	769.53	3,794,068	83,053	964,712	NA	NA	10,382	
MH-2	10/29/2010	NR	NR	3,871,264	85,842	1,050,554	NA	NA	12,263	Pump off due to leaking tank
MH-2	11/5/2010	5.30	769.64	4,024,543	38,320	2,534,624	NA	NA	5,474	
MH-2	11/9/2010	4.88	770.06	4,089,583	16,260	2,550,884	NA	NA	4,065	Cut-off wall installed 11/9-11/11
MH-2	11/23/2010	4.20	770.74	4,302,141	53,140	2,604,023	NA	NA	3,796	
MH-2	11/29/2010	3.19	771.75	4,373,837	17,924	2,621,947	NA	NA	2,987	
MH-2	12/3/2010	3.37	771.57	4,731,348	89,378	2,711,325	NA	NA	22,344	
MH-2	12/21/2010	5.13	769.81	4,903,964	43,154	2,754,479	NA	NA	2,397	
MH-2	12/30/2010	3.36	771.58	4,991,078	21,779	2,776,257	NA	NA	2,420	
MH-2	1/4/2011	2.56	772.38	5,091,387	25,077	2,801,335	NA	NA	5,015	

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MH-2	1/14/2011	2.82	772.12	5,095,504	1,029	2,802,364	NA	NA	103	
MH-2	1/20/2011	2.73	772.21	5,290,345	48,710	2,851,074	NA	NA	8,118	
MH-2	1/26/2011	3.26	771.68	5,292,630	571	2,851,645	NA	NA	95	
MH-2	2/2/2011	2.50	772.44	5,292,630	-	2,851,645	NA	NA	-	
MH-2	2/9/2011	2.36	772.58	5,430,045	34,354	2,885,999	NA	NA	4,908	
MH-2	2/14/2011	2.21	772.73	5,456,089	6,511	2,892,510	NA	NA	1,302	
MH-2	2/25/2011	1.86	773.08	5,671,148	53,765	2,946,275	NA	NA	4,888	
MH-2	3/4/2011	2.83	772.11	5,828,428	39,320	2,985,595	NA	NA	5,617	
MH-2	3/11/2011	1.09	773.85	6,000,380	42,988	3,028,583	NA	NA	6,141	
MH-2	3/18/2011	1.11	773.83	6,005,061	1,170	3,029,753	NA	NA	167	
MH-2	3/22/2011	1.95	772.99	6,009,623	1,141	3,030,894	NA	NA	285	
MH-2	12/31/2050									
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
SP-1	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
SP-1	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
SP-1	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
SP-1	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
SP-1	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
SP-1	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
SP-1	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
SP-1	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
SP-1	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
SP-1	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
SP-1	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
SP-1	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
SP-1	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
SP-1	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
SP-1	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
SP-1	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
SP-1	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
SP-1	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
SP-1	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
SP-1	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
SP-1	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
SP-1	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
SP-1	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
SP-1	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
SP-1	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
SP-1	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
SP-1	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
SP-1	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
SP-1	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
SP-1	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
SP-1	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
SP-1	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
SP-1	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
SP-1	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
SP-1	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
SP-1	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
SP-1	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
SP-1	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
SP-1	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
SP-1	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
SP-1	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
SP-1	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	

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SP-1	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
SP-1	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
SP-1	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
SP-1	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
SP-1	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
SP-1	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
SP-1	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
SP-1	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
SP-1	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
SP-1	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
SP-1	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
SP-1	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
SP-1	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
SP-1	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
SP-1	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
SP-1	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
SP-1	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
SP-1	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
SP-1	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
SP-1	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	
SP-1	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
SP-1	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump
SP-1	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
SP-1	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
SP-1	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
SP-1	10/22/2010	3.12	773.39	3,944,246	7,687	984,081	NA	NA	961	
SP-1	10/29/2010	NR	NR	3,973,045	7,200	991,281	NA	NA	1,029	Pump off due to leaking tank
SP-1	11/5/2010	3.10	773.41	3,994,762	5,429	996,710	NA	NA	776	
SP-1	11/9/2010	2.83	773.68	4,008,694	3,483	1,000,193	NA	NA	871	
SP-1	11/23/2010	2.78	773.73	4,047,147	9,613	1,009,806	NA	NA	687	Regulator removed due to leak
SP-1	11/29/2010	2.31	774.20	4,054,706	1,890	1,011,696	NA	NA	315	
SP-1	12/3/2010	2.23	774.28	4,080,361	6,414	1,018,110	NA	NA	1,603	
SP-1	12/21/2010	2.00	774.51	4,080,889	132	1,018,242	NA	NA	7	
SP-1	12/30/2010	3.61	772.90	4,125,983	11,274	1,029,515	NA	NA	1,253	
SP-1	1/4/2011	2.35	774.16	4,140,614	3,658	1,033,173	NA	NA	732	
SP-1	1/14/2011	2.21	774.30	4,145,475	1,215	1,034,388	NA	NA	122	
SP-1	1/20/2011	2.15	774.36	4,157,669	3,049	1,037,437	NA	NA	508	
SP-1	1/26/2011	2.65	773.86	4,158,398	182	1,037,619	NA	NA	30	
SP-1	2/2/2011	2.25	774.26	4,158,398	-	1,037,619	NA	NA	-	
SP-1	2/9/2011	1.88	774.63	4,166,635	2,059	1,039,678	NA	NA	294	
SP-1	2/14/2011	1.41	775.10	4,166,747	28	1,039,706	NA	NA	6	
SP-1	2/25/2011	1.22	775.29	4,179,676	3,232	1,042,938	NA	NA	294	
SP-1	3/4/2011	1.03	775.48	4,193,424	3,437	1,046,375	NA	NA	491	
SP-1	3/11/2011	1.43	775.08	4,193,502	20	1,046,395	NA	NA	3	
SP-1	3/18/2011	1.01	775.50	4,201,373	1,968	1,048,363	NA	NA	281	
SP-1	3/22/2011	1.31	775.20	4,219,245	4,468	1,052,831	NA	NA	1,117	
SP-1	12/31/2050									
					Total System Gallons Pumped	**4,111,998**			**6,686**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: D. Zinnen 04/08/11.

Southcentral Blower/Flare Summary Table

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/23/2010	11/29/2010	12/3/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM	9:30 AM	10:23 AM	9:30	11:00	10:00	10:50	10:50		
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9	4.0	3.7	4.20	4.0	3.90	4.1	4.1	4.0	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	6	Fully Open
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82	66	65	50	72	NR	51	51	42	42
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30	0.30	0.22	0.5	0.26	0.2	0.3	0.3	2.9	2.9
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010	0.025	0.025	0.02	0.02	0.02	0.23	0.23	0.55	0.55
Approximate Flow (scfm)	13	8	10	8	5	6	12	5	8	8	8	8	8	25	25	37	37
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2	41.0	38.4	36.8	35.5	37.7	28.1	28.1	35.1	35.1
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0	23.8	24.3	23.9	23.0	23.7	20.2	20.2	20.4	20.4
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3	4.3	4.1	5.4	4.8	3.1	6.2	6.2	5.9	5.9
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5	30.9	33.2	33.9	36.7	35.5	45.5	45.5	39.1	39.1
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531	711	632	714 - 908	530	NR	861	861	713	713
Blower SPD%	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717	1858.9	1999	2138	2221	NR	2500	2500	2619	2619
Blower Cycles	3	3	4	4	4	4	4	4	4	4	4	4	NR	4	4	4	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.2	3.2
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR	1280	1280	1280	1280	1279	1280	1280	1279	1279
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140	140	-	150	-	140	135	135	5790	80
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75	78	-	75	-	80	73	73	75	75
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in	12.5 in	30 in	-	-	-	-	-	16417 GAL	90"
Comments	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower								Post Adjustment				Post Adjustment
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%								CH4-35.7%				CH4-38.7%
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%								CO2-22.1%				CO2-22.8%
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%								O2-4.7%				O2-4.7%
			Compressor														
			off due to full														
			frac tank.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/16/2011	3/22/2011
Time				7:30	10:07	7:36
Blower Inlet Vacuum (in H_2O)	4.0	1.9	1.9	1.2	6.7	-4.5
Inlet Valve (Turns) Open / 6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	42	48	15	5	61	50
Blower Outlet Pressure (in H_2O)	3.1	3.7	4.0	4.6	4.3	1.3
Orifice Plate DP (in H_2O)	0.09	1.30	0.19	0.10	0.05	0.08
Approximate Flow (scfm)	16	60	23	16	12	16
% CH_4	38.7	37.4	35.1	40.5	22.1	50.3
% CO_2	22.8	18.0	17.6	16.4	11.8	21.5
% O_2	4.7	6.9	8.2	6.3	10.1	3.9
% Balance Gas	33.8	37.7	39.1	36.8	56.0	24.3
Combustion Temperature(^oF)	589	714	970	355	576	687
Blower SPD%	35	40	40	40	55	40
Blower Hours	2739	3179	3278	3296	342	115
Blower Cycles	193	193	193	193	149	2
Blower Amps	3.2	3.2	3.2	3.2	3.7	3.2
Blower RPMs	1277	1466	1464	1466	2020	1466
Air Compressor Pressure (psi)	150	150	149	149	0.55	125
Well Field Air Pressure (psi)	75	75	75	75	80	65
Approx. Leachate Tank Level	5961GAL	5768 GAL	13289 GAL	13,289 GAL	17199	8401
Comments						
				Post Adjustment	Post Adjustment	Post Adjustment
				CH4-52.5%	CH4-41.1%	CH4-41.2%
				CO2-21.4%	CO2-19.8%	CO2-27.3%
				O2-2.6%	O2-3.8%	O2-0.4%

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Northwest Blower/Flare Summary Table

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0
					23.5 BAL	23.6 BAL	22.2 BAL					22.3
									No flame			
									Sparker on			

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Updated by: D. Zinnen, 03/08/11.

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM
Blower Inlet Vacuum (in H_2O)	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70
Blower Outlet Pressure (in H_2O)	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8
Orifice Plate DP (in H_2O)	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14
Approximate Flow (scfm)	22	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20
% CH_4	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0
% CO_2	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2
% O_2	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2
% Balance Gas	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6
Combustion Temperature(^oF)	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602
Blower SPD%	40	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45
Blower Hours	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535
Blower Cycles	114	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127
Blower Amps	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3
Blower RPMs	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652
Air Compressor Pressure (psi)	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160
Well Field Air Pressure (psi)	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA
Comments	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3	HI 1500 LO 200 HI HI 1900 LO LO 200	*Low value due to position of thermo-couple.	Gas readings are pre-blower values.	Pre-blower: CH_4 40.4 CO_2 25.2 O_2 2.2	Pre-blower: CH_4 40.5 CO_2 25.3 O_2 2.3	Post-blower: CH_4 46.1 CO_2 27.4 O_2 2.0	Post-blower: CH_4 43.5 CO_2 25.2 O_2 2.9
												Pre-blower: CH_4 43.6 CO_2 25.6 O_2 2.3					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010
Time	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM
Blower Inlet Vacuum (in H_2O)	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	64	69	NR	70	NR	72	61	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00
Orifice Plate DP (in H_2O)	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18
Approximate Flow (scfm)	NR	NA	25	NR	24	NR	25	22	22	24	24	16	17	20	22	26	23	22	22
% CH_4	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0
% CO_2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2
% O_2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0
% Balance Gas	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8
Combustion Temperature(^oF)	460	761	337	NR	625	NR	356	615	770	262	415	232	NA	1200	1002	938	933	832	800
Blower SPD%	50	50	50	NR	50	50	50	50	50	50	50	35 - 45*	45	45	50	50	50	50	50
Blower Hours	107	NR	227	NR	344	NR	506	665	765	906	956	2	102	522	701	821	1005	1103	1261
Blower Cycles	1	NR	1	NR	3	NR	3	3	4	398	862	13	270	272	272	272	272	272	273
Blower Amps	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4
Blower RPMs	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments																			
			Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower
			CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%
			CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%
	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%
	CH_4 43.6	was taken																	
	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf					*Blower SPD		*Blower speed					
	O_2 2.10	No post-					card					increased to		increased to					
		blower reading										45% on 7/21		50%					
		was recorded.																	

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/29/2010	12/3/2010	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/17/2011	03/34/11
Time	12:00 PM	11:15 AM	11:25 AM	10:15 AM	12:22 PM	9:40	10:30	NR	11:10							8:38	7:36
Blower Inlet Vacuum (in H_2O)	6.5	6.3	6.9	6.5	4.1	4.5	4.30	4.00	4.50	4.10	-4.10	3.90	3.20	4.00	1.10	7.10	4.50
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	Fully Open	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	NA	NA	NA	68	60	50	75	68	48	47	47	45	42	5	10	54	36
Blower Outlet Pressure (in H_2O)	2.30	2.70	2.20	2.00	1.30	1.6	1.5	4.7	2.5	1.3	1.3	2.2	4.0	2.2	5.6	2.6	0.5
Orifice Plate DP (in H_2O)	0.14	0.20	0.18	0.18	0.14	0.10	0.14	0.19	0.09	0.01	-0.01	0.17	0.50	0.20	0.10	0.26	0.14
Approximate Flow (scfm)	20	24	22	22	20	17	20	23	16	5	5	21	37	24	16	28	21
% CH_4	38.4	36.5	35.3	32.6	37.1	34.3	34.0	33.4	33.6	31.7	31.7	40.4	47.2	43.8	47.5	40.5	33.5
% CO_2	27.0	27.2	26.8	25.3	27.3	26.5	26.1	25.0	26.7	25.5	25.5	29.3	30.0	30.2	28.0	27.4	22.1
% O_2	2.0	1.8	1.9	2.6	2.8	6.3	3.1	3.6	3.4	4.1	4.1	1.1	1.5	1.9	2.2	1.4	5.5
% Balance Gas	32.6	34.5	36.0	39.5	32.8	32.9	36.8	38.0	36.3	38.7	38.7	29.2	21.3	24.1	22.3	30.7	38.9
Combustion Temperature(^oF)	810	759	573	769	1054	894	690	580	950	530	530	665	1055	1058	1156	1040	684
Blower SPD%	50	50	50	50	40	40	40	40	40	40	40	40	42	42	42	52	42
Blower Hours	1381	1561	1697	1837.3	1957	2095	2176	2318	2457	2575	2575	2693	3195	3295	3494	4174	4873
Blower Cycles	273	274	426	426	571	571	NR	573	579	573	573	573	573	573	573	574	574
Blower Amps	3.4	3.4	NR	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	35.0	3.3
Blower RPMs	1838	1838	NR	1838	1470	1470	1468	1469	1470	1279	1470	1505	1544	1542	1544	1914	1541
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	80	150	150	149	149	0.55	
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	75	75	75	75	75	80	
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	16417 GAL	90"	5961 GAL	5768 GAL	13289 GAL	13,289 GAL	17199	
Comments				Replaced	down on arrival												
				temp	had difficulties getting			Post Adjustment			Post Adjustment				Post Adjustment	Post Adjustment	Post Adjustment
				probe	started. Turned off			CH4-34.7%			CH4-40.4%				CH4-46.9%	CH4-35.7%	CH4-41.2%
					blower and let sit			CO2-25.8%			CO2-29.3%				CO2-29.7%	CO2-24.3%	CO2-27.3%
					2 hrs to build up			O2-3.3%			O2-1.1%				O2-1.7%	O2-3.8%	O2-0.4%
					methane conc.												
					After 2hr wait, flare												
					lit on first startup												
					attempt.												

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 03/08/11.

Gas Extraction Well Summary Tables

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR
Orifice Plate DP (in H_2O)	1.80	1.80	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR
% CH_4	51.3		50.7		53.3		60.5		60.5		48.0		41.5	
% CO_2	27.2		26.5		27.4		34.1		30.9		29.5		28.3	
% O_2	0.4		0.0		0.0		0.0		0.0		0.0		0.6	
% Balance Gas	21.1		22.8		19.3		5.4		8.6		22.5		29.6	
Gas Temperature(^oF)	82		64		70		73		72		72		68	
Valve Turns Open	8	10	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.1		-0.6		-7.1		-4.7	
Well Side Pressure (in H_2O)	-3.7	-3.5	-0.8	NC	-0.5	NC	-6.9	NC	-4.6	NC
Orifice Plate DP (in H_2O)	1.80	1.10	1.95	NC	0.165	NC	3.2	NC	1.4	NC
% CH_4	37.2		43.3		50.0		44.6		47.1	
% CO_2	26.2		26.6		27.1		28.8		28.5	
% O_2	1.9		2.3		2.3		0.0		0.0	
% Balance Gas	34.7		27.8		20.6		26.6		24.4	
Gas Temperature(^oF)	68		60		30		50		40	
Valve Turns Open	8	2	NR	NR	1	2	2	4	4	NC
Liquid Level (ft BTOC)	NR		NM		22.90		21.37		20.84	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.5		-5.7		-4.2	
Well Side Pressure (in H_2O)	-1.30	-0.8	-0.20	NC	-0.20	NC	-5.30	NC	-4.20	NC
Orifice Plate DP (in H_2O)	0.75	0.55	0.49	NC	0.173	NC	3.140	NC	2.080	NC
% CH_4	35.3		36.6		37.3		32.0		29.8	
% CO_2	28.9		29.4		26.2		26.6		24.2	
% O_2	0.1		1.3		1.8		1.9		0.6	
% Balance Gas	35.7		32.7		34.7		39.5		45.4	
Gas Temperature(^oF)	53		42		20		49		42	
Valve Turns Open	0.75	0.25	NR	NR	1/4	1/2	1/2	7/8	1	NC
Liquid Level (ft BTOC)	20.32		NM		20.46		8.65		7.93	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC	-3.2	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC	0.030	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8		26.3	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7		25.3	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5		0.4	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0		48.0	
Gas Temperature(^oF)	76		88		84		90		84		62		50	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC	0.25	NC
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26		17.79	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.5		-6.5		-4.7	
Well Side Pressure (in H_2O)	0.0	NC	-1.2	NC	-6.5	NC	-4.7	NC
Orifice Plate DP (in H_2O)	0.050	NC	0.119	NC	1.740	NC	0.002	NC
% CH_4	39.3		31.4		21.5		56.0	
% CO_2	28.5		23.3		15.8		24.4	
% O_2	1.3		2.5		6.0		0.0	
% Balance Gas	30.9		42.8		56.7		19.6	
Gas Temperature(^oF)	36		19		48		30	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	1/4
Liquid Level (ft BTOC)	NM		18.66		16.78		16.78	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4		-5.0	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC	0.50	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0		19.1	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2		19.8	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0		3.9	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8		57.2	
Gas Temperature(^oF)	60		NR		58		80		88		88		90	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77		15.65	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6		-3.8		-3.0		-1.5		-6.5		-4.7	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC	-3.8	NC	-3.0	NC	-1.5	NC	-6.5	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.40	NC	0.85	NC	0.45	NC	0.29	NC	0.623	NC	0.670	NC	0.090	NC
% CH_4	16.0		13.5		16.5		14.7		17.1		10.0		20.3	
% CO_2	19.6		19.4		23.7		21.5		20.6		19.4		22.1	
% O_2	2.9		3.8		0.2		2.0		2.9		2.4		0.3	
% Balance Gas	61.5		63.3		59.6		61.8		59.4		68.2		57.3	
Gas Temperature(^oF)	82		62		50		34		20		46		30	
Valve Turns Open	7	NC	7	NC	7	NC	NR	NR	1/8	CLOSED	CLOSED	1/4	1/4	NC
Liquid Level (ft BTOC)	15.59		17.38		17.82		NM		18.59		17.27		16.52	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6		-3.8	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC	-1.60	-0.2
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC	1.20	0.10
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0		2.1	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2		16.1	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1		15.4	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7		66.4	
Gas Temperature(^oF)	78		84		84		82		78		60		50	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC	1	0.5
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41		17.48	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.3		-5.6		-4.2	
Well Side Pressure (in H_2O)	-0.30	NC	0.00	NC	-4.80	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.60	NC	0.001	NC	0.937	NC	0.010	NC
% CH_4	2.0		3.1		16.5		5.2	
% CO_2	12.5		3.2		17.2		4.8	
% O_2	13.6		17.0		4.2		16.6	
% Balance Gas	71.9		76.7		62.1		73.4	
Gas Temperature(^oF)	32		19		40		32	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	CLOSED
Liquid Level (ft BTOC)	NM		15.36		13.03		10.11	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.6		-6.9		-4.2	
Well Side Pressure (in H_2O)	-3.8	NC	-3.2	NC	-0.6	NC	-6.6	NC	-4.2	NC
Orifice Plate DP (in H_2O)	2.40	NC	1.03	NC	0.311	NC	3.980	NC	1.590	NC
% CH_4	54.9		53.5		59.6		62.0		64.9	
% CO_2	33.7		31.4		29.3		33.5		34.8	
% O_2	0.2		1.9		3.3		0.0		0.1	
% Balance Gas	11.2		13.2		7.8		4.5		0.2	
Gas Temperature(^oF)	60		48		32		52		52	
Valve Turns Open	10.25	NC	NR	NR	3/4	1	1	3	3	NC
Liquid Level (ft BTOC)	NR		NM		26.16		26.29		25.79	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20	0.05	0.08
% CH_4	58		71.1		43.6		37.1		54.4		47.9		48.9	
% CO_2	29		28		28.8		23.1		27.0		26.0		26.7	
% O_2	1.9		0		1.9		3.9		0.9		1.3		1.4	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8		23.0	
Gas Temperature(^oF)	36		40		34		46		50		NR		68	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7	7.5	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		17.3	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.5	NC	-6.6	NC	NR	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.03	NC	0.01	NC	0.04	NR	0.00	NC	0.03	NC	0.02	NC
% CH_4	56.1		67.8		65.3		66.4		66.2		63.3		65.4	
% CO_2	29.4		30.6		30.7		31.9		33.5		32.7		34.0	
% O_2	0.0		0.4		0.9		1.0		0.1		0.7		0.4	
% Balance Gas	14.5		1.2		3.1		0.7		0.2		3.3		0.2	
Gas Temperature(^oF)	74		84		85		90		88		64		63	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.22		17.28		17.00		17.04		17.18		17.04	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.4		-6.6		-4.7	
Well Side Pressure (in H_2O)	-3.0	NC	-1.4	NC	-6.5	NC	-4.7	NC
Orifice Plate DP (in H_2O)	0.05	NC	0.254	NC	0.003	NC	0.020	NC
% CH_4	62.4		60.2		65.7		65.9	
% CO_2	31.4		31.5		33.4		33.9	
% O_2	1.9		2.5		0.0		0.0	
% Balance Gas	4.3		5.8		0.9		0.2	
Gas Temperature(^oF)	38		22		50		32	
Valve Turns Open	NR	NR	3/4	1	1	2	2	1/4
Liquid Level (ft BTOC)	NM		16.96		16.91		16.93	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.1		-0.5		-6.6		-4.7	
Well Side Pressure (in H_2O)	-3.8	-2.8	-0.6	NC	-0.2	NC	-6.5	NC	-4.6	NC
Orifice Plate DP (in H_2O)	3.20	2.20	1.66	NC	0.003	NC	3.210	NC	3.000	NC
% CH_4	37.5		35.9		44.4		45.4		36.9	
% CO_2	30.0		28.2		28.6		30.7		28.6	
% O_2	0.3		1.6		1.7		0.0		0.5	
% Balance Gas	32.2		34.3		25.3		23.9		34.0	
Gas Temperature(^oF)	60		50		32		50		42	
Valve Turns Open	8.5	4.5	NR	NR	1/4	1/2	1/2	2.0	2	1/4
Liquid Level (ft BTOC)	22.5		NM		7.50		23.46		22.60	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR		-4.4	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC	-0.8	-0.9
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC	0.65	0.85
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2		34.4	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5		16.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4		8.8	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9		40.3	
Gas Temperature(^oF)	38		44		38		46		52		NR		74	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC	1	1.25
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.5		-5.0		-5.25		-6.60		-3.80	
Well Side Pressure (in H_2O)	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR	0.1	NC
Orifice Plate DP (in H_2O)	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR	0.10	NC
% CH_4	21.1		21.2		21.7		32.5		19.8		21.2		27.5	
% CO_2	12.9		11.5		12.9		19.7		11.6		14.0		16.4	
% O_2	10.5		10.6		10.7		6.9		11.2		11.2		9.4	
% Balance Gas	55.5		56.7		54.7		40.9		57.4		53.6		46.7	
Gas Temperature(^oF)	72		80		84		84		84		64		58	
Valve Turns Open	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25	0.5	NC
Liquid Level (ft BTOC)	11.95		NR		DRY		DRY		DRY		12.34		12.51	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.30		-0.80		-5.70		-3.80	
Well Side Pressure (in H_2O)	0.0	NC	-0.5	NC	0.5	NC	-1.1	NC
Orifice Plate DP (in H_2O)	0.01	NC	0.583	NC	0.236	NC	0.010	NC
% CH_4	23.3		52.0		21.3		21.1	
% CO_2	14.2		28.3		10.3		11.6	
% O_2	11.5		2.5		12.9		12.1	
% Balance Gas	51.0		17.2		55.5		55.2	
Gas Temperature(^oF)	40.0		24.0		52.0		30.0	
Valve Turns Open	NR	NR	1/2	3/4	3/4	1/2	1/4	1/8
Liquid Level (ft BTOC)	NM		7.50		4.51		4.11	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8		-3.8		-2.9		-1.2		-8.0	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC	-3.8	NC	-2.9	NC	-0.8	NC	-7.9	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC	2.00	NC	1.45	NC	0.461	NC	3.250	NC
% CH_4	67.3		60.9		52.8		39.3		39.8		50.3		52.0	
% CO_2	28.9		30.3		30.1		27.4		25.0		21.9		24.0	
% O_2	0.2		0.3		0.4		0.1		1.8		1.5		0.5	
% Balance Gas	3.6		8.5		16.7		33.2		33.4		26.3		23.5	
Gas Temperature(^oF)	72		70		58		54		46		36		38	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC	12.25	NC	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NR		NM		12.31		20.13	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-3.9	
Well Side Pressure (in H_2O)	-3.8	NC
Orifice Plate DP (in H_2O)	2.510	NC
% CH_4	60.2	
% CO_2	24.4	
% O_2	0.3	
% Balance Gas	15.1	
Gas Temperature(^oF)	44	
Valve Turns Open	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	20.09	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0		0.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC	0.00	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2		0.5	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1		0.6	
% O_2	18.0		NR		19.2		18.8		20.2		19.3		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4		79.6	
Gas Temperature(^oF)	46		NR		NR		58		76		84		82	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/21/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.5		-3.7		-3.9		-3.8		-2.9		-0.7	
Well Side Pressure (in H_2O)	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC	-1.3	-0.1	-2.9	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.03	NC	0.015	NC	0.005	NC	0.030	NC	0.01	0.01	1.45	NC	0.005	NC
% CH_4	0.1		0.3		0.3		0.0		0.2		0.8		1.3	
% CO_2	0.4		0.4		0.5		0.6		0.7		2.1		4.0	
% O_2	18.6		19.7		19.9		19.3		19.5		19.1		18.2	
% Balance Gas	80.9		79.6		79.3		80.1		79.6		78.0		76.5	
Gas Temperature(^oF)	98		88		80		58		58		28		20	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.25	NR	NR	NR	CLOSED	CLOSED
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NM		11.02	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/16/2011		3/22/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-8.3		-3.5	
Well Side Pressure (in H_2O)	0.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.000	NC	0.000	NC
% CH_4	1.2		0.0	
% CO_2	1.1		0.2	
% O_2	19.1		19.7	
% Balance Gas	78.6		80.1	
Gas Temperature(^oF)	50		40	
Valve Turns Open	CLOSED	CLOSED	CLOSED	CLOSED
Liquid Level (ft BTOC)	11.55		8.86	
Comments				

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC	-1.3	NR
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC	1.30	NR
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4		34.5	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6		17.9	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2		8.7	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8		38.9	
Gas Temperature(^oF)	NR		50		72		76		88		72		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.8		-1.2		-0.8		-6.7		-4.3		-4.3	
Well Side Pressure (in H_2O)	-0.9	-0.2	-0.2	-0.2	-1.0	-0.2	-0.3	NC	-6.5	NC	-0.2	NC	-0.2	NC
Orifice Plate DP (in H_2O)	0.50	0.10	0.22	0.10	0.50	0.10	0.188	NC	1.080	NC	1.270	NC	1.270	NC
% CH_4	29.4		36.7		47.5		65.7		23.0		23.0		48.8	
% CO_2	16.1		20.1		24.4		24.4		16.0		16.0		22.5	
% O_2	10.2		7.1		5.6		1.5		5.9		5.9		3.7	
% Balance Gas	44.3		36.1		22.5		8.4		55.1		55.1		25.0	
Gas Temperature(^oF)	62		58		42		30		48		48		46	
Valve Turns Open	1	0.75	0.75	0.25	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NM		26.52		26.63		26.63		26.19	
Comments														

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(1) Based on initial reading.
(2) Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC	-0.70	NR
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC	0.045	NR
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2		17.5	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4		7.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6		14.9	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8		60.2	
Gas Temperature(^oF)	NR		62		88		90		100		88		80	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC	1.5	1.0
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-7.3		-4.3	
Well Side Pressure (in H_2O)	0.01	-0.1	-0.01	-0.2	-0.70	NC	0.00	NC	-4.80	NC	-1.00	NC
Orifice Plate DP (in H_2O)	0.010	0.08	0.010	0.12	0.119	NC	0.018	NC	0.080	NC	0.720	NC
% CH_4	71.9		72.6		11.0		60.8		14.3		30.3	
% CO_2	28.1		27.1		4.9		21.2		6.0		10.9	
% O_2	0.0		0.2		17.3		3.3		15.9		11.5	
% Balance Gas	0.0		0.1		66.8		14.7		63.8		47.3	
Gas Temperature(^oF)	62		72		40		28		42		40	
Valve Turns Open	0.25	0.75	1.5	0.75	NR	NR	3/4	1	1	2	2	NC
Liquid Level (ft BTOC)	NR		NR		NM		14.73		15.21		13.61	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9		-0.9		-2.0		-6.7		-4.3	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC	0.02	NC	-0.20	NC	0.00	NC	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC	0.01	NC	0.60	NC	0.017	NC	0.000	NC	0.000	NC
% CH_4	14.1		1.1		35.8		2.0		1.4		1.1		2.0	
% CO_2	6.1		2.5		16.6		12.5		3.0		1.3		0.8	
% O_2	15.3		19.1		7.5		13.6		19.8		19.4		18.6	
% Balance Gas	64.5		77.3		40.1		71.9		75.8		78.2		78.6	
Gas Temperature(^oF)	79		54		56		32		38		42		42	
Valve Turns Open	0	NC	0.25	NC	0.125	NC	NR	NR	1/8	CLOSED	1/8	CLOSED	CLOSED	CLOSED
Liquid Level (ft BTOC)	10.24		8.54		8.75		NM		10.20		11.40		10.38	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC	0.05	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5		34.0	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0		16.3	
% O_2	0.1		NR		4.1		6.5		7.8		8.6		8.0	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9		41.7	
Gas Temperature(^oF)	44		NR		56		76		80		98		84	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.8		-3.9		-1.4		-7.5		-4.3	
Well Side Pressure (in H_2O)	-0.025	NR	-0.400	-0.10	-0.1	-3.0	0.0	NC	-1.4	NC	-6.8	NC	-1.0	NC
Orifice Plate DP (in H_2O)	0.02	NR	0.24	0.05	0.05	0.23	0.02	NC	1.439	NC	0.320	NC	0.820	NC
% CH_4	64.6		23.7		61.5		27.2		68.8		10.6		53.8	
% CO_2	27.0		13.2		25.9		12.9		21.1		5.3		20.4	
% O_2	1.5		11.0		0.2		11.8		1.5		15.8		5.3	
% Balance Gas	6.9		52.1		12.4		48.1		8.6		68.3		20.5	
Gas Temperature(^oF)	80		64		60		40		10		38		40	
Valve Turns Open	0.125	0.25	1	0.75	0.25	0.5	NR	NR	FULL OPEN	FULLOPEN	FULL OPEN	FULLOPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NR		NM		5.05		5.03		5.02	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2		NR	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2	NR	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01	NR	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9		NR	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8		NR	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5		NR	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8		NR	
Gas Temperature(^oF)	36		38		24		36		54	54	48		NR	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.5		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR	-3.50	NC	-3.40	NC
Orifice Plate DP (in H_2O)	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR	0.06	NC	0.035	NC
% CH_4	62.2		1.8		77.4		73.5		67.8		31.7		19.8	
% CO_2	4.3		2.0		20.4		25.6		31.8		17.6		18.3	
% O_2	0.8		18.4		0.1		0.0		0.4		9.3		5.7	
% Balance Gas	32.7		77.8		2.1		0.9		0.0		41.4		56.2	
Gas Temperature(^oF)	NR		64		82		88		98		90		87	
Valve Turns Open	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-6.7		-4.3	
Well Side Pressure (in H_2O)	-3.30	-1.6	-0.60	-0.3	0.20	-0.3	-0.30	NC	-6.70	NC	-4.30	NC
Orifice Plate DP (in H_2O)	0.010	0.01	0.01	0.01	0.19	0.01	0.021	NC	0.060	NC	0.070	NC
% CH_4	10.0		31.7		27.3		58.6		46.8		51.5	
% CO_2	11.2		21.8		13.7		17.9		13.1		16.6	
% O_2	11.1		5.6		10.3		4.3		7.1		6.8	
% Balance Gas	67.7		40.9		48.7		19.2		33.0		25.1	
Gas Temperature(^oF)	58		58		42		20		50		42	
Valve Turns Open	1	0.75	0.5	NR	NR	NR	1/8	1/2	1/2	3/8	3/8	1/2
Liquid Level (ft BTOC)	NR		NR		NM		8.97		8.79		8.14	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
June 9, 2011

Meeting Logistics

- Location: Mallard Lake Landfill (MLL) conference room
- Time: Following 10 AM MLL meeting.

Discussion Topics

- USEPA – IEPA transition status
- Groundwater monitoring data evaluation/reporting
- O&M Plan review status
- Ongoing OM&M activities
- Leachate force main connection status

Attached Data

- Gas Probe Monitoring Data Tables (April and May 2011)
- Methane Detections Figures (April and May 2011)
- Gas Probes with Significant Methane Detections Table
- Liquid Pumping Volumes and Rates Table
- Southcentral Blower/Flare Summary Table
- Northwest Blower/Flare Summary Table
- Gas Extraction Well Summary Tables

Gas Probe Monitoring Data Tables (April and May 2011)

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 4/28/2011

Pressure Device: Dewyer Manometer
Water Level Device: Solinst Water Meter
Ground Conditions: Slightly Moist

Date: 4/28/2011
Weather: Sunny
Barometric Pressure 28.76

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.01	0.0	0.3	20.0	79.7	17.81	
GP-33A	0.0	0.1	0.6	19.9	79.4	11.71	
GP-33B	0.0	1.9	3.0	18.2	76.9	12.49	
G-116	0.0	76.8	21.9	0.7	0.6	12.41	
GP-2A	0.0	44.1	9.1	8.8	38.0	12.00	
GP-2B	0.0	5.4	2.3	17.8	74.5	10.57	
GP-34A	0.0	0.0	0.2	20.2	79.6	4.00	
GP-34B	0.0	0.0	0.2	20.2	79.6	3.77	
GP-3	0.0	0.0	0.1	20.2	79.7	4.75	
GP-4A	0.0	0.0	0.1	20.3	79.6	7.11	
GP-4B	0.0	0.0	0.8	19.7	79.5	6.71	
GP-4C	0.0	0.0	0.5	19.9	79.6	22.27	
GP-5	0	0.0	0.1	20.3	79.6	18.88	
P-1A	0	0.0	0.4	20.0	79.6	18.21	
GP-6	0.0	0.0	0.5	20.0	79.5	4.21	
GP-7A	0.0	0.0	1.7	18.2	80.1	14.09	
GP-7B	0.0	0.0	0.1	20.2	79.7	16.98	
GP-8A	0	0.0	0.1	20.1	79.8	5.21	
GP-8B	0.0	0.0	0.1	20.2	79.7	25.89	
P-3A	0.0	0.0	1.8	16.1	82.1	2.52	
GP-9A	0.0	0.0	0.1	20.3	79.6	4.35	
GP-9B	0.0	0.0	0.1	20.3	79.6	18.85	
P-4C	0.0	0.0	0.1	20.4	79.5	4.51	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	0.1	20.5	79.4	3.81	
GP-10B	0.0	0.0	0.8	20.2	79.0	5.51	
GP-10C	0.0	0.0	0.3	20.3	79.4	8.79	
P-5A	0	0.0	0.1	20.5	79.4	5.31	
GP-11A	0.0	0.0	0.1	20.6	79.3	5.11	
GP-11B	0	0.0	0.8	20.2	79.0	7.46	
P-6C	0	0.0	0.1	20.6	79.3	4.82	
GP-12	0.0	0.0	0.1	20.7	79.2	3.81	
P-7A	0.0	0.0	0.1	20.7	79.2	6.67	
P-7B	0.0	0.0	0.2	20.6	79.2	3.25	
GP-13	0	0.0	0.1	20.6	79.3	4.61	
GP-14	0	0.0	0.1	20.7	79.2	4.99	
G-109	0.0	0.0	0.4	20.6	79.0	3.22	
GP-15A	0.0	0.0	0.8	20.4	78.8	3.22	
GP-15B	-0.01	0.7	1.6	19.9	77.8	7.36	
GP-28A	-0.01	0.0	0.1	20.6	79.3	8.56	
GP-28B	0.0	0.0	0.1	20.6	79.3	3.21	
GP-28C	0.0	0.0	0.2	20.6	79.2	2.94	
GP-16A	-0.01	0.0	0.1	20.6	79.3	4.51	
GP-16B	0	0.0	0.1	20.6	79.3	11.21	
GP-16C	0.0	0.0	0.1	20.6	79.3	8.73	
GP-29A	0.0	0.0	0.2	20.6	79.2	6.11	
GP-29B	0.0	0.0	0.1	20.6	79.3	12.79	
G-110	0	0.0	0.8	20.3	78.9	8.31	
GP-17	0.0	0.0	0.2	20.6	79.2	3.25	
GP-18	0.0	0.0	0.0	20.7	79.3	7.56	
GP-19	0.0	0.0	0.1	20.7	79.2	6.23	
GP-20	0.0	0.0	0.2	20.6	79.2	3.34	
GP-21A	0.0	0.0	0.1	20.7	79.2	6.11	
GP-21B	0.0	0.0	0.3	20.4	79.3	18.73	
GP-22A	0.0	0.0	0.2	20.2	79.6	3.11	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	2.5	0.3	19.3	77.9	19.50	
GP-30A	0.0	0.0	0.2	20.6	79.2	3.87	
GP-30B	0.0	0.4	0.1	20.6	78.9	11.07	
MW-204 East	0.0	22.2	4.2	8.8	64.8	22.51	
MW-204 West	0.0	0.1	0.1	20.0	79.8	23.53	
GP-23A	0.0	0.0	0.3	20.5	79.2	3.85	
GP-23B	0	2.3	1.3	17.4	79.0	14.45	
GP-24A	0.0	0.0	0.6	20.4	79.0	3.73	
GP-24B	0.0	0.0	0.0	20.6	79.4	11.24	
GP-25A	0.0	0.3	0.3	19.1	80.3	5.09	
GP-25B	0.0	0.0	0.1	19.7	80.2	18.61	
GP-31A	0.0	0.0	0.1	20.3	79.6	5.36	
GP-31B	0.0	7.6	0.4	18.3	73.7	11.51	
GP-26A	0.0	0.0	0.1	20.1	79.8	4.92	
GP-26B	0.0	0.1	0.1	20.1	79.7	14.91	
GP-27A	0.0	0.0	1.2	18.0	80.8	9.61	
GP-27B	0.0	0.0	0.1	19.4	80.5	20.69	
GP-35A	0.0	0.0	0.9	19.3	79.8	3.71	
GP-35B	0.0	0.0	0.1	19.8	80.1	4.89	
G-113	0.0	0.0	0.5	20.1	79.4	10.62	
G-121	0.0	0.0	0.8	19.0	80.2	10.51	
GP-32A	0.0	0.0	2.0	19.7	78.3	9.93	
GP-32B	0.0	0.0	0.6	19.9	79.5	10.71	
GP-37A	0.0	0.1	0.1	20.2	79.6	10.91	
GP-37B	0.0	0.0	1.0	19.9	79.1	11.41	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva/ Ray Babowice
Pressure Device: GEM 2000
Date: 5/31/2011
Gas Meter: GEM 2000
Water Level Device: Solinst Water Meter
Weather: Sunny/windy
Serial #: GM12543
Ground Conditions: Tall grass and dry
Barometric Pressure: 30.23
Date Calibrated: 5/31/2011

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.4	18.2	81.4	18.45	
GP-33A	0.0	0.0	0.7	18.2	81.1	11.7	
GP-33B	0.0	0.4	1.6	17.7	80.3	12.12	
G-116	0.0	71.5	19.5	1.3	7.7	12	
GP-2A	0.0	13.3	4.2	14.6	67.9	13.53	
GP-2B	0.0	0.0	0.0	19.1	80.9	10.21	
GP-34A	0.0	0.0	0.5	18.5	81.0	6.31	
GP-34B	0.0	0.0	0.1	19.1	80.8	7.73	
GP-3	0.0	0.0	0.4	18.5	81.1	7.39	
GP-4A	0.0	0.0	0.0	19.2	80.8	8.59	
GP-4B	0.0	0.0	0.3	18.8	80.9	8.31	
GP-4C	0.0	0.0	0.8	18.5	80.7	19.46	
GP-5	0.0	0.0	0.0	19.3	80.7	17.08	
P-1A	0.0	0.0	0.5	18.9	80.6	16.2	
GP-6	0.0	0.0	0.2	19.3	80.5	6.29	
GP-7A	0.0	0.0	5.0	7.6	87.4	8.57	
GP-7B	0.0	0.0	0.0	19.3	80.7	17.16	
GP-8A	0.0	0.0	0.0	19.3	80.7	5.49	
GP-8B	0.0	0.0	0.1	19.3	80.6	16.56	
P-3A	0.0	0.0	0.3	19.1	80.6	3.55	
GP-9A	0.0	0.0	0.1	19.2	80.7	5.36	
GP-9B	0.0	0.0	0.0	19.3	80.7	18.71	
P-4C	0.0	0.0	0.5	17.7	81.8	5.15	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	0.4	18.5	81.1	6.96	
GP-10B	0.0	0.0	0.7	18.9	80.4	7.71	
GP-10C	0.0	0.0	0.4	19.0	80.6	8.84	
P-5A	0.0	0.0	0.0	19.1	80.9	6.75	
GP-11A	0.0	0.0	0.2	18.8	81.0	6.21	
GP-11B	0.0	0.0	0.1	18.9	81.0	8.7	
P-6C	0.0	0.0	0.0	18.9	81.1	5.31	
GP-12	0.0	0.0	0.0	18.8	81.2	4.25	
P-7A	0.0	0.0	0.1	18.6	81.3	4.24	
P-7B	0.0	0.0	0.1	18.6	81.3	4.43	
GP-13	0.0	0.0	0.0	18.8	81.2	5.16	
GP-14	0.0	0.0	0.0	18.9	81.1	4.11	
G-109	0.0	0.0	0.0	18.9	81.1	5.06	
GP-15A	0.0	0.0	0.2	18.7	81.1	3.02	
GP-15B	0.0	0.0	0.1	19.0	80.9	7.38	
GP-28A	0.0	0.0	0.0	18.9	81.1	8.49	
GP-28B	0.0	0.0	0.0	18.9	81.1	3.56	
GP-28C	0.0	0.0	0.1	18.9	81.0	3.31	
GP-16A	0.0	0.0	0.0	18.6	81.4	4.01	
GP-16B	0.0	0.0	0.0	18.6	81.4	3.99	
GP-16C	0.0	0.0	0.0	18.8	81.2	8.81	
GP-29A	0.0	0.0	0.0	18.3	81.7	4.41	
GP-29B	0.0	0.0	0.0	18.6	81.4	9.38	
G-110	0.0	0.0	0.1	18.5	81.4	8.05	
GP-17	0.0	0.0	0.2	18.4	81.4	2.73	
GP-18	0.0	0.0	0.0	18.5	81.5	7.73	
GP-19	0.0	0.0	0.0	18.4	81.6	7.21	
GP-20	0.0	0.0	0.0	19.1	80.9	4.21	
GP-21A	0.0	0.0	0.0	18.5	81.5	5.91	
GP-21B	0.0	0.0	0.0	18.4	81.6	10.41	
GP-22A	0.0	0.0	0.0	19.1	80.9	4.11	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.0	0.0	19.2	80.8	20.3	
GP-30A	0.0	0.0	0.2	18.4	81.4	4.31	
GP-30B	0.0	0.0	0.0	18.5	81.5	6.81	
MW-204 East	0.0	34.6	4.9	6.1	54.4	22.49	
MW-204 West	0.0	0.0	0.1	19.2	80.7	23.5	
GP-23A	0.0	0.0	0.1	18.4	81.5	4.21	
GP-23B	0.0	0.0	0.6	17.6	81.8	11	
GP-24A	0.0	0.0	0.0	18.5	81.5	4.64	
GP-24B	0.0	0.0	1.8	17.5	80.7	13.47	
GP-25A	0.0	0.0	0.1	19.0	80.9	5.34	
GP-25B	0.0	0.0	0.0	19.1	80.9	18.36	
GP-31A	0.0	0.0	0.1	18.0	81.9	6.32	
GP-31B	0.0	2.9	0.3	17.0	79.8	12.15	
GP-26A	0.0	0.0	0.0	18.1	81.9	4.46	
GP-26B	0.0	0.0	0.1	18.0	81.9	15.52	
GP-27A	0.0	0.0	0.1	19.0	80.9	8.89	
GP-27B	0.0	0.0	0.0	19.1	80.9	20.16	
GP-35A	0.0	0.0	0.3	19.2	80.5	4.61	
GP-35B	0.0	0.0	0.1	19.2	80.7	4.91	
G-113	0.0	0.0	0.2	18.7	81.1	11.13	
G-121	0.0	0.0	0.4	18.3	81.3	11.02	
GP-32A	0.0	0.0	0.1	18.5	81.4	10.25	
GP-32B	0.0	0.0	0.3	18.4	81.3	11.25	
GP-37A	0.0	0.0	0.4	18.4	81.2	11.49	
GP-37B	0.0	0.0	0.0	18.6	81.4	11.66	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	4/29/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Mostly Sunny		
Ambient Temperature:	65.1	^oF	Ground Conditions:	Soggy		
Barometric Pressure:	30.02	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Slightly Rising		Date Last Calibrated:	4/29/2011		
Notes:	Monthly Readings					

	Blower/Flare Data					
	7:36AM	12:09pm				
Date / Time / Location	SC-FLARE	SC-FLARE		NW-FLARE	NW-FLARE	UAV-4
Blower Inlet Vacuum (in H_2O)	4.2	4.8		5.0	4.8	
Inlet Valve (Turns) Open / 6	6	6		6	6	
Gas Inlet Temperature (^oF)	71	82		78	82	
Blower Outlet Pressure (in H_2O)	1.4	1.1		1.1	1.2	
Orifice Plate DP (in H_2O)	0.03	0.03		0.33	0.13	
Approximate Flow (scfm)	9	9		26	16	0
% CH_4	33.8	37.3		41.7	40.8	63.9
% CO_2	13.8	14.7		24.8	23.1	35.3
% O_2	7.6	6.3		0.1	1.9	0.0
% Balance Gas	44.8	41.7		33.4	34.2	0.8
Combustion Temperature(^oF)	425	478		668	665	
Blower SPD%	40	40		42	42	
Blower Hours	839	844		5598	55601	
Blower Cycles	143	143		574	574	
Blower Amps	3.1	3.1		3.2	3.2	
Blower RPM	1466	1466		1544	1544	
Air Compressor Pressure (psi)	150	150		150	150	
Air Compressor Hours	374.14	374.14		374.14	374.14	
Well Field Air Pressure (psi)	80	80		80	80	
Approx. Leachate Tank Level	1,403	1,403		1,403	1,403	
Comments						FLAME- YES
						SPARKER- YES
						BLOWER- YES

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	6/1/2011					
Person (s) sampling	Frank Silva		Weather Conditions:	Mostly Sunny		
Ambient Temperature:	84	^{o}F	Ground Conditions:	Tall grass and dry		
Barometric Pressure:	30.23	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Rising by the hour		Date Last Calibrated:	6/1/2011		
Notes:						

	Blower/Flare Data					
	7:14	1:20		9:50	1:35	11:50
Date / Time / Location	SC-FLARE	SC-FLARE		NW-FLARE	NW-FLARE	UAV-4
Blower Inlet Vacuum (in H_2O)	9.1	9.1		4.9	5.0	
Inlet Valve (Turns) Open / 6	6	6		6	6	
Gas Inlet Temperature (^{o}F)	92	96		81	86	
Blower Outlet Pressure (in H_2O)	1.6	1.6		1.2	1.1	
Orifice Plate DP (in H_2O)	0.10	0.14		0.13	0.13	
Approximate Flow (scfm)	16	19		18	19	0
% CH_4	31.9	33.7		40.7	41.7	64.3
% CO_2	15.6	15.9		23.8	24.1	32.9
% O_2	5.6	4.3		1.4	0.0	0.0
% Balance Gas	46.9	46.1		34.1	34.2	2.8
Combustion Temperature(^{o}F)	442	501		603	620	
Blower SPD%	55	55		42	42	
Blower Hours	107	113		161	166	
Blower Cycles	186	186		4	4	
Blower Amps	3.6	3.6		3.2	3.2	
Blower RPM	2020	2020		1544	1544	
Air Compressor Pressure (psi)	150	150		150	150	
Air Compressor Hours	734.01	734.01		734.01	734.01	
Well Field Air Pressure (psi)	80	80		80	80	
Approx. Leachate Tank Level	2,630	2,630		2,630	2,630	
Comments						FLAME- YES
						SPARKER- YES
						BLOWER- YES

4/29/2011

Gas Extraction Wells

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-4.9	-4.9	-4.9	1.814	1.2	3.5	45.9	24.0	0.0	30.1	60	4	4	22.71
DV-8	-4.7	-4.5	-2.5	1.342	0.8	2.7	28.1	21.0	0.1	50.8	60	1	3	8.05
EWL-10	-4.8	-4.7	-4.7	0.717	0.7	2.6	54.6	19.6	2.2	23.6	74	1/4	1/2	13.81
EWL-11	-4.8	-3.8	-2.9	0.55	0.0	0.0	14.8	18.5	0.0	66.7	60	1/4	1/2	15.08
EWL-12	-4.9	0.00	0.0	0.006	0.0	0.0	7.6	11.0	11.0	70.4	72	CLOSED	CLOSED	10.2
GEW-1	-4.8	-4.7	-4.7	1.709	1.5	3.7	62.5	29.6	0.0	7.9	60	3	3	24.85
GEW-2	-4.8	-4.8	-4.8	0.556	0.0	0.0	71.2	28.7	0.0	0.1	72	1/4	1/2	16.77
UAV-1	-4.9	-3.7	-4.9	0.48	2.1	4.5	41.7	25.8	0.4	32.1	54	1/4	1/4	21.67
UAV-6	-4.6	0.0	-0.8	0.028	0.6	2.5	71.8	28.0	0.0	0.2	74	1/8	1/2	DRY
SOUTHCENTRAL WELLS														
DV-6	-4.3	0.0	0.0	0	0.0	0.0	1.9	0.5	18.6	79.0	64	CLOSED	CLOSED	7.86
DV-12	-4.2	-2.4	-1.5	0.688	0.1	1.4	31.1	15.5	6.8	46.6	52	1/4	OPEN	25.41
DV-13	-4.4	-2.20	-0.7	0.242	0.1	0.0	9.4	3.4	16.4	70.8	58	2	4	12.06
EWL-2	-4.2	0.0	0.0	0.002	0.0	0.0	2.6	0.7	18.6	78.1	66	CLOSED	CLOSED	5.91
SV-12	-4.1	-1.1	-0.7	0.57	0.4	1.9	14.3	6.4	14.7	64.6	52	1/4	OPEN	DRY
DV-3	-4.3	-4.3	-4.2	0.69	0.9	4.2	68.7	22.0	0.0	9.3	52	OPEN	OPEN	18.38
UAV-2	-4.2	0.3	-4.1	0.006	0.0	0.0	81.5	17.7	0.0	0.8	68	1/2	3/4	8.03

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	N/A	63.9	35.3	0	0.8	Y	Y	Y	

DATE: 6/1/11

Gas Extraction Wells

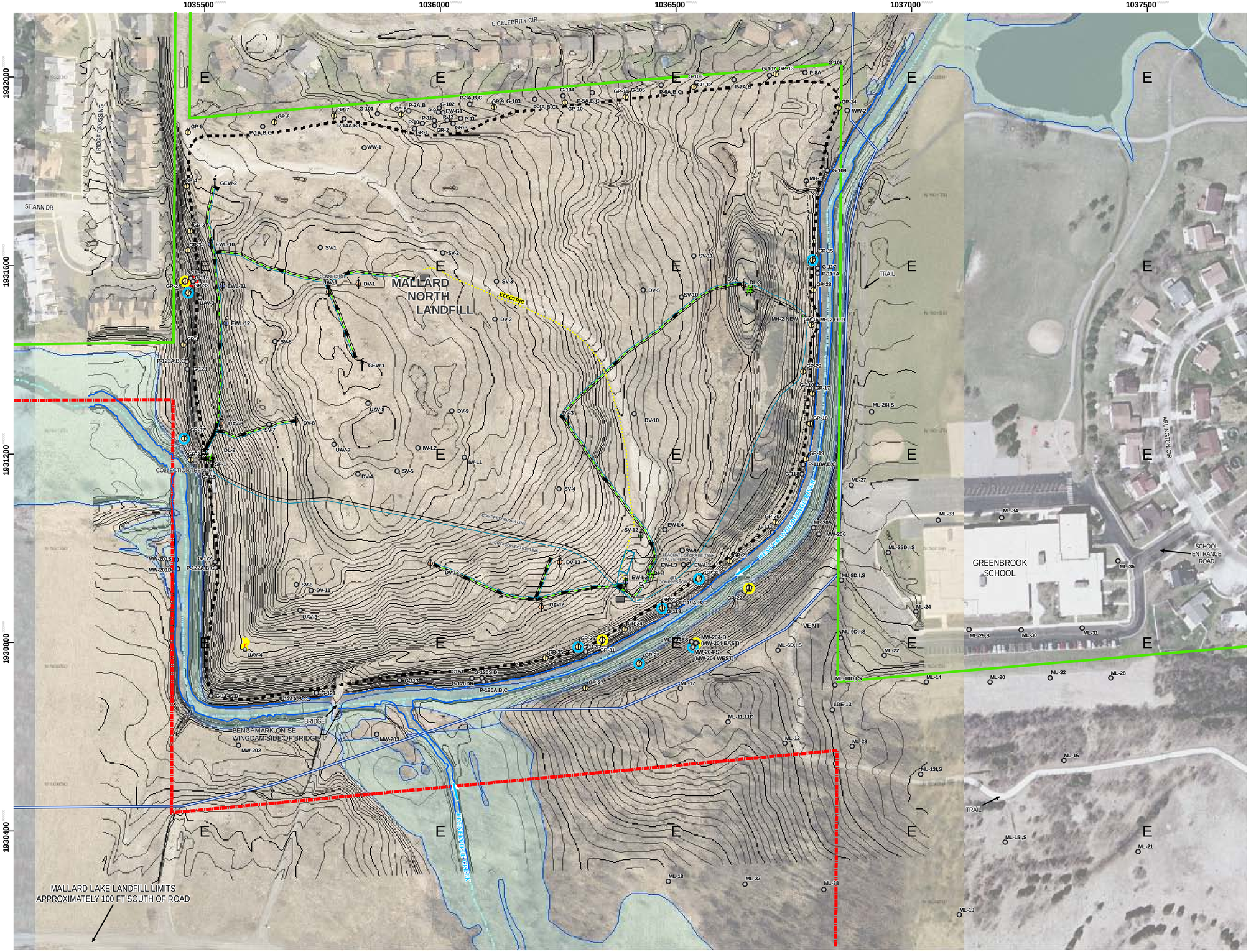
LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (°F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
DV-1	-4.8	-4.7	NC	1.45	NC	3.7	49.7	23.8	0.6	25.9	86	4	NC	21.86
DV-8	-4.3	-4.3	NC	1.98	NC	4.4	30.1	19.9	1.4	48.6	86	3	NC	8.01
EWL-10	-4.8	-4.8	NC	0.09	NC	0.5	60.0	19.9	1.2	18.9	75	1/2	NC	14.21
EWL-11	-4.8	-2.9	NC	0.06	NC	0.3	20.4	18.6	0.0	61.0	75	1/2	NC	15.98
EWL-12	-4.8	0.00	NC	0	NC	0.0	10.7	9.6	0.0	79.7	76	CLOSED	NC	10.17
GEW-1	-4.8	-4.8	NC	1.81	NC	4.3	61.4	28.6	1.1	8.9	75	3	NC	23.96
GEW-2	-4.8	-4.8	NC	0.02	NC	0.2	69.6	27.2	0.0	3.2	75	1/2	NC	16.83
UAV-1	-4.8	-4.2	NC	3.1	NC	5.5	41.3	25.4	1.1	32.2	86	1/4	NC	21.71
UAV-6	-4.5	-4.0	NC	0.04	NC	0.4	36.7	24.0	0.0	39.3	84	1/2	NC	4.08
SOUTHCENTRAL WELLS														
DV-6	-8.9	0.0	NC	0	NC	0.0	0.0	0.5	18.7	80.8	70	CLOSED	NC	8.41
DV-12	-9.1	-9.1	NC	1.25	NC	3.5	33.1	16.5	5.5	44.9	70	OPEN	NC	25.63
DV-13	-9.1	-2.0	NC	1.1	NC	3.3	16.2	10.1	13.0	60.7	65	4	NC	15.55
EWL-2	-9.1	0.00	NC	0	NC	0.0	1.4	1.0	18.6	79.0	65	CLOSED	NC	6.01
SV-12	-9.1	-9.1	NC	0.98	NC	3.1	21.8	15.4	7.9	54.9	72	OPEN	NC	5.03
DV-3	-8.9	-8.9	NC	1.75	NC	4.2	68.7	21.9	0.0	9.4	72	OPEN	NC	19.30
UAV-2	-9.1	-9.1	NC	0.09	NC	0.4	71.3	14.9	0.6	13.2	60	3/4	NC	8.63

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	64.3	32.9	0	2.8	YES	YES	YES	

Methane Detections Figures (April and May 2011)



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL
- MALLARD LAKE LANDFILL PROPERTY LINE
- FPDDC PRESERVE BOUNDARY

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 04/28/11.

0 100 200 FEET

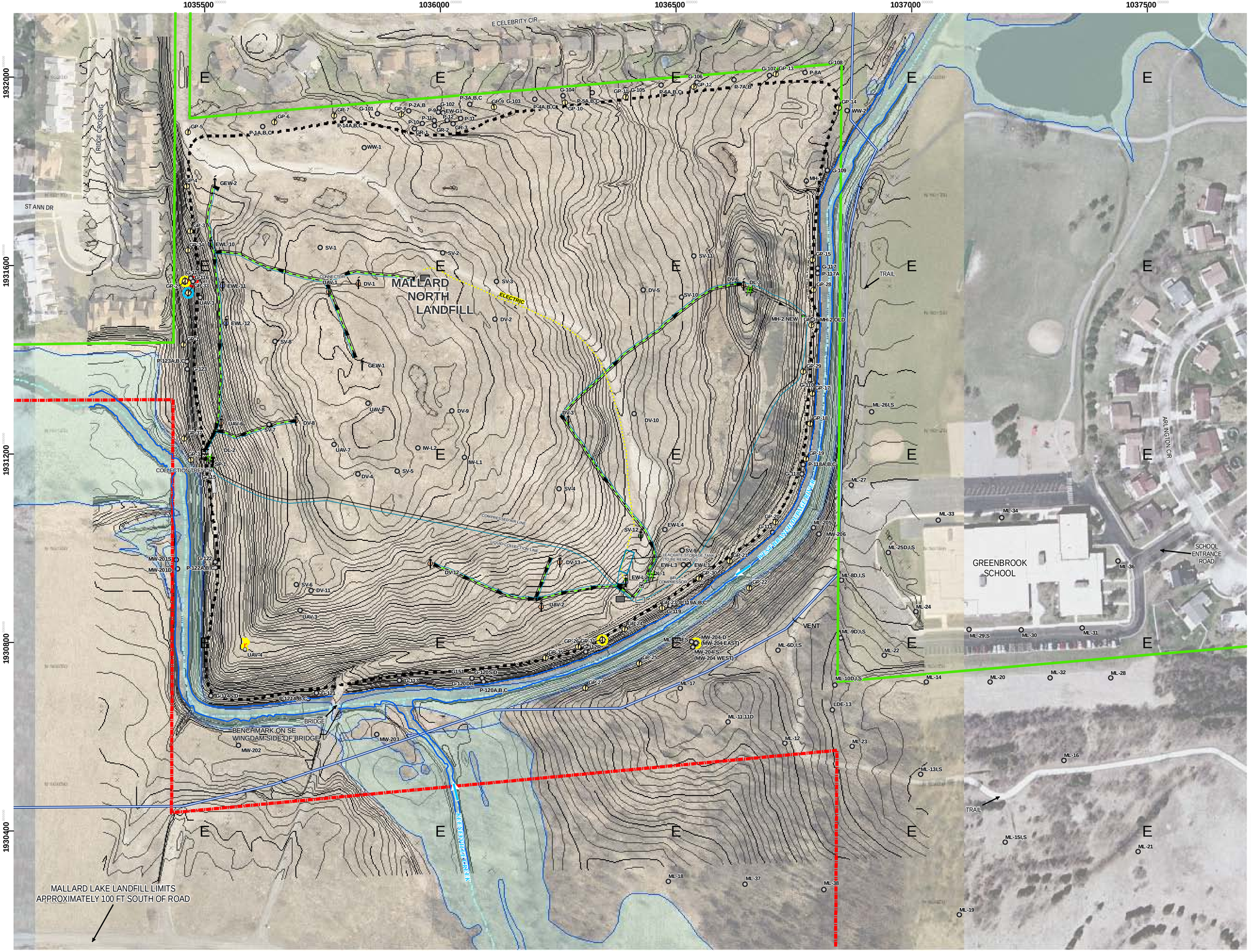
PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(APRIL 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931April2011
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: MAY 5, 2011	04/07/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

D:\PRE_TESS_PROJECTS\06809\03\MXD\68090321.mxd



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
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- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
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7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
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10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 05/31/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(MAY 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931May2011
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: JUNE 7, 2011	06/07/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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Gas Probes with Significant Methane Detections Table

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2***	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1***	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
	11/15/2010	**49.9**	+0.1	19.11		
	12/1/2010	0.0	0.00	15.45		
	1/13/2011	**5.3**	0.00	14.99		
	2/14/2011	**77.3**	0.00	16.85		
	3/16/2011	**11.9**	0.00	13.53		
	4/28/2011	**44.1**	0.00	12.00		
	5/31/2010	**13.3**	0.00	13.53		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2***	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3***	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1***	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
	11/15/2010	**0.3***	0.00	13.54		
	12/1/2010	0.0	0.00	12.79		
	1/13/2011	0.0	0.00	17.78		
	2/14/2011	0.0	-0.10	13.27		
	3/16/2011	0.0	0.00	11.67		
	4/28/2011	5.4	0.00	10.57		
	5/31/2011	0.0	0.00	10.21		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-3	11/15/2010	**0.2***	+0.1	15.18	29.70	
	12/1/2010	0.0	0.00	15.11		
	1/13/2011	0.0	0.00	13.61		
	2/14/2011	0.0	-0.10	14.72		
	3/16/2011	0.0	0.00	10.36		
	4/28/2011	0.0	0.00	4.75		
	5/31/2011	0.0	0.00	7.39		
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1***	-5.0	NM		
	9/16/2010	**0.1***	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		
	11/15/2010	0.0	0.0	NM		Removed hose extraction
	12/1/2010	0.0	0.0	20.72		
	1/13/2011	0.0	+0.01	20.96		
	2/14/2011	0.0	-0.6	21.18		
	3/16/2011	0.0	0.0	20.64		
	4/28/2011	0.0	0.0	22.27		
	5/31/2011	0.0	0.0	19.46		
GP-8A	1/13/2011	**0.1***	0.0	6.61	7.53	
	2/14/2011	0.0	0.0	8.27		
	3/16/2011	0.0	+0.03	6.61		
	4/28/2011	0.0	0.0	5.21		
	5/31/2011	0.0	0.0	5.49		
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3***	0.00	4.92		
	3/17/2010	**0.3***	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
	11/15/2010	0.0	0.00	6.22		
	12/1/2010	0.0	0.00	6.10		
	1/13/2011	**0.1***	+0.08	4.84		
	2/14/2011	0.0	0.00	3.60		
	3/16/2011	0.0	0.00	3.50		
	4/28/2011	0.0	0.00	3.22		
	5/31/2011	0.0	0.00	3.02		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1***	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
	11/15/2010	0.0	0.00	7.16		
	12/1/2010	0.0	0.00	7.25		
	1/13/2011	**1.1**	0.00	7.35		
	2/14/2011	0.0	0.00	7.38		
	3/16/2011	0.0	+0.03	7.37		
	4/28/2011	-0.7	-0.01	7.36		
	5/31/2011	0.0	0.00	7.38		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
	11/15/2010	0.0	0.00	7.36		
	12/1/2010	0.0	0.00	6.14		
	1/13/2011	0.0	+0.14	4.50		
	2/14/2011	0.0	0.00	2.57		TD = 3.6' FROZEN?
	3/16/2011	0.0	0.00	2.44		
	4/28/2011	0.0	0.00	3.25		
	5/31/2011	0.0	0.00	2.73		
GP-19	2/23/2010	**0.2***	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
	11/15/2010	0.0	0.00	12.89		
	12/1/2010	0.0	0.00	14.05		
	1/13/2011	**0.1***	+1.22	11.90		
	2/14/2011	0.0	-0.40	12.85		
	3/16/2011	0.0	0.00	6.14		
	4/28/2011	0.0	0.00	6.23		
	5/31/2011	0.0	0.00	7.21		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
	11/15/2010	0.0	0.00	11.72		
	12/1/2010	0.0	0.00	10.30		
	1/13/2011	0.0	0.00	8.76		
	2/14/2011	0.0	0.00	6.38		
	3/16/2011	0.0	0.00	3.51		
	4/28/2011	0.0	0.00	3.11		
	5/31/2011	0.0	0.00	4.11		
GP-22B	6/28/2010	**0.2***	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
	11/15/2010	0.0	0.00	11.76		
	12/1/2010	0.0	0.00	22.02		
	1/13/2011	**42.5**	+0.02	21.96		
	2/14/2011	**51.2**	0.00	21.54		
	3/16/2011	**2.4**	0.00	20.66		
	4/28/2011	**2.5**	0.00	19.50		
	5/31/2011	**0.0**	0.00	20.30		
GP-23A	1/13/2011	**0.7**	+7.5	5.50		PRESSURE DIMINISHED DURING MEAS.
	2/14/2011	**1.0**	0.00	4.02		
	3/16/2011	**0.3***	0.00	4.53		
	4/28/2011	0.0	0.00	3.85		
	5/31/2011	0.0	0.00	4.21		
GP-23B	2/23/2010	**0.3***	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2***	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1***	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
	11/15/2010	0.0	0.00	14.08		
	12/1/2010	0.0	0.00	14.95		
	1/13/2011	0.0	+0.31	14.16		
	2/14/2011	0.0	0.00	12.85		
	3/16/2011	0.0	+0.02	11.98		
	4/28/2011	**2.3**	0.00	14.45		
	5/31/2011	0.0	0.00	11		
GP-24A	9/16/2010	**0.1***	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
	11/15/2010	0.0	-0.20	9.36		
	12/1/2010	0.0	0.00	8.25		
	1/13/2011	**0.2***	+0.30	6.26		
	2/14/2011	**0.5**	0.00	11.77		
	3/16/2011	0.0	0.00	4.99		
	4/28/2011	0.0	0.00	3.73		
	5/31/2011	0.0	0.00	4.64		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7
	11/15/2010	**46.1**	0.00	NM		Removed hose extraction
	12/1/2010	**4.2**	0.00	21.35		
	1/13/2011	**0.4**	+0.02	20.95		
	2/14/2011	**1.3**	0.00	23.95		
	3/16/2011	0.0	0.00	17.33		
	4/28/2011	0.0	0.00	11.24		
	5/31/2011	0.0	0.00	13.47		
GP-26A	1/13/2011	**0.1***	0.00	9.92	16.65	
	2/14/2011	0.0	0.00	9.07		
	3/16/2011	0.0	0.00	5.71		
	4/28/2011	0.0	0.00	4.92		
	5/31/2011	0.0	0.00	4.46		
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1***	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1***	0.00	19.20		
	10/14/2010	**0.2***	+0.1	20.23		
	11/15/2010	**0.9**	+0.2	21.16		
	12/1/2010	0.0	0.00	20.44		
	1/13/2011	**24.4**	1.23	17.84		
	2/14/2011	**2.4**	0.00	23.84		
	3/16/2011	0.0	0.00	15.73		
	4/28/2011	**0.1***	0.00	14.91		
	5/31/2011	**0.0**	0.00	15.52		
GP-29A	1/13/2011	**0.1***	0.00	4.31	13.36	
	2/14/2011	0.0	0.00	4.54		
	3/16/2011	0.0	0.00	4.84		
	4/28/2011	0.0	0.00	6.11		
	5/31/2011	0.0	0.00	4.41		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3***	-6.00	NM		
	6/28/2010	**0.1***	-6.50	NM		
	7/20/2010	**0.2***	-3.50	NM		
	8/16/2010	**0.3***	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
	11/15/2010	**0.4***	0.00	NM		Removed hose extraction
	12/1/2010	**2.7**	0.00	5.45		
	1/13/2011	**0.4***	+0.01	10.12		
	2/14/2011	0.0	0.00	10.04		
	3/16/2011	**0.5**	0.00	9.59		
	4/28/2011	**0.4***	0.00	11.07		
	5/31/2011	0.0	0.00	6.81		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2***	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1***	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10
	11/15/2010	**50.1**	0.00	20.03		
	12/1/2010	0.0	0.00	20.50		
	1/13/2011	**64.7**	+0.01	20.26		
	2/14/2011	**81.7**	-0.10	18.80		
	3/16/2011	**2.3**	0.00	15.97		
	4/28/2011	**7.6**	0.00	11.51		
	5/31/2011	**2.9**	0.00	12.15		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-32A	8/16/2010	**0.2***	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
	11/15/2010	0.0	0.00	12.33		
	12/1/2010	0.0	0.00	12.22		
	1/13/2011	**0.1***	0.00	11.64		
	2/14/2011	0.0	0.00	14.00		
	3/16/2011	0.0	0.00	11.09		
	4/28/2011	0.0	0.00	9.93		
	5/31/2011	0.0	0.00	10.25		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1***	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2***	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0.00	13.93		
	6/28/2010	0.0	0.00	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0.0	13.94		
	9/16/2010	0.0	0.0	15.41		
	10/14/2010	0.0	0.0	16.39		
	11/15/2010	**18.4**	0.0	17.16		
	12/1/2010	0.0	0.0	14.91		
	1/13/2011	**0.5**	0.0	14.45		
	2/14/2011	**11.4**	3.3	16.67		
	3/16/2011	**1.1**	0.0	12.01		
	4/28/2011	**0.1***	0.0	11.71		
	5/31/2011	0.0	0.0	11.7		
GP-33B	1/13/2011	**1.9**	0.0	14.29	30.44	
	2/14/2011	**5.3**	-1.5	14.01		
	3/16/2011	**4.0**	0.0	12.21		
	4/28/2011	**1.9**	0.0	12.49		
	5/31/2011	**0.4***	0.0	12.12		
GP-35B	1/13/2011	**0.1***	0.0	13.21	18.23	
	2/14/2011	0.0	0.0	12.46		
	3/16/2011	0.0	0.0	5.31		
	4/28/2011	0.0	0.0	4.89		
	5/31/2011	0.0	0.0	4.91		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-37A	6/17/2009	**0.2***	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1***	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1***	-6.00	NM		
	7/20/2010	**0.3***	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
	11/15/2010	**0.5**	0.00	NM		Removed hose extraction
	12/1/2010	0.0	0.00	13.27		
	1/13/2011	**0.1***	0.00	12.96		
	2/14/2011	0.0	0.00	13.25		
	3/16/2011	**0.1***	0.00	12.21		
	4/28/2011	**0.1***	0.00	10.91		
	5/31/2011	**0.0**	0.00	11.49		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2***	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		
	11/15/2010	**13.1**	0.00	NM		
	12/1/2010	0.0	0.00	12.78		
	1/13/2011	0.0	+0.86	12.53		
	2/14/2011	0.0	-0.60	12.73		
	3/16/2011	0.0	0.00	11.79		
	4/28/2011	0.0	0.00	10.62		
	5/31/2011	0.0	0.00	11.13		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
	11/15/2010	**57.8**	0.00	NM		Removed hose extraction
	12/1/2010	**31.0**	0.00	14.00		
	1/13/2011	**71.8**	0.00	14.26		
	2/14/2011	**69.1**	0.00	14.15		
	3/16/2011	**78.1**	+0.9	13.46		
	4/28/2011	**76.8**	0.00	12.41		
	5/31/2011	**71.5**	0.00	12.00		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		
	11/15/2010	**44.1**	0.00	22.26		
	12/1/2010	**50.9**	0.00	23.09		
	1/13/2011	**69.8**	+0.01	22.93		
	2/14/2011	**32.8**	0.00	22.95		
	3/16/2011	**28.2**	0.00	20.22		
	4/28/2011	**22.2**	0.00	22.51		
	5/31/2011	**34.6**	0.00	22.49		
GP-25A	4/28/2011	**0.3***	0.0	5.09	7.53	
	5/31/2011	**0.0**	0.0	5.34		
MW-204S (Deep)	4/28/2011	**0.1***	0.0	23.53	43.58	
	5/31/2011	0.0	0.0	23.50		

1. NM= not measured
2. Measurements prior to 12/1/10 were by RMT, Inc. Measurements on or after 12/1/10 were by FPDDC.
By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09

Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10

Updated by: N. Braun, 3/24/10; update checked by E. Watruba, 3/24/10
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10
Updated by: E. Watruba, 6/17/10; update checked by S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10; update checked by E. Watruba, 6/30/10
Updated by: S. Jorgensen, 7/30/10; update checked by N. Braun, 8/2/10
Updated by: S. Jorgensen, 8/18/10; update checked by T. Halena, 8/19/10
Updated by: J. Schoephoester, 10/20/10; update checked by: S. Jorgensen, 10/21/10
3. * Methane measurement within the margin of error for accuracy of the measuring instrument, and therefore may or may not indicate the presence of methane.
4. Updated by: D. Zinnen, 06/07/11.

Liquid Pumping Volumes and Rates Table

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
EWL-2	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
EWL-2	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
EWL-2	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
EWL-2	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
EWL-2	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
EWL-2	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
EWL-2	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
EWL-2	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
EWL-2	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
EWL-2	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
EWL-2	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
EWL-2	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
EWL-2	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
EWL-2	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
EWL-2	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
EWL-2	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
EWL-2	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
EWL-2	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
EWL-2	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
EWL-2	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
EWL-2	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
EWL-2	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
EWL-2	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
EWL-2	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
EWL-2	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
EWL-2	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
EWL-2	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
EWL-2	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
EWL-2	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
EWL-2	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
EWL-2	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
EWL-2	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
EWL-2	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
EWL-2	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
EWL-2	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
EWL-2	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
EWL-2	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
EWL-2	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
EWL-2	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
EWL-2	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
EWL-2	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
EWL-2	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
EWL-2	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
EWL-2	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
EWL-2	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
EWL-2	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
EWL-2	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
EWL-2	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
EWL-2	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
EWL-2	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
EWL-2	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
EWL-2	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
EWL-2	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
EWL-2	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
EWL-2	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
EWL-2	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
EWL-2	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
EWL-2	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
EWL-2	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
EWL-2	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
EWL-2	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
EWL-2	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
EWL-2	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
EWL-2	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
EWL-2	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
EWL-2	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
EWL-2	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
EWL-2	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
EWL-2	10/22/2010	9.90	773.33	4,940,368	6,849	1,231,941	NA	NA	856	Repaired slight air leak
EWL-2	10/29/2010	-	-	4,988,452	12,021	1,243,962	NA	NA	1,717	Pump off due to leaking tank
EWL-2	11/5/2010	9.15	774.08	5,018,662	7,553	1,251,515	NA	NA	1,079	Counter not counting upon arrival, fixed
EWL-2	11/9/2010	9.05	774.18	5,038,101	4,860	1,256,374	NA	NA	1,215	
EWL-2	11/16/2010	-	-	5,072,572	8,618	1,264,992	NA	NA	1,231	
EWL-2	11/23/2010	9.20	774.03	5,106,373	8,450	1,273,442	NA	NA	1,207	
EWL-2	11/29/2010	8.60	774.63	5,132,434	6,515	1,279,958	NA	NA	1,086	
EWL-2	12/3/2010	8.29	774.94	5,258,014	31,395	1,311,353	NA	NA	7,849	
EWL-2	12/21/2010	8.19	775.04	5,267,780	2,442	1,313,794	NA	NA	136	
EWL-2	12/30/2010	10.30	772.93	5,339,165	17,846	1,331,640	NA	NA	1,983	
EWL-2	1/4/2011	9.87	773.36	5,351,855	3,173	1,334,813	NA	NA	635	
EWL-2	1/14/2011	10.51	772.72	5,377,783	6,482	1,341,295	NA	NA	648	
EWL-2	1/20/2011	12.00	771.23	5,094,899	-	1,341,295	NA	NA	-	COUNTER MALFUNCTION
EWL-2	1/26/2011	12.17	771.06	5,096,408	377	1,341,672	NA	NA	63	
EWL-2	2/2/2011	12.05	771.18	5,096,408	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/9/2011	11.91	771.32	5,974,854	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/14/2011	10.23	773.00	5,984,866	2,503	1,344,175	NA	NA	501	
EWL-2	2/25/2011	10.24	772.99	6,096,503	27,909	1,372,084	NA	NA	2,537	
EWL-2	3/4/2011	11.46	771.77	6,191,381	23,720	1,395,804	NA	NA	3,389	
EWL-2	3/11/2011	11.50	771.73	6,314,056	30,669	1,426,473	NA	NA	4,381	
EWL-2	3/18/2011	10.53	772.70	6,375,502	15,362	1,441,834	NA	NA	2,195	
EWL-2	3/22/2011	10.36	772.87	6,391,164	3,916	1,445,750	NA	NA	979	
EWL-2	4/8/2011	9.71	773.52	6,671,634	70,118	1,515,867	NA	NA	4,125	
EWL-2	4/19/2011	7.31	775.92	6,837,285	41,413	1,557,280	NA	NA	3,765	
EWL-2	4/29/2011	5.91	777.32	6,879,900	10,654	1,567,934	NA	NA	1,065	
EWL-2	5/6/2011	5.86	777.37	6,972,251	23,088	1,591,021	NA	NA	3,298	
EWL-2	5/13/2011	5.96	777.27	7,030,265	14,504	1,605,525	NA	NA	2,072	
EWL-2	5/20/2011	6.60	776.63	7,171,357	35,273	1,640,798	NA	NA	5,039	
EWL-2	5/27/2011	6.15	777.08	7,194,435	5,770	1,646,567	NA	NA	824	
EWL-2	5/31/2011	6.03	777.20	7,365,792	42,839	1,689,407	NA	NA	10,710	
EWL-2	12/31/2050									
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
MH-2	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
MH-2	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
MH-2	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
MH-2	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
MH-2	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
MH-2	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
MH-2	9/8/2009	NR		NR	NA	NA	63,058	818	68	
MH-2	9/14/2009	NR		NR	NA	NA	63,419	361	60	
MH-2	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
MH-2	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
MH-2	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
MH-2	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
MH-2	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
MH-2	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
MH-2	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
MH-2	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
MH-2	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
MH-2	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
MH-2	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
MH-2	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
MH-2	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
MH-2	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
MH-2	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
MH-2	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
MH-2	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
MH-2	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
MH-2	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
MH-2	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
MH-2	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
MH-2	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
MH-2	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
MH-2	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
MH-2	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
MH-2	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
MH-2	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
MH-2	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
MH-2	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
MH-2	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
MH-2	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
MH-2	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
MH-2	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
MH-2	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
MH-2	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
MH-2	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
MH-2	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
MH-2	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
MH-2	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
MH-2	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
MH-2	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
MH-2	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
MH-2	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
MH-2	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
MH-2	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
MH-2	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
MH-2	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
MH-2	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
MH-2	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
MH-2	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
MH-2	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
MH-2	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	
MH-2	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
MH-2	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
MH-2	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
MH-2	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
MH-2	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
MH-2	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	
MH-2	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
MH-2	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
MH-2	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
MH-2	10/22/2010	5.41	769.53	3,794,068	83,053	964,712	NA	NA	10,382	
MH-2	10/29/2010	NR	NR	3,871,264	85,842	1,050,554	NA	NA	12,263	Pump off due to leaking tank

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	11/5/2010	5.30	769.64	4,024,543	38,320	2,778,281	NA	NA	5,474	
MH-2	11/9/2010	4.88	770.06	4,089,583	16,260	2,794,541	NA	NA	4,065	Cut-off wall installed 11/9-11/11
MH-2	11/23/2010	4.20	770.74	4,302,141	53,140	2,847,680	NA	NA	3,796	
MH-2	11/29/2010	3.19	771.75	4,373,837	17,924	2,865,604	NA	NA	2,987	
MH-2	12/3/2010	3.37	771.57	4,731,348	89,378	2,954,982	NA	NA	22,344	
MH-2	12/21/2010	5.13	769.81	4,903,964	43,154	2,998,136	NA	NA	2,397	
MH-2	12/30/2010	3.36	771.58	4,991,078	21,779	3,019,914	NA	NA	2,420	
MH-2	1/4/2011	2.56	772.38	5,091,387	25,077	3,044,992	NA	NA	5,015	
MH-2	1/14/2011	2.82	772.12	5,095,504	1,029	3,046,021	NA	NA	103	
MH-2	1/20/2011	2.73	772.21	5,290,345	48,710	3,094,731	NA	NA	8,118	
MH-2	1/26/2011	3.26	771.68	5,292,630	571	3,095,302	NA	NA	95	
MH-2	2/2/2011	2.50	772.44	5,292,630	-	3,095,302	NA	NA	-	
MH-2	2/9/2011	2.36	772.58	5,430,045	34,354	3,129,656	NA	NA	4,908	
MH-2	2/14/2011	2.21	772.73	5,456,089	6,511	3,136,167	NA	NA	1,302	
MH-2	2/25/2011	1.86	773.08	5,671,148	53,765	3,189,932	NA	NA	4,888	
MH-2	3/4/2011	2.83	772.11	5,828,428	39,320	3,229,252	NA	NA	5,617	
MH-2	3/11/2011	1.09	773.85	6,000,380	42,988	3,272,240	NA	NA	6,141	
MH-2	3/18/2011	1.11	773.83	6,005,061	1,170	3,273,410	NA	NA	167	
MH-2	3/22/2011	1.95	772.99	6,009,623	1,141	3,274,551	NA	NA	285	
MH-2	4/8/2011	1.53	773.41	6,106,195	24,143	3,298,694	NA	NA	1,420	
MH-2	4/19/2011	1.60	773.34	6,189,711	20,879	3,319,573	NA	NA	1,898	
MH-2	4/29/2011	1.75	773.19	6,231,266	10,389	3,329,961	NA	NA	1,039	
MH-2	5/6/2011	2.01	772.93	6,274,726	10,865	3,340,826	NA	NA	1,552	
MH-2	5/13/2011	2.67	772.27	6,661,467	96,685	3,437,512	NA	NA	13,812	
MH-2	5/20/2011	3.02	771.92	7,078,180	104,178	3,541,690	NA	NA	14,883	
MH-2	5/27/2011	2.95	771.99	7,208,437	32,564	3,574,254	NA	NA	4,652	
MH-2	5/31/2011	2.62	772.32	7,486,617	69,545	3,643,799	NA	NA	17,386	
MH-2	12/31/2050									
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
SP-1	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
SP-1	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
SP-1	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
SP-1	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
SP-1	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
SP-1	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
SP-1	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
SP-1	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
SP-1	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
SP-1	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
SP-1	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
SP-1	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
SP-1	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
SP-1	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
SP-1	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
SP-1	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
SP-1	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
SP-1	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
SP-1	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
SP-1	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
SP-1	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
SP-1	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
SP-1	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
SP-1	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
SP-1	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
SP-1	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
SP-1	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
SP-1	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
SP-1	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
SP-1	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
SP-1	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
SP-1	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
SP-1	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
SP-1	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
SP-1	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
SP-1	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
SP-1	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
SP-1	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
SP-1	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
SP-1	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
SP-1	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
SP-1	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
SP-1	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
SP-1	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
SP-1	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
SP-1	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
SP-1	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
SP-1	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
SP-1	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
SP-1	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
SP-1	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
SP-1	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
SP-1	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
SP-1	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
SP-1	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
SP-1	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
SP-1	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
SP-1	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
SP-1	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
SP-1	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
SP-1	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	
SP-1	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
SP-1	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump
SP-1	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
SP-1	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
SP-1	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
SP-1	10/22/2010	3.12	773.39	3,944,246	7,687	984,081	NA	NA	961	
SP-1	10/29/2010	NR	NR	3,973,045	7,200	991,281	NA	NA	1,029	Pump off due to leaking tank
SP-1	11/5/2010	3.10	773.41	3,994,762	5,429	996,710	NA	NA	776	
SP-1	11/9/2010	2.83	773.68	4,008,694	3,483	1,000,193	NA	NA	871	
SP-1	11/23/2010	2.78	773.73	4,047,147	9,613	1,009,806	NA	NA	687	Regulator removed due to leak
SP-1	11/29/2010	2.31	774.20	4,054,706	1,890	1,011,696	NA	NA	315	
SP-1	12/3/2010	2.23	774.28	4,080,361	6,414	1,018,110	NA	NA	1,603	
SP-1	12/21/2010	2.00	774.51	4,080,889	132	1,018,242	NA	NA	7	
SP-1	12/30/2010	3.61	772.90	4,125,983	11,274	1,029,515	NA	NA	1,253	
SP-1	1/4/2011	2.35	774.16	4,140,614	3,658	1,033,173	NA	NA	732	
SP-1	1/14/2011	2.21	774.30	4,145,475	1,215	1,034,388	NA	NA	122	
SP-1	1/20/2011	2.15	774.36	4,157,669	3,049	1,037,437	NA	NA	508	
SP-1	1/26/2011	2.65	773.86	4,158,398	182	1,037,619	NA	NA	30	
SP-1	2/2/2011	2.25	774.26	4,158,398	-	1,037,619	NA	NA	-	
SP-1	2/9/2011	1.88	774.63	4,166,635	2,059	1,039,678	NA	NA	294	
SP-1	2/14/2011	1.41	775.10	4,166,747	28	1,039,706	NA	NA	6	
SP-1	2/25/2011	1.22	775.29	4,179,676	3,232	1,042,938	NA	NA	294	
SP-1	3/4/2011	1.03	775.48	4,193,424	3,437	1,046,375	NA	NA	491	
SP-1	3/11/2011	1.43	775.08	4,193,502	20	1,046,395	NA	NA	3	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)[1]	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)[2]	Average Volume Pumped (gallons/day)	Comments
SP-1	3/18/2011	1.01	775.50	4,201,373	1,968	1,048,363	NA	NA	281	
SP-1	3/22/2011	1.31	775.20	4,219,245	4,468	1,052,831	NA	NA	1,117	
SP-1	4/8/2011	2.02	774.49	4,246,961	6,929	1,059,760	NA	NA	408	
SP-1	4/19/2011	2.87	773.64	4,351,984	26,256	1,086,015	NA	NA	2,387	
SP-1	4/29/2011	1.48	775.03	4,503,523	37,885	1,123,900	NA	NA	3,788	
SP-1	5/6/2011	2.55	773.96	4,618,536	28,753	1,152,653	NA	NA	4,108	
SP-1	5/13/2011	2.25	774.26	4,703,095	21,140	1,173,793	NA	NA	3,020	
SP-1	5/20/2011	2.20	774.31	4,787,654	21,140	1,194,933	NA	NA	3,020	
SP-1	5/27/2011	2.72	773.79	4,933,654	36,500	1,231,433	NA	NA	5,214	
SP-1	5/31/2011	1.51	775.00	5,000,503	16,712	1,248,145	NA	NA	4,178	
SP-1	12/31/2050									
					Total System Gallons Pumped	**4,920,218**			**7,183**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: D. Zinnen 06/08/11

Southcentral Blower/Flare Summary Table

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/23/2010	11/29/2010	12/3/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM	9:30 AM	10:23 AM	9:30	11:00	10:00	10:50	10:50		
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9	4.0	3.7	4.20	4.0	3.90	4.1	4.1	4.0	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	6	Fully Open
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82	66	65	50	72	NR	51	51	42	42
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30	0.30	0.22	0.5	0.26	0.2	0.3	0.3	2.9	2.9
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010	0.025	0.025	0.02	0.02	0.02	0.23	0.23	0.55	0.55
Approximate Flow (scfm)	13	8	10	8	5	6	12	5	8	8	8	8	8	25	25	37	37
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2	41.0	38.4	36.8	35.5	37.7	28.1	28.1	35.1	35.1
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0	23.8	24.3	23.9	23.0	23.7	20.2	20.2	20.4	20.4
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3	4.3	4.1	5.4	4.8	3.1	6.2	6.2	5.9	5.9
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5	30.9	33.2	33.9	36.7	35.5	45.5	45.5	39.1	39.1
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531	711	632	714 - 908	530	NR	861	861	713	713
Blower SPD%	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717	1858.9	1999	2138	2221	NR	2500	2500	2619	2619
Blower Cycles	3	3	4	4	4	4	4	4	4	4	4	4	NR	4	4	4	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.2	3.2
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR	1280	1280	1280	1280	1279	1280	1280	1279	1279
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140	140	-	150	-	140	135	135	5790	80
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75	78	-	75	-	80	73	73	75	75
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in	12.5 in	30 in	-	-	-	-	-	16417 GAL	90"
Comments	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower								Post Adjustment				Post Adjustment
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%								CH4-35.7%				CH4-38.7%
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%								CO2-22.1%				CO2-22.8%
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%								O2-4.7%				O2-4.7%
			Compressor														
			off due to full														
			frac tank.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/16/2011	3/22/2011	4/29/2011	5/13/2011	6/1/2011
Time				7:30	10:07	7:36	7:36	8:30	7:14
Blower Inlet Vacuum (in H_2O)	4.0	1.9	1.9	1.2	6.7	-4.5	-4.2	-5.5	-9.1
Inlet Valve (Turns) Open / 6	6	6	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	42	48	15	5	61	50	71	75	92
Blower Outlet Pressure (in H_2O)	3.1	3.7	4.0	4.6	4.3	1.3	1.4	1.5	1.6
Orifice Plate DP (in H_2O)	0.09	1.30	0.19	0.10	0.05	0.08	0.03	0.26	0.10
Approximate Flow (scfm)	16	60	23	16	12	16	9	25	16
% CH_4	38.7	37.4	35.1	40.5	22.1	50.3	33.8	38.5	31.9
% CO_2	22.8	18.0	17.6	16.4	11.8	21.5	13.8	17.9	15.6
% O_2	4.7	6.9	8.2	6.3	10.1	3.9	7.6	5.5	5.6
% Balance Gas	33.8	37.7	39.1	36.8	56.0	24.3	44.8	38.1	46.9
Combustion Temperature(^oF)	589	714	970	355	576	687	425	478	442
Blower SPD%	35	40	40	40	55	40	40	45	55
Blower Hours	2739	3179	3278	3296	342	115	839	1125	107
Blower Cycles	193	193	193	193	149	2	143	209	186
Blower Amps	3.2	3.2	3.2	3.2	3.7	3.2	3.1	3.3	3.6
Blower RPMs	1277	1466	1464	1466	2020	1466	1466	1650	2020
Air Compressor Pressure (psi)	150	150	149	149	0.55	125	150	150	150
Well Field Air Pressure (psi)	75	75	75	75	80	65	80	80	80
Approx. Leachate Tank Level	5961GAL	5768 GAL	13289 GAL	13,289 GAL	17199	8401	1403	1929	2630
Comments									
				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment		Post Adjustment
				CH4-52.5%	CH4-41.1%	CH4-41.2%	CH4-37.3		CH4-33.7
				CO2-21.4%	CO2-19.8%	CO2-27.3%	CO2-14.7		CO2-15.9
				O2-2.6%	O2-3.8%	O2-0.4%	02-6.3		02-4.3

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Northwest Blower/Flare Summary Table

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0
					23.5 BAL	23.6 BAL	22.2 BAL					22.3
									No flame			
									Sparker on			

Notes:
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NR = not recorded
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Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM
Blower Inlet Vacuum (in H_2O)	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70
Blower Outlet Pressure (in H_2O)	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8
Orifice Plate DP (in H_2O)	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14
Approximate Flow (scfm)	22	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20
% CH_4	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0
% CO_2	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2
% O_2	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2
% Balance Gas	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6
Combustion Temperature(^oF)	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602
Blower SPD%	40	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45
Blower Hours	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535
Blower Cycles	114	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127
Blower Amps	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3
Blower RPMs	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652
Air Compressor Pressure (psi)	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160
Well Field Air Pressure (psi)	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA
Comments	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3	HI 1500 LO 200 HI HI 1900 LO LO 200	*Low value due to position of thermo-couple.	Gas readings are pre-blower values.	Pre-blower: CH_4 40.4 CO_2 25.2 O_2 2.2	Pre-blower: CH_4 40.5 CO_2 25.3 O_2 2.3	Post-blower: CH_4 46.1 CO_2 27.4 O_2 2.0	Post-blower: CH_4 43.5 CO_2 25.2 O_2 2.9
												Pre-blower: CH_4 43.6 CO_2 25.6 O_2 2.3					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010
Time	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM
Blower Inlet Vacuum (in H_2O)	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	64	69	NR	70	NR	72	61	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00
Orifice Plate DP (in H_2O)	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18
Approximate Flow (scfm)	NR	NA	25	NR	24	NR	25	22	22	24	24	16	17	20	22	26	23	22	22
% CH_4	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0
% CO_2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2
% O_2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0
% Balance Gas	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8
Combustion Temperature(^oF)	460	761	337	NR	625	NR	356	615	770	262	415	232	NA	1200	1002	938	933	832	800
Blower SPD%	50	50	50	NR	50	50	50	50	50	50	50	35 - 45*	45	45	50	50	50	50	50
Blower Hours	107	NR	227	NR	344	NR	506	665	765	906	956	2	102	522	701	821	1005	1103	1261
Blower Cycles	1	NR	1	NR	3	NR	3	3	4	398	862	13	270	272	272	272	272	272	273
Blower Amps	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4
Blower RPMs	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments																			
			Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower
			CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%
			CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%
	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%
	CH_4 43.6	was taken																	
	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf					*Blower SPD		*Blower speed					
	O_2 2.10	No post-					card					increased to		increased to					
		blower reading										45% on 7/21		50%					
		was recorded.																	

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/29/2010	12/3/2010	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/17/2011	03/34/11	4/29/2011
Time	12:00 PM	11:15 AM	11:25 AM	10:15 AM	12:22 PM	9:40	10:30	NR	11:10							8:38	7:36	
Blower Inlet Vacuum (in H_2O)	6.5	6.3	6.9	6.5	4.1	4.5	4.30	4.00	4.50	4.10	-4.10	3.90	3.20	4.00	1.10	7.10	4.50	5.03
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	Fully Open	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	NA	NA	NA	68	60	50	75	68	48	47	47	45	42	5	10	54	36	78
Blower Outlet Pressure (in H_2O)	2.30	2.70	2.20	2.00	1.30	1.6	1.5	4.7	2.5	1.3	1.3	2.2	4.0	2.2	5.6	2.6	0.5	1.1
Orifice Plate DP (in H_2O)	0.14	0.20	0.18	0.18	0.14	0.10	0.14	0.19	0.09	0.01	-0.01	0.17	0.50	0.20	0.10	0.26	0.14	0.33
Approximate Flow (scfm)	20	24	22	22	20	17	20	23	16	5	5	21	37	24	16	28	21	26
% CH_4	38.4	36.5	35.3	32.6	37.1	34.3	34.0	33.4	33.6	31.7	31.7	40.4	47.2	43.8	47.5	40.5	33.5	41.7
% CO_2	27.0	27.2	26.8	25.3	27.3	26.5	26.1	25.0	26.7	25.5	25.5	29.3	30.0	30.2	28.0	27.4	22.1	24.8
% O_2	2.0	1.8	1.9	2.6	2.8	6.3	3.1	3.6	3.4	4.1	4.1	1.1	1.5	1.9	2.2	1.4	5.5	0.1
% Balance Gas	32.6	34.5	36.0	39.5	32.8	32.9	36.8	38.0	36.3	38.7	38.7	29.2	21.3	24.1	22.3	30.7	38.9	33.4
Combustion Temperature(^oF)	810	759	573	769	1054	894	690	580	950	530	530	665	1055	1058	1156	1040	684	668
Blower SPD%	50	50	50	50	40	40	40	40	40	40	40	40	42	42	42	52	42	42
Blower Hours	1381	1561	1697	1837.3	1957	2095	2176	2318	2457	2575	2575	2693	3195	3295	3494	4174	4873	5598
Blower Cycles	273	274	426	426	571	571	NR	573	579	573	573	573	573	573	573	574	574	574
Blower Amps	3.4	3.4	NR	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	35.0	3.3	3.2
Blower RPMs	1838	1838	NR	1838	1470	1470	1468	1469	1470	1279	1470	1505	1544	1542	1544	1914	1541	1544
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	80	150	150	149	149	0.55		150
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	75	75	75	75	75	80		80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	16417 GAL	90"	5961 GAL	5768 GAL	13289 GAL	13,289 GAL	17199		1403
Comments				Replaced	down on arrival													
				temp	had difficulties getting			Post Adjustment			Post Adjustment				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment
				probe	started. Turned off			CH4-34.7%			CH4-40.4%				CH4-46.9%	CH4-35.7%	CH4-41.2%	CH4-40.8
					blower and let sit			CO2-25.8%			CO2-29.3%				CO2-29.7%	CO2-24.3%	CO2-27.3%	CO2-23.1
					2 hrs to build up			O2-3.3%			O2-1.1%				O2-1.7%	O2-3.8%	O2-0.4%	O2-1.9
					methane conc.													
					After 2hr wait, flare													
					lit on first startup													
					attempt.													

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/13/2011	6/1/2011
Time	8:45	9:45
Blower Inlet Vacuum (in H_2O)	-4.50	-4.90
Inlet Valve (Turns) Open / 6	6	6
Gas Inlet Temperature (^oF)	77	81
Blower Outlet Pressure (in H_2O)	1.6	1.2
Orifice Plate DP (in H_2O)	0.15	0.13
Approximate Flow (scfm)	21	18
% CH_4	54.3	40.7
% CO_2	28.7	23.8
% O_2	0.0	1.4
% Balance Gas	17.0	34.1
Combustion Temperature(^oF)	975	603
Blower SPD%	42	42
Blower Hours	0	161
Blower Cycles	1	4
Blower Amps	3.3	3.2
Blower RPMs	1544	1544
Air Compressor Pressure (psi)	150	150
Well Field Air Pressure (psi)	80	80
Approx. Leachate Tank Level	1929	2630
Comments		
		Post Adjustment
		CH4-64.3
		CO2-32.9
		O2-0.0

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Gas Extraction Well Summary Tables

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR
Orifice Plate DP (in H_2O)	1.80	1.80	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR
% CH_4	51.3		50.7		53.3		60.5		60.5		48.0		41.5	
% CO_2	27.2		26.5		27.4		34.1		30.9		29.5		28.3	
% O_2	0.4		0.0		0.0		0.0		0.0		0.0		0.6	
% Balance Gas	21.1		22.8		19.3		5.4		8.6		22.5		29.6	
Gas Temperature(^oF)	82		64		70		73		72		72		68	
Valve Turns Open	8	10	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.1		-0.6		-7.1		-4.7		-4.9		-4.8	
Well Side Pressure (in H_2O)	-3.7	-3.5	-0.8	NC	-0.5	NC	-6.9	NC	-4.6	NC	-4.9	-4.9	-4.7	-4.7
Orifice Plate DP (in H_2O)	1.80	1.10	1.95	NC	0.165	NC	3.2	NC	1.4	NC	1.8	1.20	2.0	1.98
% CH_4	37.2		43.3		50.0		44.6		47.1		45.9		49.7	
% CO_2	26.2		26.6		27.1		28.8		28.5		24.0		23.8	
% O_2	1.9		2.3		2.3		0.0		0.0		0.0		0.6	
% Balance Gas	34.7		27.8		20.6		26.6		24.4		30.1		25.9	
Gas Temperature(^oF)	68		60		30		50		40		60		86	
Valve Turns Open	8	2	NR	NR	1	2	2	4	4	NC	4	4	4	NC
Liquid Level (ft BTOC)	NR		NM		22.90		21.37		20.84		22.71		21.86	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.5		-5.7		-4.2		-4.7		-4.3	
Well Side Pressure (in H_2O)	-1.30	-0.8	-0.20	NC	-0.20	NC	-5.30	NC	-4.20	NC	-4.50	-2.5	-4.30	NC
Orifice Plate DP (in H_2O)	0.75	0.55	0.49	NC	0.173	NC	3.140	NC	2.080	NC	1.342	0.80	1.980	NC
% CH_4	35.3		36.6		37.3		32.0		29.8		28.1		30.1	
% CO_2	28.9		29.4		26.2		26.6		24.2		21.0		19.9	
% O_2	0.1		1.3		1.8		1.9		0.6		0.1		1.4	
% Balance Gas	35.7		32.7		34.7		39.5		45.4		50.8		48.6	
Gas Temperature(^oF)	53		42		20		49		42		60		86	
Valve Turns Open	0.75	0.25	NR	NR	1/4	1/2	1/2	7/8	1	NC	1	3	3	NC
Liquid Level (ft BTOC)	20.32		NM		20.46		8.65		7.93		8.05		8.01	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC	-3.2	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC	0.030	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8		26.3	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7		25.3	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5		0.4	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0		48.0	
Gas Temperature(^oF)	76		88		84		90		84		62		50	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC	0.25	NC
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26		17.79	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.5		-6.5		-4.7		-4.8		-4.8	
Well Side Pressure (in H_2O)	0.0	NC	-1.2	NC	-6.5	NC	-4.7	NC	-4.7	-4.7	-4.8	NC
Orifice Plate DP (in H_2O)	0.050	NC	0.119	NC	1.740	NC	0.002	NC	0.717	0.70	0.090	NC
% CH_4	39.3		31.4		21.5		56.0		54.6		60.0	
% CO_2	28.5		23.3		15.8		24.4		19.6		19.9	
% O_2	1.3		2.5		6.0		0.0		2.2		1.2	
% Balance Gas	30.9		42.8		56.7		19.6		23.6		18.9	
Gas Temperature(^oF)	36		19		48		30		74		75	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	1/4	1/4	1/2	1/2	NC
Liquid Level (ft BTOC)	NM		18.66		16.78		16.78		13.81		14.21	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4		-5.0	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC	0.50	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0		19.1	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2		19.8	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0		3.9	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8		57.2	
Gas Temperature(^oF)	60		NR		58		80		88		88		90	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77		15.65	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6		-3.8		-3.0		-1.5		-6.5		-4.7	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC	-3.8	NC	-3.0	NC	-1.5	NC	-6.5	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.40	NC	0.85	NC	0.45	NC	0.29	NC	0.623	NC	0.670	NC	0.090	NC
% CH_4	16.0		13.5		16.5		14.7		17.1		10.0		20.3	
% CO_2	19.6		19.4		23.7		21.5		20.6		19.4		22.1	
% O_2	2.9		3.8		0.2		2.0		2.9		2.4		0.3	
% Balance Gas	61.5		63.3		59.6		61.8		59.4		68.2		57.3	
Gas Temperature(^oF)	82		62		50		34		20		46		30	
Valve Turns Open	7	NC	7	NC	7	NC	NR	NR	1/8	CLOSED	CLOSED	1/4	1/4	NC
Liquid Level (ft BTOC)	15.59		17.38		17.82		NM		18.59		17.27		16.52	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.8		-4.8	
Well Side Pressure (in H_2O)	-3.8	-2.9	-2.9	NC
Orifice Plate DP (in H_2O)	0.550	0.00	0.060	NC
% CH_4	14.8		20.4	
% CO_2	18.5		18.6	
% O_2	0.0		0.0	
% Balance Gas	66.7		61.0	
Gas Temperature(^oF)	60		75	
Valve Turns Open	1/4	1/2	1/2	NC
Liquid Level (ft BTOC)	15.08		15.98	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6		-3.8	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC	-1.60	-0.2
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC	1.20	0.10
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0		2.1	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2		16.1	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1		15.4	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7		66.4	
Gas Temperature(^oF)	78		84		84		82		78		60		50	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC	1	0.5
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41		17.48	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.3		-5.6		-4.2		-4.9		-4.8	
Well Side Pressure (in H_2O)	-0.30	NC	0.00	NC	-4.80	NC	0.00	NC	0.00	0.0	0.00	NC
Orifice Plate DP (in H_2O)	0.60	NC	0.001	NC	0.937	NC	0.010	NC	0.006	0.00	0.000	NC
% CH_4	2.0		3.1		16.5		5.2		7.6		10.7	
% CO_2	12.5		3.2		17.2		4.8		11.0		9.6	
% O_2	13.6		17.0		4.2		16.6		11.0		0.0	
% Balance Gas	71.9		76.7		62.1		73.4		70.4		79.7	
Gas Temperature(^oF)	32		19		40		32		72		76	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	CLOSED	CLOSED	CLOSED	CLOSED	NC
Liquid Level (ft BTOC)	NM		15.36		13.03		10.11		10.2		10.17	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.6		-6.9		-4.2		-4.8		-4.8	
Well Side Pressure (in H_2O)	-3.8	NC	-3.2	NC	-0.6	NC	-6.6	NC	-4.2	NC	-4.7	-4.7	-4.8	NC
Orifice Plate DP (in H_2O)	2.40	NC	1.03	NC	0.311	NC	3.980	NC	1.590	NC	1.709	1.50	1.810	NC
% CH_4	54.9		53.5		59.6		62.0		64.9		62.5		61.4	
% CO_2	33.7		31.4		29.3		33.5		34.8		29.6		28.6	
% O_2	0.2		1.9		3.3		0.0		0.1		0.0		1.1	
% Balance Gas	11.2		13.2		7.8		4.5		0.2		7.9		8.9	
Gas Temperature(^oF)	60		48		32		52		52		60		60	
Valve Turns Open	10.25	NC	NR	NR	3/4	1	1	3	3	NC	3	3	3	3
Liquid Level (ft BTOC)	NR		NM		26.16		26.29		25.79		24.85		24.85	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20	0.05	0.08
% CH_4	58		71.1		43.6		37.1		54.4		47.9		48.9	
% CO_2	29		28		28.8		23.1		27.0		26.0		26.7	
% O_2	1.9		0		1.9		3.9		0.9		1.3		1.4	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8		23.0	
Gas Temperature(^oF)	36		40		34		46		50		NR		68	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7	7.5	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		17.3	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.5	NC	-6.6	NC	NR	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.03	NC	0.01	NC	0.04	NR	0.00	NC	0.03	NC	0.02	NC
% CH_4	56.1		67.8		65.3		66.4		66.2		63.3		65.4	
% CO_2	29.4		30.6		30.7		31.9		33.5		32.7		34.0	
% O_2	0.0		0.4		0.9		1.0		0.1		0.7		0.4	
% Balance Gas	14.5		1.2		3.1		0.7		0.2		3.3		0.2	
Gas Temperature(^oF)	74		84		85		90		88		64		63	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.22		17.28		17.00		17.04		17.18		17.04	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.4		-6.6		-4.7		-4.8		-4.8	
Well Side Pressure (in H_2O)	-3.0	NC	-1.4	NC	-6.5	NC	-4.7	NC	-4.8	-4.8	-4.8	NC
Orifice Plate DP (in H_2O)	0.05	NC	0.254	NC	0.003	NC	0.020	NC	0.556	0.00	0.020	NC
% CH_4	62.4		60.2		65.7		65.9		71.2		69.6	
% CO_2	31.4		31.5		33.4		33.9		28.7		27.2	
% O_2	1.9		2.5		0.0		0.0		0.0		0.0	
% Balance Gas	4.3		5.8		0.9		0.2		0.1		3.2	
Gas Temperature(^oF)	38		22		50		32		72		75	
Valve Turns Open	NR	NR	3/4	1	1	2	2	1/4	1/4	1/2	1/2	NC
Liquid Level (ft BTOC)	NM		16.96		16.91		16.93		16.77		16.83	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.1		-0.5		-6.6		-4.7		-4.9		-4.8	
Well Side Pressure (in H_2O)	-3.8	-2.8	-0.6	NC	-0.2	NC	-6.5	NC	-4.6	NC	-3.7	-4.9	-4.2	NC
Orifice Plate DP (in H_2O)	3.20	2.20	1.66	NC	0.003	NC	3.210	NC	3.000	NC	0.480	2.10	3.100	NC
% CH_4	37.5		35.9		44.4		45.4		36.9		41.7		41.3	
% CO_2	30.0		28.2		28.6		30.7		28.6		25.8		25.4	
% O_2	0.3		1.6		1.7		0.0		0.5		0.4		1.1	
% Balance Gas	32.2		34.3		25.3		23.9		34.0		32.1		32.2	
Gas Temperature(^oF)	60		50		32		50		42		54		86	
Valve Turns Open	8.5	4.5	NR	NR	1/4	1/2	1/2	2.0	2	1/4	1/4	1/4	1/4	NC
Liquid Level (ft BTOC)	22.5		NM		7.50		23.46		22.60		21.67		21.71	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR		-4.4	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC	-0.8	-0.9
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC	0.65	0.85
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2		34.4	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5		16.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4		8.8	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9		40.3	
Gas Temperature(^oF)	38		44		38		46		52		NR		74	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC	1	1.25
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.5		-5.0		-5.25		-6.60		-3.80	
Well Side Pressure (in H_2O)	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR	0.1	NC
Orifice Plate DP (in H_2O)	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR	0.10	NC
% CH_4	21.1		21.2		21.7		32.5		19.8		21.2		27.5	
% CO_2	12.9		11.5		12.9		19.7		11.6		14.0		16.4	
% O_2	10.5		10.6		10.7		6.9		11.2		11.2		9.4	
% Balance Gas	55.5		56.7		54.7		40.9		57.4		53.6		46.7	
Gas Temperature(^oF)	72		80		84		84		84		64		58	
Valve Turns Open	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25	0.5	NC
Liquid Level (ft BTOC)	11.95		NR		DRY		DRY		DRY		12.34		12.51	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.30		-0.80		-5.70		-3.80		-4.60		-4.50	
Well Side Pressure (in H_2O)	0.0	NC	-0.5	NC	0.5	NC	-1.1	NC	0.0	-0.8	-4.0	NC
Orifice Plate DP (in H_2O)	0.01	NC	0.583	NC	0.236	NC	0.010	NC	0.028	0.60	0.040	NC
% CH_4	23.3		52.0		21.3		21.1		71.8		36.7	
% CO_2	14.2		28.3		10.3		11.6		28.0		24.0	
% O_2	11.5		2.5		12.9		12.1		0.0		0.0	
% Balance Gas	51.0		17.2		55.5		55.2		0.2		39.3	
Gas Temperature(^oF)	40.0		24.0		52.0		30.0		74.0		84.0	
Valve Turns Open	NR	NR	1/2	3/4	3/4	1/2	1/4	1/8	1/8	1/2	1/2	NC
Liquid Level (ft BTOC)	NM		7.50		4.51		4.11		DRY		4.08	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8		-3.8		-2.9		-1.2		-8.0	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC	-3.8	NC	-2.9	NC	-0.8	NC	-7.9	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC	2.00	NC	1.45	NC	0.461	NC	3.250	NC
% CH_4	67.3		60.9		52.8		39.3		39.8		50.3		52.0	
% CO_2	28.9		30.3		30.1		27.4		25.0		21.9		24.0	
% O_2	0.2		0.3		0.4		0.1		1.8		1.5		0.5	
% Balance Gas	3.6		8.5		16.7		33.2		33.4		26.3		23.5	
Gas Temperature(^oF)	72		70		58		54		46		36		38	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC	12.25	NC	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NR		NM		12.31		20.13	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-4.3		-8.9	
Well Side Pressure (in H_2O)	-3.8	NC	-4.3	-4.2	-8.9	NC
Orifice Plate DP (in H_2O)	2.510	NC	0.690	0.90	1.750	NC
% CH_4	60.2		68.7		68.7	
% CO_2	24.4		22.0		21.9	
% O_2	0.3		0.0		0.0	
% Balance Gas	15.1		9.3		9.4	
Gas Temperature(^oF)	44		52		72	
Valve Turns Open	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	OPEN	NC
Liquid Level (ft BTOC)	20.09		18.38		19.3	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0		0.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC	0.00	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2		0.5	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1		0.6	
% O_2	18.0		NR		19.2		18.8		20.2		19.3		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4		79.6	
Gas Temperature(^oF)	46		NR		NR		58		76		84		82	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/21/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.5		-3.7		-3.9		-3.8		-2.9		-0.7	
Well Side Pressure (in H_2O)	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC	-1.3	-0.1	-2.9	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.03	NC	0.015	NC	0.005	NC	0.030	NC	0.01	0.01	1.45	NC	0.005	NC
% CH_4	0.1		0.3		0.3		0.0		0.2		0.8		1.3	
% CO_2	0.4		0.4		0.5		0.6		0.7		2.1		4.0	
% O_2	18.6		19.7		19.9		19.3		19.5		19.1		18.2	
% Balance Gas	80.9		79.6		79.3		80.1		79.6		78.0		76.5	
Gas Temperature(^oF)	98		88		80		58		58		28		20	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.25	NR	NR	NR	CLOSED	CLOSED
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NM		11.02	
Comments														

Notes:
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/16/2011		3/22/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-8.3		-3.5		-4.3		-8.9	
Well Side Pressure (in H_2O)	0.0	NC	0.0	NC	0.0	0.0	0.0	NC
Orifice Plate DP (in H_2O)	0.000	NC	0.000	NC	0.000	0.00	0.000	NC
% CH_4	1.2		0.0		1.9		0.0	
% CO_2	1.1		0.2		0.5		0.5	
% O_2	19.1		19.7		18.6		18.7	
% Balance Gas	78.6		80.1		79.0		80.8	
Gas Temperature(^oF)	50		40		64		70	
Valve Turns Open	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	NC
Liquid Level (ft BTOC)	11.55		8.86		7.86		8.41	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC	-1.3	NR
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC	1.30	NR
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4		34.5	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6		17.9	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2		8.7	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8		38.9	
Gas Temperature(^oF)	NR		50		72		76		88		72		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.8		-1.2		-0.8		-6.7		-4.3		-4.3	
Well Side Pressure (in H_2O)	-0.9	-0.2	-0.2	-0.2	-1.0	-0.2	-0.3	NC	-6.5	NC	-0.2	NC	-0.2	NC
Orifice Plate DP (in H_2O)	0.50	0.10	0.22	0.10	0.50	0.10	0.188	NC	1.080	NC	1.270	NC	1.270	NC
% CH_4	29.4		36.7		47.5		65.7		23.0		23.0		48.8	
% CO_2	16.1		20.1		24.4		24.4		16.0		16.0		22.5	
% O_2	10.2		7.1		5.6		1.5		5.9		5.9		3.7	
% Balance Gas	44.3		36.1		22.5		8.4		55.1		55.1		25.0	
Gas Temperature(^oF)	62		58		42		30		48		48		46	
Valve Turns Open	1	0.75	0.75	0.25	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NM		26.52		26.63		26.63		26.19	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1	
Well Side Pressure (in H_2O)	-2.4	-1.5	-9.1	NC
Orifice Plate DP (in H_2O)	0.688	0.10	1.250	NC
% CH_4	31.1		33.1	
% CO_2	15.5		16.5	
% O_2	6.8		5.5	
% Balance Gas	46.6		44.9	
Gas Temperature(^oF)	52		70	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC
Liquid Level (ft BTOC)	25.41		25.63	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC	-0.70	NR
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC	0.045	NR
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2		17.5	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4		7.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6		14.9	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8		60.2	
Gas Temperature(^oF)	NR		62		88		90		100		88		80	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC	1.5	1.0
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-7.3		-4.3		-4.4	
Well Side Pressure (in H_2O)	0.01	-0.1	-0.01	-0.2	-0.70	NC	0.00	NC	-4.80	NC	-1.00	NC	-2.20	-0.7
Orifice Plate DP (in H_2O)	0.010	0.08	0.010	0.12	0.119	NC	0.018	NC	0.080	NC	0.720	NC	0.242	0.10
% CH_4	71.9		72.6		11.0		60.8		14.3		30.3		9.4	
% CO_2	28.1		27.1		4.9		21.2		6.0		10.9		3.4	
% O_2	0.0		0.2		17.3		3.3		15.9		11.5		16.4	
% Balance Gas	0.0		0.1		66.8		14.7		63.8		47.3		70.8	
Gas Temperature(^oF)	62		72		40		28		42		40		58	
Valve Turns Open	0.25	0.75	1.5	0.75	NR	NR	3/4	1	1	2	2	NC	2	4
Liquid Level (ft BTOC)	NR		NR		NM		14.73		15.21		13.61		12.06	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-9.1	
Well Side Pressure (in H_2O)	-2.00	NC
Orifice Plate DP (in H_2O)	1.100	NC
% CH_4	16.2	
% CO_2	10.1	
% O_2	13.0	
% Balance Gas	60.7	
Gas Temperature(^oF)	65	
Valve Turns Open	4	NC
Liquid Level (ft BTOC)	15.55	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9		-0.9		-2.0		-6.7		-4.3	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC	0.02	NC	-0.20	NC	0.00	NC	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC	0.01	NC	0.60	NC	0.017	NC	0.000	NC	0.000	NC
% CH_4	14.1		1.1		35.8		2.0		1.4		1.1		2.0	
% CO_2	6.1		2.5		16.6		12.5		3.0		1.3		0.8	
% O_2	15.3		19.1		7.5		13.6		19.8		19.4		18.6	
% Balance Gas	64.5		77.3		40.1		71.9		75.8		78.2		78.6	
Gas Temperature(^oF)	79		54		56		32		38		42		42	
Valve Turns Open	0	NC	0.25	NC	0.125	NC	NR	NR	1/8	CLOSED	1/8	CLOSED	CLOSED	CLOSED
Liquid Level (ft BTOC)	10.24		8.54		8.75		NM		10.20		11.40		10.38	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1	
Well Side Pressure (in H_2O)	0.00	0.0	0.00	NC
Orifice Plate DP (in H_2O)	0.002	0.00	0.000	NC
% CH_4	2.6		1.4	
% CO_2	0.7		1.0	
% O_2	18.6		18.6	
% Balance Gas	78.1		79.0	
Gas Temperature(^oF)	66		65	
Valve Turns Open	CLOSED	CLOSED	CLOSED	NC
Liquid Level (ft BTOC)	5.91		6.01	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC	0.05	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5		34.0	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0		16.3	
% O_2	0.1		NR		4.1		6.5		7.8		8.6		8.0	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9		41.7	
Gas Temperature(^oF)	44		NR		56		76		80		98		84	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.8		-3.9		-1.4		-7.5		-4.3	
Well Side Pressure (in H_2O)	-0.025	NR	-0.400	-0.10	-0.1	-3.0	0.0	NC	-1.4	NC	-6.8	NC	-1.0	NC
Orifice Plate DP (in H_2O)	0.02	NR	0.24	0.05	0.05	0.23	0.02	NC	1.439	NC	0.320	NC	0.820	NC
% CH_4	64.6		23.7		61.5		27.2		68.8		10.6		53.8	
% CO_2	27.0		13.2		25.9		12.9		21.1		5.3		20.4	
% O_2	1.5		11.0		0.2		11.8		1.5		15.8		5.3	
% Balance Gas	6.9		52.1		12.4		48.1		8.6		68.3		20.5	
Gas Temperature(^oF)	80		64		60		40		10		38		40	
Valve Turns Open	0.125	0.25	1	0.75	0.25	0.5	NR	NR	FULL OPEN	FULLOPEN	FULL OPEN	FULLOPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NR		NM		5.05		5.03		5.02	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.1		-9.1	
Well Side Pressure (in H_2O)	-1.1	-0.7	-9.1	NC
Orifice Plate DP (in H_2O)	0.570	0.40	0.980	NC
% CH_4	14.3		21.8	
% CO_2	6.4		15.4	
% O_2	14.7		7.9	
% Balance Gas	64.6		54.9	
Gas Temperature(^oF)	52		72	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC
Liquid Level (ft BTOC)	DRY		5.03	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2		NR	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2	NR	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01	NR	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9		NR	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8		NR	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5		NR	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8		NR	
Gas Temperature(^oF)	36		38		24		36		54	54	48		NR	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.5		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR	-3.50	NC	-3.40	NC
Orifice Plate DP (in H_2O)	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR	0.06	NC	0.035	NC
% CH_4	62.2		1.8		77.4		73.5		67.8		31.7		19.8	
% CO_2	4.3		2.0		20.4		25.6		31.8		17.6		18.3	
% O_2	0.8		18.4		0.1		0.0		0.4		9.3		5.7	
% Balance Gas	32.7		77.8		2.1		0.9		0.0		41.4		56.2	
Gas Temperature(^oF)	NR		64		82		88		98		90		87	
Valve Turns Open	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-6.7		-4.3		-4.2	
Well Side Pressure (in H_2O)	-3.30	-1.6	-0.60	-0.3	0.20	-0.3	-0.30	NC	-6.70	NC	-4.30	NC	0.30	-4.1
Orifice Plate DP (in H_2O)	0.010	0.01	0.01	0.01	0.19	0.01	0.021	NC	0.060	NC	0.070	NC	0.006	0.00
% CH_4	10.0		31.7		27.3		58.6		46.8		51.5		81.5	
% CO_2	11.2		21.8		13.7		17.9		13.1		16.6		17.7	
% O_2	11.1		5.6		10.3		4.3		7.1		6.8		0.0	
% Balance Gas	67.7		40.9		48.7		19.2		33.0		25.1		0.8	
Gas Temperature(^oF)	58		58		42		20		50		42		68	
Valve Turns Open	1	0.75	0.5	NR	NR	NR	1/8	1/2	1/2	3/8	3/8	1/2	1/2	3/4
Liquid Level (ft BTOC)	NR		NR		NM		8.97		8.79		8.14		8.03	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-9.1	
Well Side Pressure (in H_2O)	-9.10	NC
Orifice Plate DP (in H_2O)	0.090	NC
% CH_4	71.3	
% CO_2	14.9	
% O_2	0.6	
% Balance Gas	13.2	
Gas Temperature(^oF)	60	
Valve Turns Open	3/4	NC
Liquid Level (ft BTOC)	8.63	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Mallard North Landfill Status Meeting
July 21, 2011

Meeting Logistics

- Location: Mallard Lake Landfill (MLL) conference room
- Time: Following 10 AM MLL meeting.

Discussion Topics

- Groundwater monitoring event #3
- Ongoing OM&M activities
- Leachate force main connection status
- USEPA – IEPA transition status, including draft RCRA 7003 order
- OM&M Plan

Attached Data

- Gas Probes Detection Table (June 2011)
- Methane Detections Figure (June 2011)
- Gas Probes with Significant Methane Detections Table
- Liquid Pumping Volumes and Rates Table
- Southcentral Blower/Flare Summary Table
- Northwest Blower/Flare Summary Table
- Gas Extraction Well Summary Tables

Gas Probes Detection Table (June 2011)

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva/ Ray Babowice
Pressure Device: GEM 2000
Date: 6/21/2011
Gas Meter: GEM 2000
Water Level Device: Solinst Water Meter
Weather: Cloudy
Serial #: GM12543
Ground Conditions: Tall grass and wet
Barometric Pressure 29.69
Date Calibrated: 6/21/2011

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.6	18.0	81.4	19.35	
GP-33A	0.0	0.0	0.5	18.5	81.0	11.15	
GP-33B	0.2	0.0	0.8	18.2	81.0	10.81	
G-116	-4.7	25.7	8.5	12.0	53.8	NM	CONNECTED TO EXTRACTION SYSTEM 06/06/11
GP-2A	0.0	12.0	4.2	14.9	68.9	12.41	
GP-2B	0.0	0.0	0.0	18.7	81.3	9.78	
GP-34A	0.0	0.0	0.1	18.7	81.2	5.78	
GP-34B	0.0	0.0	0.1	18.7	81.2	10.81	
GP-3	0.1	0.0	0.1	18.6	81.3	11.26	
GP-4A	0.0	0.0	0.0	18.9	81.1	10.38	
GP-4B	0.1	0.0	0.1	18.7	81.2	10.55	
GP-4C	0.0	0.0	0.4	18.3	81.3	19.31	
GP-5	0.9	0.0	0.0	19.8	80.2	15.59	
P-1A	0.5	0.0	0.3	18.5	81.2	16.25	
GP-6	0.0	0.0	0.1	18.7	81.2	9.31	
GP-7A	0.0	0.0	4.5	9.3	86.2	10.76	
GP-7B	0.0	0.0	0.0	18.6	81.4	17.58	
GP-8A	0.0	0.0	0.0	18.8	81.2	6.81	
GP-8B	0.1	0.0	0.0	18.7	81.3	16.2	
P-3A	0.0	0.0	0.0	18.9	81.1	11.55	
GP-9A	0.0	0.0	0.0	18.8	81.2	5.61	
GP-9B	0.0	0.0	0.0	18.9	81.1	18.88	
P-4C	0.0	0.0	2.3	10.8	86.9	DRY	TD = 7.08

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	0.9	16.8	82.3	8.1	
GP-10B	0.1	0.0	0.1	18.8	81.1	8.85	
GP-10C	0.0	0.0	0.2	18.5	81.3	10.29	
P-5A	0.0	0.0	0.0	18.9	81.1	7.63	
GP-11A	0.0	0.0	0.2	18.4	81.4	7.77	
GP-11B	0.2	0.0	0.0	18.6	81.4	9.11	
P-6C	0.0	0.0	0.0	18.6	81.4	5.65	
GP-12	0.1	0.0	0.1	18.6	81.3	4.21	
P-7A	0.6	0.0	0.0	18.5	81.5	4.61	
P-7B	0.2	0.0	0.0	18.4	81.6	4.41	
GP-13	0.0	0.0	0.2	18.1	81.7	5.81	
GP-14	0.0	0.0	0.0	18.4	81.6	4.69	
G-109	0.0	0.0	0.0	18.9	81.1	5.06	
GP-15A	0.0	0.0	0.2	18.7	81.1	3.02	
GP-15B	0.1	0.0	0.1	19.0	80.9	7.38	
GP-28A	0.0	0.0	0.0	18.3	81.7	8.44	
GP-28B	0.0	0.0	0.0	18.4	81.6	3.63	
GP-28C	0.2	0.0	0.0	18.3	81.7	3.69	
GP-16A	0.1	0.0	0.0	18.3	81.7	4.39	
GP-16B	0.3	0.0	0.0	18.3	81.7	3.21	
GP-16C	0.1	0.0	0.0	18.3	81.7	8.89	
GP-29A	0.0	0.0	0.0	18.2	81.8	4.4	
GP-29B	0.0	0.0	0.0	18.3	81.7	8.91	
G-110	0.0	0.0	0.0	18.5	81.5	8.05	
GP-17	0.0	0.0	0.1	18.0	81.9	3.62	
GP-18	0.0	0.0	0.0	18.2	81.8	8.44	
GP-19	0.1	0.0	0.0	18.1	81.9	7.7	
GP-20	0.0	0.0	0.0	18.0	82.0	4.15	
GP-21A	0.0	0.0	0.0	18.1	81.9	6.11	
GP-21B	0.0	0.0	0.0	18.1	81.9	9.74	
GP-22A	0.1	0.0	0.1	19.1	80.8	4.55	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.1	0.0	19.1	80.8	19.06	
GP-30A	0.0	0.0	0.0	18.1	81.9	5.57	
GP-30B	0.1	0.1	0.0	18.1	81.8	6.51	
MW-204 East	0.0	35.9	4.1	9.6	50.4	17.44	
MW-204 West	0.0	0.0	0.0	19.1	80.9	23.99	
GP-23A	0.0	0.0	0.4	17.7	81.9	4.52	
GP-23B	0.0	0.0	0.2	17.9	81.9	10.13	
GP-24A	0.4	0.0	0.4	17.9	81.7	4.65	
GP-24B	7.0	89.8	5.6	0.0	4.6	14.65	
GP-25A	0.1	0.0	1.6	17.5	80.9	4.86	
GP-25B	0.1	0.0	0.1	19.0	80.9	16.44	
GP-31A	0.0	0.0	0.6	17.5	81.9	7.52	
GP-31B	0.0	0.0	0.1	18.1	81.8	14.15	CONNECTED TO EXTRACTION SYSTEM 06/03/11. SHUT VALVE/CEASED VACUUM 06/15/11
GP-26A	0.0	0.0	0.2	18.1	81.7	5.99	
GP-26B	0.0	0.0	0.1	18.1	81.8	14.28	
GP-27A	0.0	0.0	0.0	19.1	80.9	4.15	
GP-27B	0.0	0.0	0.5	18.6	80.9	20.03	
GP-35A	0.0	0.0	1.1	16.9	82.0	5.73	
GP-35B	0.0	0.0	0.1	18.3	81.6	8.75	
G-113	0.0	0.0	0.5	18.7	80.8	11.8	
G-121	0.0	0.0	0.4	18.5	81.1	11.73	
GP-32A	0.0	0.0	0.2	18.9	80.9	11.05	
GP-32B	0.0	0.0	0.4	18.7	80.9	12.05	
GP-37A	0.0	0.0	0.2	18.8	81.0	12.78	
GP-37B	0.0	0.1	0.0	18.9	81.0	12.3	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	7/8/2011						
Person (s) sampling	Frank Silva			Weather Conditions:	Dry		
Ambient Temperature:	91.3		^oF	Ground Conditions:	Tall Grass		
Barometric Pressure:	29.92		in. Hg	Gas/O_2 Meter Model:	GEM 2000	Serial #:	GM12543
Trend in barometric pres	Steady	Going up		Date Last Calibrated:	7/8/2011		
Notes:	Weekly Readings						

	Blower/Flare Data					
	12:41pm		6:45AM		1:25PM	
Date / Time / Location	SC-Flare		NW-Flare		UAV-4	
Blower Inlet Vacuum (in H_2O)	-3.30		-3.4		0.0	
Inlet Valve (Turns) Open / 6	6		6		NA	
Gas Inlet Temperature (^oF)	110		102		NA	
Blower Outlet Pressure (in H_2O)	0.6		0.7		0.0	
Orifice Plate DP (in H_2O)	0.04		0.04		0.00	
Approximate Flow (scfm)	10		11		0	
% CH_4	44.5		42.1		61.7	
% CO_2	19.9		26.1		36.1	
% O_2	4.7		0.1		0.0	
% Balance Gas	30.9		31.7		2.2	
Combustion Temperature(^oF)	532		675		NA	
Blower SPD%	35		42		NA	
Blower Hours	810		866		NA	
Blower Cycles	190		5		NA	
Blower Amps	3.1		3.2		NA	
Blower RPM	1279		1544		NA	
Air Compressor Pressure (psi)	150		150		NA	
Air Compressor Hours	1165.23		1165.23		NA	
Well Field Air Pressure (psi)	80		80		NA	
Approx. Leachate Tank Level	701		701		NA	
Comments					Flame is burning	
					Blower is running.	
					Sparker is sparking.	

DATE: 6/23/11

Gas Extraction Wells

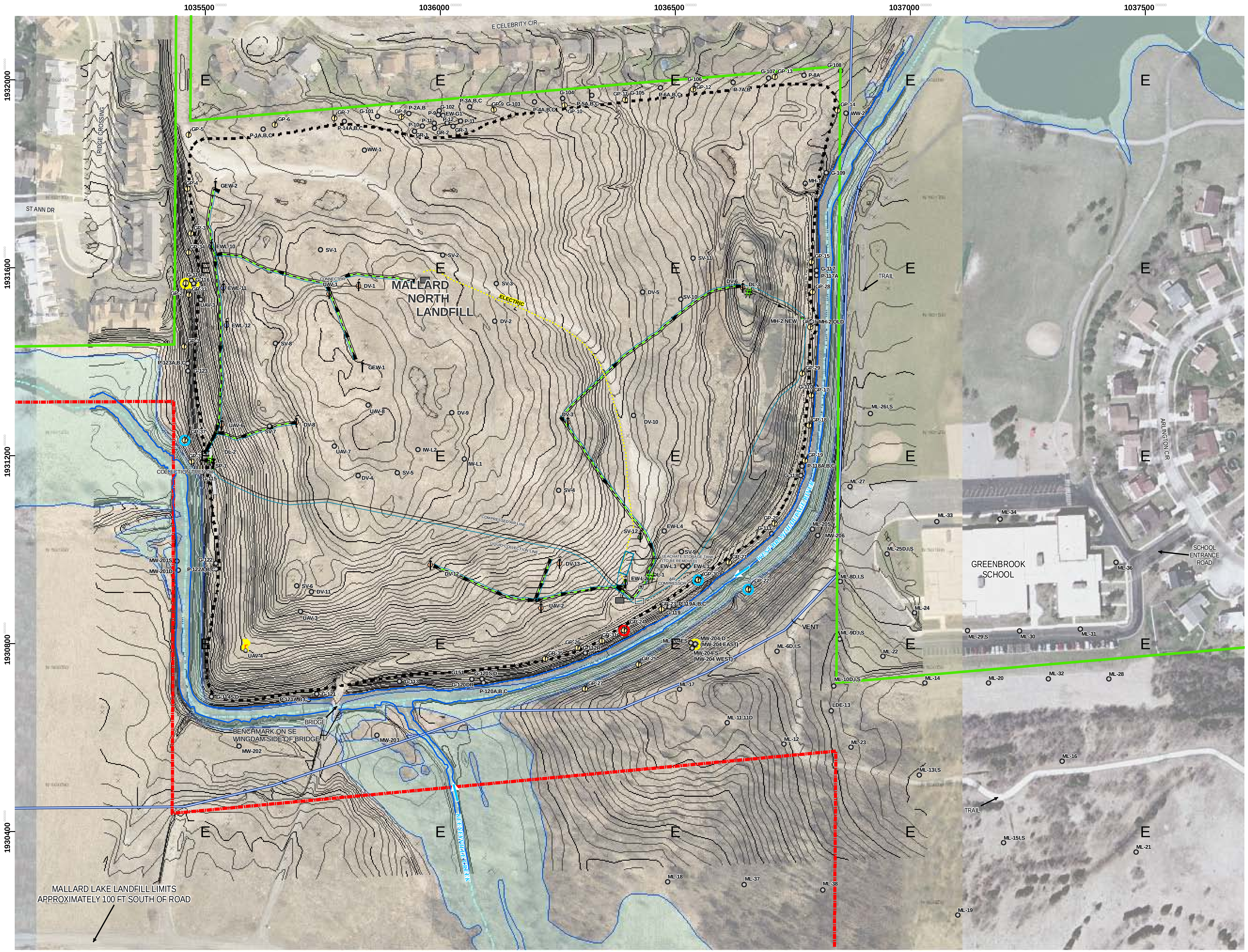
LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^{0}F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
NORTHWEST WELLS														
DV-1	-4.7	-4.7	NC	1.09	NC	3.5	51.2	25.8	0.0	23.0	78	4	NC	20.05
DV-8	-4.7	-2.4	NC	0.9	NC	3.0	37.9	24.6	0.0	37.5	70	3	NC	7.97
EWL-10	-4.7	-4.6	NC	0.62	NC	2.5	68.3	26.9	0.0	4.8	73	1/2	NC	14.00
EWL-11	-4.7	-3.1	NC	0.07	NC	0.5	26.0	23.0	0.0	51.0	70	1/2	NC	15.55
EWL-12	-4.7	-4.60	NC	3.734	NC	6.0	11.4	20.1	0.0	68.5	70	CLOSED	1/4	12.33
GEW-1	-4.7	-4.6	NC	0.03	NC	0.4	68.6	29.4	0.0	2.0	62	3	NC	23.99
GEW-2	-4.7	-4.7	NC	1.11	NC	3.8	60.6	30.4	0.0	9.1	62	1/2	NC	14.36
UAV-1	-4.7	-4.7	NC	2.99	NC	5.4	39.8	27.8	0.0	32.4	72	1/4	NC	20.81
UAV-6	-4.8	-0.3	NC	0.27	NC	1.4	24.6	11.8	10.8	52.8	72	1/2	CLOSED	4.99
SOUTHCENTRAL WELLS														
DV-6	-8.4	0.0	NC	0	NC	0.0	0.1	0.8	18.5	80.6	70	CLOSED	NC	7.54
DV-12	-8.4	-2.3	NC	1.77	NC	4.3	22.3	14.4	8.1	55.2	64	OPEN	9 3/4	24.91
DV-13	-8.4	-0.1	NC	0.014	NC	0.2	6.5	2.3	17.7	74.0	68	4	3 7/8	10.77
EWL-2	-8.2	0.00	NC	0	NC	0.0	0.0	0.1	19.1	80.8	70	CLOSED	NC	7.66
SV-12	-8.4	-0.5	NC	0.153	NC	1.0	25.3	10.6	10.8	53.3	69	OPEN	9 3/4	5.04
DV-3	-8.4	-8.4	NC	2.55	NC	5.1	51.3	24.0	0.0	24.7	60	OPEN	NC	14.61
UAV-2	-8.4	-1.2	NC	0.003	NC	0.3	0.1	0.4	19.0	80.5	69	3/4	CLOSED	7.11

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	56.3	34.2	3.9	5.6	YES	YES	YES	

Methane Detections Figure (June 2011)



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL
- MALLARD LAKE LANDFILL PROPERTY LINE
- FPDDC PRESERVE BOUNDARY

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 06/21/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(JUNE 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE: AS NOTED	PROJ. NO.	
CHECKED BY: DLZ		FILE NO.	MallardNorth931June2011
APPROVED BY:	DATE PRINTED: 07/14/11	**FIGURE 1**	
DATE: JULY 14, 2011			

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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Gas Probes with Significant Methane Detections Table

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2***	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1***	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
	11/15/2010	**49.9**	+0.1	19.11		
	12/1/2010	0.0	0.00	15.45		
	1/13/2011	**5.3**	0.00	14.99		
	2/14/2011	**77.3**	0.00	16.85		
	3/16/2011	**11.9**	0.00	13.53		
	4/28/2011	**44.1**	0.00	12.00		
	5/31/2010	**13.3**	0.00	13.53		
	6/21/2011	**12.0**	0.00	12.41		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2***	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3***	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1***	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
	11/15/2010	**0.3***	0.00	13.54		
	12/1/2010	0.0	0.00	12.79		
	1/13/2011	0.0	0.00	17.78		
	2/14/2011	0.0	-0.10	13.27		
	3/16/2011	0.0	0.00	11.67		
	4/28/2011	5.4	0.00	10.57		
	5/31/2011	0.0	0.00	10.21		
	6/21/2011	0.0	0.00	9.78		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-3	11/15/2010	**0.2***	+0.1	15.18	29.70	
	12/1/2010	0.0	0.00	15.11		
	1/13/2011	0.0	0.00	13.61		
	2/14/2011	0.0	-0.10	14.72		
	3/16/2011	0.0	0.00	10.36		
	4/28/2011	0.0	0.00	4.75		
	5/31/2011	0.0	0.00	7.39		
	6/21/2011	0.0	+0.1	11.26		
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1***	-5.0	NM		
	9/16/2010	**0.1***	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		
	11/15/2010	0.0	0.0	NM		Removed hose extraction
	12/1/2010	0.0	0.0	20.72		
	1/13/2011	0.0	+0.01	20.96		
	2/14/2011	0.0	-0.6	21.18		
	3/16/2011	0.0	0.0	20.64		
	4/28/2011	0.0	0.0	22.27		
	5/31/2011	0.0	0.0	19.46		
	6/21/2011	0.0	0.0	19.31		
GP-8A	1/13/2011	**0.1***	0.0	6.61	7.53	
	2/14/2011	0.0	0.0	8.27		
	3/16/2011	0.0	+0.03	6.61		
	4/28/2011	0.0	0.0	5.21		
	5/31/2011	0.0	0.0	5.49		
	6/21/2011	0.0	0.0	6.81		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3***	0.00	4.92		
	3/17/2010	**0.3***	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
	11/15/2010	0.0	0.00	6.22		
	12/1/2010	0.0	0.00	6.10		
	1/13/2011	**0.1***	+0.08	4.84		
	2/14/2011	0.0	0.00	3.60		
	3/16/2011	0.0	0.00	3.50		
	4/28/2011	0.0	0.00	3.22		
	5/31/2011	0.0	0.00	3.02		
	6/21/2011	0.0	0.00	3.02		
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1***	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
	11/15/2010	0.0	0.00	7.16		
	12/1/2010	0.0	0.00	7.25		
	1/13/2011	**1.1**	0.00	7.35		
	2/14/2011	0.0	0.00	7.38		
	3/16/2011	0.0	+0.03	7.37		
	4/28/2011	-0.7	-0.01	7.36		
	5/31/2011	0.0	0.00	7.38		
	6/21/2011	0.0	+0.1	7.38		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
	11/15/2010	0.0	0.00	7.36		
	12/1/2010	0.0	0.00	6.14		
	1/13/2011	0.0	+0.14	4.50		
	2/14/2011	0.0	0.00	2.57		TD = 3.6' FROZEN?
	3/16/2011	0.0	0.00	2.44		
	4/28/2011	0.0	0.00	3.25		
	5/31/2011	0.0	0.00	2.73		
	6/21/2011	0.0	0.00	3.62		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	**0.2***	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
	11/15/2010	0.0	0.00	12.89		
	12/1/2010	0.0	0.00	14.05		
	1/13/2011	**0.1***	+1.22	11.90		
	2/14/2011	0.0	-0.40	12.85		
	3/16/2011	0.0	0.00	6.14		
	4/28/2011	0.0	0.00	6.23		
	5/31/2011	0.0	0.00	7.21		
	6/21/2011	0.0	+0.1	7.70		
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
	11/15/2010	0.0	0.00	11.72		
	12/1/2010	0.0	0.00	10.30		
	1/13/2011	0.0	0.00	8.76		
	2/14/2011	0.0	0.00	6.38		
	3/16/2011	0.0	0.00	3.51		
	4/28/2011	0.0	0.00	3.11		
	5/31/2011	0.0	0.00	4.11		
	6/21/2011	0.0	+0.1	4.55		
GP-22B	6/28/2010	**0.2***	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
	11/15/2010	0.0	0.00	11.76		
	12/1/2010	0.0	0.00	22.02		
	1/13/2011	**42.5**	+0.02	21.96		
	2/14/2011	**51.2**	0.00	21.54		
	3/16/2011	**2.4**	0.00	20.66		
	4/28/2011	**2.5**	0.00	19.50		
	5/31/2011	0.0	0.00	20.30		
	6/21/2011	**0.1***	0.00	19.06		
GP-23A	1/13/2011	**0.7**	+7.5	5.50		PRESSURE DIMINISHED DURING MEAS.
	2/14/2011	**1.0**	0.00	4.02		
	3/16/2011	**0.3***	0.00	4.53		
	4/28/2011	0.0	0.00	3.85		
	5/31/2011	0.0	0.00	4.21		
	6/21/2011	0.0	0.00	4.52		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-23B	2/23/2010	**0.3***	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2***	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1***	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
	11/15/2010	0.0	0.00	14.08		
	12/1/2010	0.0	0.00	14.95		
	1/13/2011	0.0	+0.31	14.16		
	2/14/2011	0.0	0.00	12.85		
	3/16/2011	0.0	+0.02	11.98		
	4/28/2011	**2.3**	0.00	14.45		
	5/31/2011	0.0	0.00	11.00		
	6/21/2011	0.0	0.00	10.13		
GP-24A	9/16/2010	**0.1***	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
	11/15/2010	0.0	-0.20	9.36		
	12/1/2010	0.0	0.00	8.25		
	1/13/2011	**0.2***	+0.30	6.26		
	2/14/2011	**0.5**	0.00	11.77		
	3/16/2011	0.0	0.00	4.99		
	4/28/2011	0.0	0.00	3.73		
	5/31/2011	0.0	0.00	4.64		
	6/21/2011	0.0	+0.4	4.65		
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7
	11/15/2010	**46.1**	0.00	NM		Removed hose extraction
	12/1/2010	**4.2**	0.00	21.35		
	1/13/2011	**0.4**	+0.02	20.95		
	2/14/2011	**1.3**	0.00	23.95		
	3/16/2011	0.0	0.00	17.33		
	4/28/2011	0.0	0.00	11.24		
	5/31/2011	0.0	0.00	13.47		
	6/21/2011	**89.8**	7.0	14.65		
GP-26A	1/13/2011	**0.1***	0.00	9.92	16.65	
	2/14/2011	0.0	0.00	9.07		
	3/16/2011	0.0	0.00	5.71		
	4/28/2011	0.0	0.00	4.92		
	5/31/2011	0.0	0.00	4.46		
	6/21/2011	0.0	0.00	5.99		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1***	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1***	0.00	19.20		
	10/14/2010	**0.2***	+0.1	20.23		
	11/15/2010	**0.9**	+0.2	21.16		
	12/1/2010	0.0	0.00	20.44		
	1/13/2011	**24.4**	1.23	17.84		
	2/14/2011	**2.4**	0.00	23.84		
	3/16/2011	0.0	0.00	15.73		
	4/28/2011	**0.1***	0.00	14.91		
	5/31/2011	0.0	0.00	15.52		
	6/21/2011	0.0	0.00	14.28		
GP-29A	1/13/2011	**0.1***	0.00	4.31	13.36	
	2/14/2011	0.0	0.00	4.54		
	3/16/2011	0.0	0.00	4.84		
	4/28/2011	0.0	0.00	6.11		
	5/31/2011	0.0	0.00	4.41		
	6/21/2011	0.0	0.00	4.40		
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3***	-6.00	NM		
	6/28/2010	**0.1***	-6.50	NM		
	7/20/2010	**0.2***	-3.50	NM		
	8/16/2010	**0.3***	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
	11/15/2010	**0.4***	0.00	NM		Removed hose extraction
	12/1/2010	**2.7**	0.00	5.45		
	1/13/2011	**0.4***	+0.01	10.12		
	2/14/2011	0.0	0.00	10.04		
	3/16/2011	**0.5**	0.00	9.59		
	4/28/2011	**0.4***	0.00	11.07		
	5/31/2011	0.0	0.00	6.81		
	6/21/2011	**0.1***	+0.1	6.51		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2***	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1***	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10
	11/15/2010	**50.1**	0.00	20.03		
	12/1/2010	0.0	0.00	20.50		
	1/13/2011	**64.7**	+0.01	20.26		
	2/14/2011	**81.7**	-0.10	18.80		
	3/16/2011	**2.3**	0.00	15.97		
	4/28/2011	**7.6**	0.00	11.51		
	5/31/2011	**2.9**	0.00	12.15		
	6/21/2011	0.0	0.00	14.15		Connected to hose extraction 6/3/11. Shut valve 6/15/11
GP-32A	8/16/2010	**0.2***	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
	11/15/2010	0.0	0.00	12.33		
	12/1/2010	0.0	0.00	12.22		
	1/13/2011	**0.1***	0.00	11.64		
	2/14/2011	0.0	0.00	14.00		
	3/16/2011	0.0	0.00	11.09		
	4/28/2011	0.0	0.00	9.93		
	5/31/2011	0.0	0.00	10.25		
	6/21/2011	0.0	0.00	11.05		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1***	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2***	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0.00	13.93		
	6/28/2010	0.0	0.00	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0.0	13.94		
	9/16/2010	0.0	0.0	15.41		
	10/14/2010	0.0	0.0	16.39		
	11/15/2010	**18.4**	0.0	17.16		
	12/1/2010	0.0	0.0	14.91		
	1/13/2011	**0.5**	0.0	14.45		
	2/14/2011	**11.4**	3.3	16.67		
	3/16/2011	**1.1**	0.0	12.01		
	4/28/2011	**0.1***	0.0	11.71		
	5/31/2011	0.0	0.0	11.70		
	6/21/2011	0.0	0.0	11.15		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33B	1/13/2011	**1.9**	0.0	14.29	30.44	
	2/14/2011	**5.3**	-1.5	14.01		
	3/16/2011	**4.0**	0.0	12.21		
	4/28/2011	**1.9**	0.0	12.49		
	5/31/2011	**0.4***	0.0	12.12		
	6/21/2011	**0.0**	+0.2	10.81		
GP-35B	1/13/2011	**0.1***	0.0	13.21	18.23	
	2/14/2011	0.0	0.0	12.46		
	3/16/2011	0.0	0.0	5.31		
	4/28/2011	0.0	0.0	4.89		
	5/31/2011	0.0	0.0	4.91		
	6/21/2011	0.0	0.0	8.75		
GP-37A	6/17/2009	**0.2***	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1***	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1***	-6.00	NM		
	7/20/2010	**0.3***	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
	11/15/2010	**0.5**	0.00	NM		Removed hose extraction
	12/1/2010	0.0	0.00	13.27		
	1/13/2011	**0.1***	0.00	12.96		
	2/14/2011	0.0	0.00	13.25		
	3/16/2011	**0.1***	0.00	12.21		
	4/28/2011	**0.1***	0.00	10.91		
	5/31/2011	0.0	0.00	11.49		
	6/21/2011	0.0	0.00	12.78		
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2***	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		
	11/15/2010	**13.1**	0.00	NM		
	12/1/2010	0.0	0.00	12.78		
	1/13/2011	0.0	+0.86	12.53		
	2/14/2011	0.0	-0.60	12.73		
	3/16/2011	0.0	0.00	11.79		
	4/28/2011	0.0	0.00	10.62		
	5/31/2011	0.0	0.00	11.13		
	6/21/2011	0.0	0.00	11.80		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
	11/15/2010	**57.8**	0.00	NM		Removed hose extraction
	12/1/2010	**31.0**	0.00	14.00		
	1/13/2011	**71.8**	0.00	14.26		
	2/14/2011	**69.1**	0.00	14.15		
	3/16/2011	**78.1**	+0.9	13.46		
	4/28/2011	**76.8**	0.00	12.41		
	5/31/2011	**71.5**	0.00	12.00		
	6/21/2011	**25.7**	-4.7	NM		Connected hose extraction 6/6/11

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		
	11/15/2010	**44.1**	0.00	22.26		
	12/1/2010	**50.9**	0.00	23.09		
	1/13/2011	**69.8**	+0.01	22.93		
	2/14/2011	**32.8**	0.00	22.95		
	3/16/2011	**28.2**	0.00	20.22		
	4/28/2011	**22.2**	0.00	22.51		
	5/31/2011	**34.6**	0.00	22.49		
	6/21/2011	**35.9**	0.00	17.44		
GP-25A	4/28/2011	**0.3***	0.0	5.09	7.53	
	5/31/2011	**0.0**	0.0	5.34		
	6/21/2011	**0.0**	+0.1	4.86		
MW-204S (Deep)	4/28/2011	**0.1***	0.0	23.53	43.58	
	5/31/2011	0.0	0.0	23.50		
	6/21/2011	0.0	0.0	23.99		

1. NM= not measured
2. Measurements prior to 12/1/10 were by RMT, Inc. Measurements on or after 12/1/10 were by FPDDC.
By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09

Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10

Updated by: N. Braun, 3/24/10; update checked by E. Watruba, 3/24/10
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10
Updated by: E. Watruba, 6/17/10; update checked by S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10; update checked by E. Watruba, 6/30/10
Updated by: S. Jorgensen, 7/30/10; update checked by N. Braun, 8/2/10
Updated by: S. Jorgensen, 8/18/10; update checked by T. Halena, 8/19/10
Updated by: J. Schoephoester, 10/20/10; update checked by: S. Jorgensen, 10/21/10
3. * Methane measurement within the margin of error for accuracy of the measuring instrument, and therefore may or may not indicate the presence of methane.
4. Updated by: D. Zinnen, 06/07/11.

Liquid Pumping Volumes and Rates Table

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
EWL-2	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
EWL-2	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
EWL-2	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
EWL-2	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
EWL-2	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
EWL-2	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
EWL-2	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
EWL-2	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
EWL-2	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
EWL-2	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
EWL-2	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
EWL-2	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
EWL-2	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
EWL-2	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
EWL-2	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
EWL-2	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
EWL-2	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
EWL-2	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
EWL-2	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
EWL-2	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
EWL-2	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
EWL-2	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
EWL-2	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
EWL-2	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
EWL-2	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
EWL-2	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
EWL-2	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
EWL-2	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
EWL-2	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
EWL-2	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
EWL-2	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
EWL-2	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
EWL-2	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
EWL-2	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
EWL-2	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
EWL-2	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
EWL-2	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
EWL-2	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
EWL-2	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
EWL-2	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
EWL-2	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
EWL-2	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
EWL-2	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
EWL-2	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
EWL-2	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
EWL-2	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
EWL-2	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
EWL-2	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
EWL-2	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
EWL-2	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
EWL-2	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
EWL-2	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
EWL-2	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
EWL-2	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
EWL-2	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
EWL-2	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
EWL-2	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
EWL-2	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
EWL-2	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
EWL-2	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
EWL-2	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
EWL-2	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
EWL-2	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
EWL-2	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
EWL-2	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
EWL-2	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
EWL-2	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
EWL-2	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
EWL-2	10/22/2010	9.90	773.33	4,940,368	6,849	1,231,941	NA	NA	856	Repaired slight air leak
EWL-2	10/29/2010	-	-	4,988,452	12,021	1,243,962	NA	NA	1,717	Pump off due to leaking tank
EWL-2	11/5/2010	9.15	774.08	5,018,662	7,553	1,251,515	NA	NA	1,079	Counter not counting upon arrival, fixed
EWL-2	11/9/2010	9.05	774.18	5,038,101	4,860	1,256,374	NA	NA	1,215	
EWL-2	11/16/2010	-	-	5,072,572	8,618	1,264,992	NA	NA	1,231	
EWL-2	11/23/2010	9.20	774.03	5,106,373	8,450	1,273,442	NA	NA	1,207	
EWL-2	11/29/2010	8.60	774.63	5,132,434	6,515	1,279,958	NA	NA	1,086	
EWL-2	12/3/2010	8.29	774.94	5,258,014	31,395	1,311,353	NA	NA	7,849	
EWL-2	12/21/2010	8.19	775.04	5,267,780	2,442	1,313,794	NA	NA	136	
EWL-2	12/30/2010	10.30	772.93	5,339,165	17,846	1,331,640	NA	NA	1,983	
EWL-2	1/4/2011	9.87	773.36	5,351,855	3,173	1,334,813	NA	NA	635	
EWL-2	1/14/2011	10.51	772.72	5,377,783	6,482	1,341,295	NA	NA	648	
EWL-2	1/20/2011	12.00	771.23	5,094,899	-	1,341,295	NA	NA	-	COUNTER MALFUNCTION
EWL-2	1/26/2011	12.17	771.06	5,096,408	377	1,341,672	NA	NA	63	
EWL-2	2/2/2011	12.05	771.18	5,096,408	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/9/2011	11.91	771.32	5,974,854	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/14/2011	10.23	773.00	5,984,866	2,503	1,344,175	NA	NA	501	
EWL-2	2/25/2011	10.24	772.99	6,096,503	27,909	1,372,084	NA	NA	2,537	
EWL-2	3/4/2011	11.46	771.77	6,191,381	23,720	1,395,804	NA	NA	3,389	
EWL-2	3/11/2011	11.50	771.73	6,314,056	30,669	1,426,473	NA	NA	4,381	
EWL-2	3/18/2011	10.53	772.70	6,375,502	15,362	1,441,834	NA	NA	2,195	
EWL-2	3/22/2011	10.36	772.87	6,391,164	3,916	1,445,750	NA	NA	979	
EWL-2	4/8/2011	9.71	773.52	6,671,634	70,118	1,515,867	NA	NA	4,125	
EWL-2	4/19/2011	7.31	775.92	6,837,285	41,413	1,557,280	NA	NA	3,765	
EWL-2	4/29/2011	5.91	777.32	6,879,900	10,654	1,567,934	NA	NA	1,065	
EWL-2	5/6/2011	5.86	777.37	6,972,251	23,088	1,591,021	NA	NA	3,298	
EWL-2	5/13/2011	5.96	777.27	7,030,265	14,504	1,605,525	NA	NA	2,072	
EWL-2	5/20/2011	6.60	776.63	7,171,357	35,273	1,640,798	NA	NA	5,039	
EWL-2	5/27/2011	6.15	777.08	7,194,435	5,770	1,646,567	NA	NA	824	
EWL-2	5/31/2011	6.03	777.20	7,365,792	42,839	1,689,407	NA	NA	10,710	
EWL-2	6/10/2011	6.73	776.50	7,490,089	31,074	1,720,481	NA	NA	3,107	
EWL-2	6/17/2011	8.36	774.87	7,540,694	12,651	1,733,132	NA	NA	1,807	
EWL-2	6/21/2011	7.66	775.57	7,681,685	35,248	1,768,380	NA	NA	8,812	
EWL-2	6/30/2011	9.41	773.82	7,827,628	36,486	1,804,866	NA	NA	4,054	
EWL-2	7/8/2011	8.88	774.35	7,951,969	31,085	1,835,951	NA	NA	3,886	
EWL-2	12/31/2050									
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
MH-2	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
MH-2	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
MH-2	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed
MH-2	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
MH-2	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
MH-2	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
MH-2	9/8/2009	NR		NR	NA	NA	63,058	818	68	
MH-2	9/14/2009	NR		NR	NA	NA	63,419	361	60	
MH-2	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure

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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
MH-2	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
MH-2	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
MH-2	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
MH-2	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
MH-2	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
MH-2	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
MH-2	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
MH-2	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
MH-2	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
MH-2	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
MH-2	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
MH-2	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
MH-2	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
MH-2	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
MH-2	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
MH-2	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
MH-2	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
MH-2	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
MH-2	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
MH-2	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
MH-2	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
MH-2	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
MH-2	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
MH-2	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
MH-2	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
MH-2	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
MH-2	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
MH-2	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
MH-2	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
MH-2	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
MH-2	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
MH-2	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
MH-2	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
MH-2	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
MH-2	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
MH-2	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
MH-2	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
MH-2	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
MH-2	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
MH-2	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
MH-2	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
MH-2	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
MH-2	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
MH-2	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
MH-2	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
MH-2	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
MH-2	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
MH-2	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
MH-2	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
MH-2	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
MH-2	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	
MH-2	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
MH-2	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
MH-2	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
MH-2	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
MH-2	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
MH-2	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	

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MH-2	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
MH-2	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
MH-2	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
MH-2	10/22/2010	5.41	769.53	3,794,068	83,053	964,712	NA	NA	10,382	
MH-2	10/29/2010	NR	NR	3,871,264	85,842	1,050,554	NA	NA	12,263	Pump off due to leaking tank
MH-2	11/5/2010	5.30	769.64	4,024,543	38,320	2,924,825	NA	NA	5,474	
MH-2	11/9/2010	4.88	770.06	4,089,583	16,260	2,941,085	NA	NA	4,065	Cut-off wall installed 11/9-11/11
MH-2	11/23/2010	4.20	770.74	4,302,141	53,140	2,994,224	NA	NA	3,796	
MH-2	11/29/2010	3.19	771.75	4,373,837	17,924	3,012,148	NA	NA	2,987	
MH-2	12/3/2010	3.37	771.57	4,731,348	89,378	3,101,526	NA	NA	22,344	
MH-2	12/21/2010	5.13	769.81	4,903,964	43,154	3,144,680	NA	NA	2,397	
MH-2	12/30/2010	3.36	771.58	4,991,078	21,779	3,166,459	NA	NA	2,420	
MH-2	1/4/2011	2.56	772.38	5,091,387	25,077	3,191,536	NA	NA	5,015	
MH-2	1/14/2011	2.82	772.12	5,095,504	1,029	3,192,565	NA	NA	103	
MH-2	1/20/2011	2.73	772.21	5,290,345	48,710	3,241,275	NA	NA	8,118	
MH-2	1/26/2011	3.26	771.68	5,292,630	571	3,241,847	NA	NA	95	
MH-2	2/2/2011	2.50	772.44	5,292,630	-	3,241,847	NA	NA	-	
MH-2	2/9/2011	2.36	772.58	5,430,045	34,354	3,276,200	NA	NA	4,908	
MH-2	2/14/2011	2.21	772.73	5,456,089	6,511	3,282,711	NA	NA	1,302	
MH-2	2/25/2011	1.86	773.08	5,671,148	53,765	3,336,476	NA	NA	4,888	
MH-2	3/4/2011	2.83	772.11	5,828,428	39,320	3,375,796	NA	NA	5,617	
MH-2	3/11/2011	1.09	773.85	6,000,380	42,988	3,418,784	NA	NA	6,141	
MH-2	3/18/2011	1.11	773.83	6,005,061	1,170	3,419,954	NA	NA	167	
MH-2	3/22/2011	1.95	772.99	6,009,623	1,141	3,421,095	NA	NA	285	
MH-2	4/8/2011	1.53	773.41	6,106,195	24,143	3,445,238	NA	NA	1,420	
MH-2	4/19/2011	1.60	773.34	6,189,711	20,879	3,466,117	NA	NA	1,898	
MH-2	4/29/2011	1.75	773.19	6,231,266	10,389	3,476,506	NA	NA	1,039	
MH-2	5/6/2011	2.01	772.93	6,274,726	10,865	3,487,371	NA	NA	1,552	
MH-2	5/13/2011	2.67	772.27	6,661,467	96,685	3,584,056	NA	NA	13,812	
MH-2	5/20/2011	3.02	771.92	7,078,180	104,178	3,688,234	NA	NA	14,883	
MH-2	5/27/2011	2.95	771.99	7,208,437	32,564	3,720,798	NA	NA	4,652	
MH-2	5/31/2011	2.62	772.32	7,486,617	69,545	3,790,343	NA	NA	17,386	
MH-2	6/10/2011	2.63	772.31	7,566,011	19,849	3,810,192	NA	NA	1,985	
MH-2	6/17/2011	3.35	771.59	7,628,820	15,702	3,825,894	NA	NA	2,243	
MH-2	6/21/2011	3.15	771.79	7,659,600	7,695	3,833,589	NA	NA	1,924	
MH-2	6/30/2011	3.51	771.43	7,795,480	33,970	3,867,559	NA	NA	3,774	
MH-2	7/8/2011	2.67	772.27	7,827,559	8,020	3,875,579	NA	NA	1,002	
MH-2	12/31/2050									
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
SP-1	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
SP-1	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
SP-1	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
SP-1	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
SP-1	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
SP-1	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
SP-1	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
SP-1	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	
SP-1	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
SP-1	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
SP-1	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
SP-1	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
SP-1	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
SP-1	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
SP-1	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
SP-1	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
SP-1	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
SP-1	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
SP-1	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
SP-1	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
SP-1	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
SP-1	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
SP-1	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
SP-1	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
SP-1	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
SP-1	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
SP-1	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
SP-1	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
SP-1	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
SP-1	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
SP-1	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
SP-1	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
SP-1	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
SP-1	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
SP-1	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
SP-1	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
SP-1	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
SP-1	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
SP-1	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
SP-1	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
SP-1	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
SP-1	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
SP-1	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
SP-1	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
SP-1	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
SP-1	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
SP-1	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
SP-1	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
SP-1	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
SP-1	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
SP-1	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
SP-1	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
SP-1	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
SP-1	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
SP-1	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
SP-1	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
SP-1	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
SP-1	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
SP-1	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
SP-1	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
SP-1	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	
SP-1	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
SP-1	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump
SP-1	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
SP-1	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
SP-1	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
SP-1	10/22/2010	3.12	773.39	3,944,246	7,687	984,081	NA	NA	961	
SP-1	10/29/2010	NR	NR	3,973,045	7,200	991,281	NA	NA	1,029	Pump off due to leaking tank
SP-1	11/5/2010	3.10	773.41	3,994,762	5,429	996,710	NA	NA	776	
SP-1	11/9/2010	2.83	773.68	4,008,694	3,483	1,000,193	NA	NA	871	
SP-1	11/23/2010	2.78	773.73	4,047,147	9,613	1,009,806	NA	NA	687	Regulator removed due to leak
SP-1	11/29/2010	2.31	774.20	4,054,706	1,890	1,011,696	NA	NA	315	
SP-1	12/3/2010	2.23	774.28	4,080,361	6,414	1,018,110	NA	NA	1,603	
SP-1	12/21/2010	2.00	774.51	4,080,889	132	1,018,242	NA	NA	7	
SP-1	12/30/2010	3.61	772.90	4,125,983	11,274	1,029,515	NA	NA	1,253	

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	1/4/2011	2.35	774.16	4,140,614	3,658	1,033,173	NA	NA	732	
SP-1	1/14/2011	2.21	774.30	4,145,475	1,215	1,034,388	NA	NA	122	
SP-1	1/20/2011	2.15	774.36	4,157,669	3,049	1,037,437	NA	NA	508	
SP-1	1/26/2011	2.65	773.86	4,158,398	182	1,037,619	NA	NA	30	
SP-1	2/2/2011	2.25	774.26	4,158,398	-	1,037,619	NA	NA	-	
SP-1	2/9/2011	1.88	774.63	4,166,635	2,059	1,039,678	NA	NA	294	
SP-1	2/14/2011	1.41	775.10	4,166,747	28	1,039,706	NA	NA	6	
SP-1	2/25/2011	1.22	775.29	4,179,676	3,232	1,042,938	NA	NA	294	
SP-1	3/4/2011	1.03	775.48	4,193,424	3,437	1,046,375	NA	NA	491	
SP-1	3/11/2011	1.43	775.08	4,193,502	20	1,046,395	NA	NA	3	
SP-1	3/18/2011	1.01	775.50	4,201,373	1,968	1,048,363	NA	NA	281	
SP-1	3/22/2011	1.31	775.20	4,219,245	4,468	1,052,831	NA	NA	1,117	
SP-1	4/8/2011	2.02	774.49	4,246,961	6,929	1,059,760	NA	NA	408	
SP-1	4/19/2011	2.87	773.64	4,351,984	26,256	1,086,015	NA	NA	2,387	
SP-1	4/29/2011	1.48	775.03	4,503,523	37,885	1,123,900	NA	NA	3,788	
SP-1	5/6/2011	2.55	773.96	4,618,536	28,753	1,152,653	NA	NA	4,108	
SP-1	5/13/2011	2.25	774.26	4,703,095	21,140	1,173,793	NA	NA	3,020	
SP-1	5/20/2011	2.20	774.31	4,787,654	21,140	1,194,933	NA	NA	3,020	
SP-1	5/27/2011	2.72	773.79	4,933,654	36,500	1,231,433	NA	NA	5,214	
SP-1	5/31/2011	1.51	775.00	5,000,503	16,712	1,248,145	NA	NA	4,178	
SP-1	6/10/2011	2.25	774.26	5,176,710	44,052	1,292,197	NA	NA	4,405	
SP-1	6/17/2011	2.03	774.48	5,311,885	33,794	1,325,991	NA	NA	4,828	
SP-1	6/21/2011	1.87	774.64	5,386,209	18,581	1,344,572	NA	NA	4,645	
SP-1	6/30/2011	2.12	774.39	5,460,587	18,595	1,363,166	NA	NA	2,066	
SP-1	7/8/2011	3.11	773.40	5,543,823	20,809	1,383,975	NA	NA	2,601	
SP-1	12/31/2050									
					Total System Gallons Pumped	**5,287,828**			**7,314**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: D. Zinnen 07/18/11

Southcentral Blower/Flare Summary Table

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/23/2010	11/29/2010	12/3/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM	9:30 AM	10:23 AM	9:30	11:00	10:00	10:50	10:50		
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9	4.0	3.7	4.20	4.0	3.90	4.1	4.1	4.0	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	6	Fully Open
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82	66	65	50	72	NR	51	51	42	42
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30	0.30	0.22	0.5	0.26	0.2	0.3	0.3	2.9	2.9
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010	0.025	0.025	0.02	0.02	0.02	0.23	0.23	0.55	0.55
Approximate Flow (scfm)	13	8	10	8	5	6	12	5	8	8	8	8	8	25	25	37	37
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2	41.0	38.4	36.8	35.5	37.7	28.1	28.1	35.1	35.1
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0	23.8	24.3	23.9	23.0	23.7	20.2	20.2	20.4	20.4
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3	4.3	4.1	5.4	4.8	3.1	6.2	6.2	5.9	5.9
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5	30.9	33.2	33.9	36.7	35.5	45.5	45.5	39.1	39.1
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531	711	632	714 - 908	530	NR	861	861	713	713
Blower SPD%	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717	1858.9	1999	2138	2221	NR	2500	2500	2619	2619
Blower Cycles	3	3	4	4	4	4	4	4	4	4	4	4	NR	4	4	4	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.2	3.2
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR	1280	1280	1280	1280	1279	1280	1280	1279	1279
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140	140	-	150	-	140	135	135	5790	80
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75	78	-	75	-	80	73	73	75	75
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in	12.5 in	30 in	-	-	-	-	-	16417 GAL	90"
Comments	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower								Post Adjustment				Post Adjustment
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%								CH4-35.7%				CH4-38.7%
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%								CO2-22.1%				CO2-22.8%
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%								O2-4.7%				O2-4.7%
			Compressor														
			off due to full														
			frac tank.														

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/16/2011	3/22/2011	4/29/2011	5/13/2011	6/1/2011	6/23/2011
Time				7:30	10:07	7:36	7:36	8:30	7:14	1:12
Blower Inlet Vacuum (in H_2O)	4.0	1.9	1.9	1.2	6.7	-4.5	-4.2	-5.5	-9.1	-8.2
Inlet Valve (Turns) Open / 6	6	6	6	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	42	48	15	5	61	50	71	75	92	92
Blower Outlet Pressure (in H_2O)	3.1	3.7	4.0	4.6	4.3	1.3	1.4	1.5	1.6	2.1
Orifice Plate DP (in H_2O)	0.09	1.30	0.19	0.10	0.05	0.08	0.03	0.26	0.10	0.02
Approximate Flow (scfm)	16	60	23	16	12	16	9	25	16	8
% CH_4	38.7	37.4	35.1	40.5	22.1	50.3	33.8	38.5	31.9	32.6
% CO_2	22.8	18.0	17.6	16.4	11.8	21.5	13.8	17.9	15.6	16.5
% O_2	4.7	6.9	8.2	6.3	10.1	3.9	7.6	5.5	5.6	5.7
% Balance Gas	33.8	37.7	39.1	36.8	56.0	24.3	44.8	38.1	46.9	45.2
Combustion Temperature(^oF)	589	714	970	355	576	687	425	478	442	772
Blower SPD%	35	40	40	40	55	40	40	45	55	55
Blower Hours	2739	3179	3278	3296	342	115	839	1125	107	510
Blower Cycles	193	193	193	193	149	2	143	209	186	190
Blower Amps	3.2	3.2	3.2	3.2	3.7	3.2	3.1	3.3	3.6	3.6
Blower RPMs	1277	1466	1464	1466	2020	1466	1466	1650	2020	2020
Air Compressor Pressure (psi)	150	150	149	149	0.55	125	150	150	150	150
Well Field Air Pressure (psi)	75	75	75	75	80	65	80	80	80	80
Approx. Leachate Tank Level	5961GAL	5768 GAL	13289 GAL	13,289 GAL	17199	8401	1403	1929	2630	2630
Comments										
				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment		Post Adjustment	Post Adjustment
				CH4-52.5%	CH4-41.1%	CH4-41.2%	CH4-37.3		CH4-33.7	CH4-34.0
				CO2-21.4%	CO2-19.8%	CO2-27.3%	CO2-14.7		CO2-15.9	CO2-18.0
				O2-2.6%	O2-3.8%	O2-0.4%	02-6.3		02-4.3	02-6.6

Notes:
NA = not available
NR = not recorded
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Updated by: D. Zinnen, 06/08/11

Northwest Blower/Flare Summary Table

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0
					23.5 BAL	23.6 BAL	22.2 BAL					22.3
									No flame			
									Sparker on			

Notes:
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NR = not recorded
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Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM
Blower Inlet Vacuum (in H_2O)	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70
Blower Outlet Pressure (in H_2O)	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8
Orifice Plate DP (in H_2O)	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14
Approximate Flow (scfm)	22	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20
% CH_4	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0
% CO_2	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2
% O_2	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2
% Balance Gas	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6
Combustion Temperature(^oF)	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602
Blower SPD%	40	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45
Blower Hours	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535
Blower Cycles	114	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127
Blower Amps	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3
Blower RPMs	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652
Air Compressor Pressure (psi)	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160
Well Field Air Pressure (psi)	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA
Comments	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3	HI 1500 LO 200 HI HI 1900 LO LO 200	*Low value due to position of thermo-couple.	Gas readings are pre-blower values.	Pre-blower: CH_4 40.4 CO_2 25.2 O_2 2.2	Pre-blower: CH_4 40.5 CO_2 25.3 O_2 2.3	Post-blower: CH_4 46.1 CO_2 27.4 O_2 2.0	Post-blower: CH_4 43.5 CO_2 25.2 O_2 2.9
												Pre-blower: CH_4 43.6 CO_2 25.6 O_2 2.3					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010
Time	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM
Blower Inlet Vacuum (in H_2O)	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	64	69	NR	70	NR	72	61	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00
Orifice Plate DP (in H_2O)	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18
Approximate Flow (scfm)	NR	NA	25	NR	24	NR	25	22	22	24	24	16	17	20	22	26	23	22	22
% CH_4	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0
% CO_2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2
% O_2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0
% Balance Gas	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8
Combustion Temperature(^oF)	460	761	337	NR	625	NR	356	615	770	262	415	232	NA	1200	1002	938	933	832	800
Blower SPD%	50	50	50	NR	50	50	50	50	50	50	50	35 - 45*	45	45	50	50	50	50	50
Blower Hours	107	NR	227	NR	344	NR	506	665	765	906	956	2	102	522	701	821	1005	1103	1261
Blower Cycles	1	NR	1	NR	3	NR	3	3	4	398	862	13	270	272	272	272	272	272	273
Blower Amps	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4
Blower RPMs	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments																			
			Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower
			CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%
			CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%
	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%
	CH_4 43.6	was taken																	
	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf					*Blower SPD		*Blower speed					
	O_2 2.10	No post-					card					increased to		increased to					
		blower reading										45% on 7/21		50%					
		was recorded.																	

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/29/2010	12/3/2010	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/17/2011	03/34/11	4/29/2011
Time	12:00 PM	11:15 AM	11:25 AM	10:15 AM	12:22 PM	9:40	10:30	NR	11:10							8:38	7:36	
Blower Inlet Vacuum (in H_2O)	6.5	6.3	6.9	6.5	4.1	4.5	4.30	4.00	4.50	4.10	-4.10	3.90	3.20	4.00	1.10	7.10	4.50	5.03
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	Fully Open	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	NA	NA	NA	68	60	50	75	68	48	47	47	45	42	5	10	54	36	78
Blower Outlet Pressure (in H_2O)	2.30	2.70	2.20	2.00	1.30	1.6	1.5	4.7	2.5	1.3	1.3	2.2	4.0	2.2	5.6	2.6	0.5	1.1
Orifice Plate DP (in H_2O)	0.14	0.20	0.18	0.18	0.14	0.10	0.14	0.19	0.09	0.01	-0.01	0.17	0.50	0.20	0.10	0.26	0.14	0.33
Approximate Flow (scfm)	20	24	22	22	20	17	20	23	16	5	5	21	37	24	16	28	21	26
% CH_4	38.4	36.5	35.3	32.6	37.1	34.3	34.0	33.4	33.6	31.7	31.7	40.4	47.2	43.8	47.5	40.5	33.5	41.7
% CO_2	27.0	27.2	26.8	25.3	27.3	26.5	26.1	25.0	26.7	25.5	25.5	29.3	30.0	30.2	28.0	27.4	22.1	24.8
% O_2	2.0	1.8	1.9	2.6	2.8	6.3	3.1	3.6	3.4	4.1	4.1	1.1	1.5	1.9	2.2	1.4	5.5	0.1
% Balance Gas	32.6	34.5	36.0	39.5	32.8	32.9	36.8	38.0	36.3	38.7	38.7	29.2	21.3	24.1	22.3	30.7	38.9	33.4
Combustion Temperature(^oF)	810	759	573	769	1054	894	690	580	950	530	530	665	1055	1058	1156	1040	684	668
Blower SPD%	50	50	50	50	40	40	40	40	40	40	40	40	42	42	42	52	42	42
Blower Hours	1381	1561	1697	1837.3	1957	2095	2176	2318	2457	2575	2575	2693	3195	3295	3494	4174	4873	5598
Blower Cycles	273	274	426	426	571	571	NR	573	579	573	573	573	573	573	573	574	574	574
Blower Amps	3.4	3.4	NR	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	35.0	3.3	3.2
Blower RPMs	1838	1838	NR	1838	1470	1470	1468	1469	1470	1279	1470	1505	1544	1542	1544	1914	1541	1544
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	80	150	150	149	149	0.55		150
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	75	75	75	75	75	80		80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	16417 GAL	90"	5961 GAL	5768 GAL	13289 GAL	13,289 GAL	17199		1403
Comments				Replaced	down on arrival													
				temp	had difficulties getting			Post Adjustment			Post Adjustment				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment
				probe	started. Turned off			CH4-34.7%			CH4-40.4%				CH4-46.9%	CH4-35.7%	CH4-41.2%	CH4-40.8
					blower and let sit			CO2-25.8%			CO2-29.3%				CO2-29.7%	CO2-24.3%	CO2-27.3%	CO2-23.1
					2 hrs to build up			O2-3.3%			O2-1.1%				O2-1.7%	O2-3.8%	O2-0.4%	O2-1.9
					methane conc.													
					After 2hr wait, flare													
					lit on first startup													
					attempt.													

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/13/2011	6/1/2011	6/23/2011
Time	8:45	9:45	10:02
Blower Inlet Vacuum (in H_2O)	-4.50	-4.90	-4.60
Inlet Valve (Turns) Open / 6	6	6	6
Gas Inlet Temperature (^oF)	77	81	79
Blower Outlet Pressure (in H_2O)	1.6	1.2	1.1
Orifice Plate DP (in H_2O)	0.15	0.13	0.06
Approximate Flow (scfm)	21	18	13
% CH_4	54.3	40.7	43.0
% CO_2	28.7	23.8	25.5
% O_2	0.0	1.4	1.0
% Balance Gas	17.0	34.1	30.5
Combustion Temperature(^oF)	975	603	913
Blower SPD%	42	42	42
Blower Hours	0	161	563
Blower Cycles	1	4	5
Blower Amps	3.3	3.2	3.2
Blower RPMs	1544	1544	1544
Air Compressor Pressure (psi)	150	150	150
Well Field Air Pressure (psi)	80	80	80
Approx. Leachate Tank Level	1929	2630	2630
Comments			
		Post Adjustment	Post Adjustment
		CH4-64.3	CH4-43.4
		CO2-32.9	CO2-26
		O2-0.0	O2-0.9

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Gas Extraction Well Summary Tables

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60	1.80	1.80
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3		51.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7		27.2	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0		0.4	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0		21.1	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR		82	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.5		-5.5		-6.6		-3.8		-3.1	
Well Side Pressure (in H_2O)	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR	-3.7	-3.5	-0.8	NC
Orifice Plate DP (in H_2O)	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR	1.80	1.10	1.95	NC
% CH_4	50.7		53.3		60.5		60.5		48.0		41.5		37.2		43.3	
% CO_2	26.5		27.4		34.1		30.9		29.5		28.3		26.2		26.6	
% O_2	0.0		0.0		0.0		0.0		0.0		0.6		1.9		2.3	
% Balance Gas	22.8		19.3		5.4		8.6		22.5		29.6		34.7		27.8	
Gas Temperature(^oF)	64		70		73		72		72		68		68		60	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	8	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NM	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.6		-7.1		-4.7		-4.9		-4.8		-4.7	
Well Side Pressure (in H_2O)	-0.5	NC	-6.9	NC	-4.6	NC	-4.9	-4.9	-4.7	-4.7	-4.7	NC
Orifice Plate DP (in H_2O)	0.165	NC	3.2	NC	1.4	NC	1.8	1.20	2.0	1.98	1.09	NC
% CH_4	50.0		44.6		47.1		45.9		49.7		51.2	
% CO_2	27.1		28.8		28.5		24.0		23.8		25.8	
% O_2	2.3		0.0		0.0		0.0		0.6		0.0	
% Balance Gas	20.6		26.6		24.4		30.1		25.9		23.0	
Gas Temperature(^oF)	30		50		40		60		86		78	
Valve Turns Open	1	2	2	4	4	NC	4	4	4	NC	4	NC
Liquid Level (ft BTOC)	22.90		21.37		20.84		22.71		21.86		20.05	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.5		-5.7		-4.2		-4.7		-4.3	
Well Side Pressure (in H_2O)	-1.30	-0.8	-0.20	NC	-0.20	NC	-5.30	NC	-4.20	NC	-4.50	-2.5	-4.30	NC
Orifice Plate DP (in H_2O)	0.75	0.55	0.49	NC	0.173	NC	3.140	NC	2.080	NC	1.342	0.80	1.980	NC
% CH_4	35.3		36.6		37.3		32.0		29.8		28.1		30.1	
% CO_2	28.9		29.4		26.2		26.6		24.2		21.0		19.9	
% O_2	0.1		1.3		1.8		1.9		0.6		0.1		1.4	
% Balance Gas	35.7		32.7		34.7		39.5		45.4		50.8		48.6	
Gas Temperature(^oF)	53		42		20		49		42		60		86	
Valve Turns Open	0.75	0.25	NR	NR	1/4	1/2	1/2	7/8	1	NC	1	3	3	NC
Liquid Level (ft BTOC)	20.32		NM		20.46		8.65		7.93		8.05		8.01	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-4.7	
Well Side Pressure (in H_2O)	-2.40	NC
Orifice Plate DP (in H_2O)	0.900	NC
% CH_4	37.9	
% CO_2	24.6	
% O_2	0.0	
% Balance Gas	37.5	
Gas Temperature(^oF)	70	
Valve Turns Open	3	NC
Liquid Level (ft BTOC)	7.97	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC	-3.2	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC	0.030	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8		26.3	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7		25.3	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5		0.4	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0		48.0	
Gas Temperature(^oF)	76		88		84		90		84		62		50	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC	0.25	NC
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26		17.79	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.5		-6.5		-4.7		-4.8		-4.8		-4.7	
Well Side Pressure (in H_2O)	0.0	NC	-1.2	NC	-6.5	NC	-4.7	NC	-4.7	-4.7	-4.8	NC	-4.6	NC
Orifice Plate DP (in H_2O)	0.050	NC	0.119	NC	1.740	NC	0.002	NC	0.717	0.70	0.090	NC	0.62	NC
% CH_4	39.3		31.4		21.5		56.0		54.6		60.0		68.3	
% CO_2	28.5		23.3		15.8		24.4		19.6		19.9		26.9	
% O_2	1.3		2.5		6.0		0.0		2.2		1.2		0.0	
% Balance Gas	30.9		42.8		56.7		19.6		23.6		18.9		4.8	
Gas Temperature(^oF)	36		19		48		30		74		75		73	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	1/4	1/4	1/2	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	NM		18.66		16.78		16.78		13.81		14.21		14.00	
Comments														

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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4		-5.0	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC	0.50	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0		19.1	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2		19.8	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0		3.9	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8		57.2	
Gas Temperature(^oF)	60		NR		58		80		88		88		90	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77		15.65	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6		-3.8		-3.0		-1.5		-6.5		-4.7	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC	-3.8	NC	-3.0	NC	-1.5	NC	-6.5	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.40	NC	0.85	NC	0.45	NC	0.29	NC	0.623	NC	0.670	NC	0.090	NC
% CH_4	16.0		13.5		16.5		14.7		17.1		10.0		20.3	
% CO_2	19.6		19.4		23.7		21.5		20.6		19.4		22.1	
% O_2	2.9		3.8		0.2		2.0		2.9		2.4		0.3	
% Balance Gas	61.5		63.3		59.6		61.8		59.4		68.2		57.3	
Gas Temperature(^oF)	82		62		50		34		20		46		30	
Valve Turns Open	7	NC	7	NC	7	NC	NR	NR	1/8	CLOSED	CLOSED	1/4	1/4	NC
Liquid Level (ft BTOC)	15.59		17.38		17.82		NM		18.59		17.27		16.52	
Comments														

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.8		-4.8		-4.7	
Well Side Pressure (in H_2O)	-3.8	-2.9	-2.9	NC	-3.1	NC
Orifice Plate DP (in H_2O)	0.550	0.00	0.060	NC	0.070	NC
% CH_4	14.8		20.4		26.0	
% CO_2	18.5		18.6		23.0	
% O_2	0.0		0.0		0.0	
% Balance Gas	66.7		61.0		51.0	
Gas Temperature(^oF)	60		75		70	
Valve Turns Open	1/4	1/2	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	15.08		15.98		15.55	
Comments						

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6		-3.8	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC	-1.60	-0.2
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC	1.20	0.10
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0		2.1	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2		16.1	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1		15.4	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7		66.4	
Gas Temperature(^oF)	78		84		84		82		78		60		50	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC	1	0.5
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41		17.48	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.3		-5.6		-4.2		-4.9		-4.8		-4.7	
Well Side Pressure (in H_2O)	-0.30	NC	0.00	NC	-4.80	NC	0.00	NC	0.00	0.0	0.00	NC	-4.60	NC
Orifice Plate DP (in H_2O)	0.60	NC	0.001	NC	0.937	NC	0.010	NC	0.006	0.00	0.000	NC	3.734	NC
% CH_4	2.0		3.1		16.5		5.2		7.6		10.7		11.4	
% CO_2	12.5		3.2		17.2		4.8		11.0		9.6		20.1	
% O_2	13.6		17.0		4.2		16.6		11.0		0.0		0.0	
% Balance Gas	71.9		76.7		62.1		73.4		70.4		79.7		68.5	
Gas Temperature(^oF)	32		19		40		32		72		76		70	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	CLOSED	CLOSED	CLOSED	CLOSED	NC	CLOSED	1/4
Liquid Level (ft BTOC)	NM		15.36		13.03		10.11		10.2		10.17		12.33	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.6		-6.9		-4.2		-4.8		-4.8	
Well Side Pressure (in H_2O)	-3.8	NC	-3.2	NC	-0.6	NC	-6.6	NC	-4.2	NC	-4.7	-4.7	-4.8	NC
Orifice Plate DP (in H_2O)	2.40	NC	1.03	NC	0.311	NC	3.980	NC	1.590	NC	1.709	1.50	1.810	NC
% CH_4	54.9		53.5		59.6		62.0		64.9		62.5		61.4	
% CO_2	33.7		31.4		29.3		33.5		34.8		29.6		28.6	
% O_2	0.2		1.9		3.3		0.0		0.1		0.0		1.1	
% Balance Gas	11.2		13.2		7.8		4.5		0.2		7.9		8.9	
Gas Temperature(^oF)	60		48		32		52		52		60		60	
Valve Turns Open	10.25	NC	NR	NR	3/4	1	1	3	3	NC	3	3	3	3
Liquid Level (ft BTOC)	NR		NM		26.16		26.29		25.79		24.85		24.85	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-4.7	
Well Side Pressure (in H_2O)	-4.6	NC
Orifice Plate DP (in H_2O)	0.03	NC
% CH_4	68.6	
% CO_2	29.4	
% O_2	0.0	
% Balance Gas	2.0	
Gas Temperature(^oF)	62	
Valve Turns Open	3	NC
Liquid Level (ft BTOC)	23.99	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20	0.05	0.08
% CH_4	58		71.1		43.6		37.1		54.4		47.9		48.9	
% CO_2	29		28		28.8		23.1		27.0		26.0		26.7	
% O_2	1.9		0		1.9		3.9		0.9		1.3		1.4	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8		23.0	
Gas Temperature(^oF)	36		40		34		46		50		NR		68	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7	7.5	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		17.3	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.5	NC	-6.6	NC	NR	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.03	NC	0.01	NC	0.04	NR	0.00	NC	0.03	NC	0.02	NC
% CH_4	56.1		67.8		65.3		66.4		66.2		63.3		65.4	
% CO_2	29.4		30.6		30.7		31.9		33.5		32.7		34.0	
% O_2	0.0		0.4		0.9		1.0		0.1		0.7		0.4	
% Balance Gas	14.5		1.2		3.1		0.7		0.2		3.3		0.2	
Gas Temperature(^oF)	74		84		85		90		88		64		63	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.22		17.28		17.00		17.04		17.18		17.04	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.4		-6.6		-4.7		-4.8		-4.8		-4.7	
Well Side Pressure (in H_2O)	-3.0	NC	-1.4	NC	-6.5	NC	-4.7	NC	-4.8	-4.8	-4.8	NC	-4.7	NC
Orifice Plate DP (in H_2O)	0.05	NC	0.254	NC	0.003	NC	0.020	NC	0.556	0.00	0.020	NC	1.110	NC
% CH_4	62.4		60.2		65.7		65.9		71.2		69.6		60.6	
% CO_2	31.4		31.5		33.4		33.9		28.7		27.2		30.4	
% O_2	1.9		2.5		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	4.3		5.8		0.9		0.2		0.1		3.2		9.0	
Gas Temperature(^oF)	38		22		50		32		72		75		62	
Valve Turns Open	NR	NR	3/4	1	1	2	2	1/4	1/4	1/2	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	NM		16.96		16.91		16.93		16.77		16.83		14.36	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.1		-0.5		-6.6		-4.7		-4.9		-4.8	
Well Side Pressure (in H_2O)	-3.8	-2.8	-0.6	NC	-0.2	NC	-6.5	NC	-4.6	NC	-3.7	-4.9	-4.2	NC
Orifice Plate DP (in H_2O)	3.20	2.20	1.66	NC	0.003	NC	3.210	NC	3.000	NC	0.480	2.10	3.100	NC
% CH_4	37.5		35.9		44.4		45.4		36.9		41.7		41.3	
% CO_2	30.0		28.2		28.6		30.7		28.6		25.8		25.4	
% O_2	0.3		1.6		1.7		0.0		0.5		0.4		1.1	
% Balance Gas	32.2		34.3		25.3		23.9		34.0		32.1		32.2	
Gas Temperature(^oF)	60		50		32		50		42		54		86	
Valve Turns Open	8.5	4.5	NR	NR	1/4	1/2	1/2	2.0	2	1/4	1/4	1/4	1/4	NC
Liquid Level (ft BTOC)	22.5		NM		7.50		23.46		22.60		21.67		21.71	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011	
	I	P
Header Side Pressure[1] (in H_2O)	-4.7	
Well Side Pressure (in H_2O)	-4.7	NC
Orifice Plate DP (in H_2O)	2.99	NC
% CH_4	39.8	
% CO_2	27.8	
% O_2	0.0	
% Balance Gas	32.4	
Gas Temperature(^oF)	72	
Valve Turns Open	1/4	NC
Liquid Level (ft BTOC)	20.81	
Comments		

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR		-4.4	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC	-0.8	-0.9
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC	0.65	0.85
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2		34.4	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5		16.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4		8.8	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9		40.3	
Gas Temperature(^oF)	38		44		38		46		52		NR		74	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC	1	1.25
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.5		-5.0		-5.25		-6.60		-3.80	
Well Side Pressure (in H_2O)	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR	0.1	NC
Orifice Plate DP (in H_2O)	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR	0.10	NC
% CH_4	21.1		21.2		21.7		32.5		19.8		21.2		27.5	
% CO_2	12.9		11.5		12.9		19.7		11.6		14.0		16.4	
% O_2	10.5		10.6		10.7		6.9		11.2		11.2		9.4	
% Balance Gas	55.5		56.7		54.7		40.9		57.4		53.6		46.7	
Gas Temperature(^oF)	72		80		84		84		84		64		58	
Valve Turns Open	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25	0.5	NC
Liquid Level (ft BTOC)	11.95		NR		DRY		DRY		DRY		12.34		12.51	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.30		-0.80		-5.70		-3.80		-4.60		-4.50		-4.80	
Well Side Pressure (in H_2O)	0.0	NC	-0.5	NC	0.5	NC	-1.1	NC	0.0	-0.8	-4.0	NC	-0.3	NC
Orifice Plate DP (in H_2O)	0.01	NC	0.583	NC	0.236	NC	0.010	NC	0.028	0.60	0.040	NC	0.27	NC
% CH_4	23.3		52.0		21.3		21.1		71.8		36.7		24.6	
% CO_2	14.2		28.3		10.3		11.6		28.0		24.0		11.8	
% O_2	11.5		2.5		12.9		12.1		0.0		0.0		10.8	
% Balance Gas	51.0		17.2		55.5		55.2		0.2		39.3		52.8	
Gas Temperature(^oF)	40.0		24.0		52.0		30.0		74.0		84.0		72.0	
Valve Turns Open	NR	NR	1/2	3/4	3/4	1/2	1/4	1/8	1/8	1/2	1/2	NC	1/2	CLOSED
Liquid Level (ft BTOC)	NM		7.50		4.51		4.11		DRY		4.08		4.99	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8		-3.8		-2.9		-1.2		-8.0	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC	-3.8	NC	-2.9	NC	-0.8	NC	-7.9	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC	2.00	NC	1.45	NC	0.461	NC	3.250	NC
% CH_4	67.3		60.9		52.8		39.3		39.8		50.3		52.0	
% CO_2	28.9		30.3		30.1		27.4		25.0		21.9		24.0	
% O_2	0.2		0.3		0.4		0.1		1.8		1.5		0.5	
% Balance Gas	3.6		8.5		16.7		33.2		33.4		26.3		23.5	
Gas Temperature(^oF)	72		70		58		54		46		36		38	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC	12.25	NC	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NR		NM		12.31		20.13	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-4.3		-8.9		-8.4	
Well Side Pressure (in H_2O)	-3.8	NC	-4.3	-4.2	-8.9	NC	-8.4	NC
Orifice Plate DP (in H_2O)	2.510	NC	0.690	0.90	1.750	NC	2.55	NC
% CH_4	60.2		68.7		68.7		51.3	
% CO_2	24.4		22.0		21.9		24.0	
% O_2	0.3		0.0		0.0		0.0	
% Balance Gas	15.1		9.3		9.4		24.7	
Gas Temperature(^oF)	44		52		72		60	
Valve Turns Open	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	OPEN	NC	OPEN	NC
Liquid Level (ft BTOC)	20.09		18.38		19.3		14.61	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0		0.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC	0.00	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2		0.5	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1		0.6	
% O_2	18.0		NR		19.2		18.8		20.2		19.3		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4		79.6	
Gas Temperature(^oF)	46		NR		NR		58		76		84		82	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/21/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.5		-3.7		-3.9		-3.8		-2.9		-0.7	
Well Side Pressure (in H_2O)	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC	-1.3	-0.1	-2.9	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.03	NC	0.015	NC	0.005	NC	0.030	NC	0.01	0.01	1.45	NC	0.005	NC
% CH_4	0.1		0.3		0.3		0.0		0.2		0.8		1.3	
% CO_2	0.4		0.4		0.5		0.6		0.7		2.1		4.0	
% O_2	18.6		19.7		19.9		19.3		19.5		19.1		18.2	
% Balance Gas	80.9		79.6		79.3		80.1		79.6		78.0		76.5	
Gas Temperature(^oF)	98		88		80		58		58		28		20	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.25	NR	NR	NR	CLOSED	CLOSED
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NM		11.02	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/16/2011		3/22/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-8.3		-3.5		-4.3		-8.9		-8.4	
Well Side Pressure (in H_2O)	0.0	NC	0.0	NC	0.0	0.0	0.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.000	NC	0.000	NC	0.000	0.00	0.000	NC	0	NC
% CH_4	1.2		0.0		1.9		0.0		0.1	
% CO_2	1.1		0.2		0.5		0.5		0.8	
% O_2	19.1		19.7		18.6		18.7		18.5	
% Balance Gas	78.6		80.1		79.0		80.8		80.6	
Gas Temperature(^oF)	50		40		64		70		70	
Valve Turns Open	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	NC	CLOSED	NC
Liquid Level (ft BTOC)	11.55		8.86		7.86		8.41		7.54	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC	-1.3	NR
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC	1.30	NR
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4		34.5	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6		17.9	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2		8.7	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8		38.9	
Gas Temperature(^oF)	NR		50		72		76		88		72		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.8		-1.2		-0.8		-6.7		-4.3		-4.3	
Well Side Pressure (in H_2O)	-0.9	-0.2	-0.2	-0.2	-1.0	-0.2	-0.3	NC	-6.5	NC	-0.2	NC	-0.2	NC
Orifice Plate DP (in H_2O)	0.50	0.10	0.22	0.10	0.50	0.10	0.188	NC	1.080	NC	1.270	NC	1.270	NC
% CH_4	29.4		36.7		47.5		65.7		23.0		23.0		48.8	
% CO_2	16.1		20.1		24.4		24.4		16.0		16.0		22.5	
% O_2	10.2		7.1		5.6		1.5		5.9		5.9		3.7	
% Balance Gas	44.3		36.1		22.5		8.4		55.1		55.1		25.0	
Gas Temperature(^oF)	62		58		42		30		48		48		46	
Valve Turns Open	1	0.75	0.75	0.25	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NM		26.52		26.63		26.63		26.19	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1		-8.4	
Well Side Pressure (in H_2O)	-2.4	-1.5	-9.1	NC	-2.3	NC
Orifice Plate DP (in H_2O)	0.688	0.10	1.250	NC	1.77	NC
% CH_4	31.1		33.1		22.3	
% CO_2	15.5		16.5		14.4	
% O_2	6.8		5.5		8.1	
% Balance Gas	46.6		44.9		55.2	
Gas Temperature(^oF)	52		70		64	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC	OPEN	9 3/4
Liquid Level (ft BTOC)	25.41		25.63		24.91	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC	-0.70	NR
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC	0.045	NR
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2		17.5	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4		7.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6		14.9	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8		60.2	
Gas Temperature(^oF)	NR		62		88		90		100		88		80	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC	1.5	1.0
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-7.3		-4.3		-4.4	
Well Side Pressure (in H_2O)	0.01	-0.1	-0.01	-0.2	-0.70	NC	0.00	NC	-4.80	NC	-1.00	NC	-2.20	-0.7
Orifice Plate DP (in H_2O)	0.010	0.08	0.010	0.12	0.119	NC	0.018	NC	0.080	NC	0.720	NC	0.242	0.10
% CH_4	71.9		72.6		11.0		60.8		14.3		30.3		9.4	
% CO_2	28.1		27.1		4.9		21.2		6.0		10.9		3.4	
% O_2	0.0		0.2		17.3		3.3		15.9		11.5		16.4	
% Balance Gas	0.0		0.1		66.8		14.7		63.8		47.3		70.8	
Gas Temperature(^oF)	62		72		40		28		42		40		58	
Valve Turns Open	0.25	0.75	1.5	0.75	NR	NR	3/4	1	1	2	2	NC	2	4
Liquid Level (ft BTOC)	NR		NR		NM		14.73		15.21		13.61		12.06	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011		6/23/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-9.1		-8.4	
Well Side Pressure (in H_2O)	-2.00	NC	-0.1	NC
Orifice Plate DP (in H_2O)	1.100	NC	0.014	NC
% CH_4	16.2		6.5	
% CO_2	10.1		2.3	
% O_2	13.0		17.7	
% Balance Gas	60.7		73.5	
Gas Temperature(^oF)	65		68	
Valve Turns Open	4	NC	4	3 7/8
Liquid Level (ft BTOC)	15.55		10.77	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9		-0.9		-2.0		-6.7		-4.3	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC	0.02	NC	-0.20	NC	0.00	NC	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC	0.01	NC	0.60	NC	0.017	NC	0.000	NC	0.000	NC
% CH_4	14.1		1.1		35.8		2.0		1.4		1.1		2.0	
% CO_2	6.1		2.5		16.6		12.5		3.0		1.3		0.8	
% O_2	15.3		19.1		7.5		13.6		19.8		19.4		18.6	
% Balance Gas	64.5		77.3		40.1		71.9		75.8		78.2		78.6	
Gas Temperature(^oF)	79		54		56		32		38		42		42	
Valve Turns Open	0	NC	0.25	NC	0.125	NC	NR	NR	1/8	CLOSED	1/8	CLOSED	CLOSED	CLOSED
Liquid Level (ft BTOC)	10.24		8.54		8.75		NM		10.20		11.40		10.38	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1		-8.2	
Well Side Pressure (in H_2O)	0.00	0.0	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.002	0.00	0.000	NC	0	NC
% CH_4	2.6		1.4		0.0	
% CO_2	0.7		1.0		0.1	
% O_2	18.6		18.6		19.1	
% Balance Gas	78.1		79.0		80.8	
Gas Temperature(^oF)	66		65		70	
Valve Turns Open	CLOSED	CLOSED	CLOSED	NC	CLOSED	NC
Liquid Level (ft BTOC)	5.91		6.01		7.66	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC	0.05	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5		34.0	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0		16.3	
% O_2	0.1		NR		4.1		6.5		7.8		8.6		8.0	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9		41.7	
Gas Temperature(^oF)	44		NR		56		76		80		98		84	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.8		-3.9		-1.4		-7.5		-4.3	
Well Side Pressure (in H_2O)	-0.025	NR	-0.400	-0.10	-0.1	-3.0	0.0	NC	-1.4	NC	-6.8	NC	-1.0	NC
Orifice Plate DP (in H_2O)	0.02	NR	0.24	0.05	0.05	0.23	0.02	NC	1.439	NC	0.320	NC	0.820	NC
% CH_4	64.6		23.7		61.5		27.2		68.8		10.6		53.8	
% CO_2	27.0		13.2		25.9		12.9		21.1		5.3		20.4	
% O_2	1.5		11.0		0.2		11.8		1.5		15.8		5.3	
% Balance Gas	6.9		52.1		12.4		48.1		8.6		68.3		20.5	
Gas Temperature(^oF)	80		64		60		40		10		38		40	
Valve Turns Open	0.125	0.25	1	0.75	0.25	0.5	NR	NR	FULL OPEN	FULLOPEN	FULL OPEN	FULLOPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NR		NM		5.05		5.03		5.02	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.1		-9.1		-8.4	
Well Side Pressure (in H_2O)	-1.1	-0.7	-9.1	NC	-0.5	NC
Orifice Plate DP (in H_2O)	0.570	0.40	0.980	NC	0.153	NC
% CH_4	14.3		21.8		25.3	
% CO_2	6.4		15.4		10.6	
% O_2	14.7		7.9		10.8	
% Balance Gas	64.6		54.9		53.3	
Gas Temperature(^oF)	52		72		69	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC	OPEN	9 3/4
Liquid Level (ft BTOC)	DRY		5.03		5.04	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2		NR	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2	NR	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01	NR	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9		NR	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8		NR	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5		NR	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8		NR	
Gas Temperature(^oF)	36		38		24		36		54	54	48		NR	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.5		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR	-3.50	NC	-3.40	NC
Orifice Plate DP (in H_2O)	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR	0.06	NC	0.035	NC
% CH_4	62.2		1.8		77.4		73.5		67.8		31.7		19.8	
% CO_2	4.3		2.0		20.4		25.6		31.8		17.6		18.3	
% O_2	0.8		18.4		0.1		0.0		0.4		9.3		5.7	
% Balance Gas	32.7		77.8		2.1		0.9		0.0		41.4		56.2	
Gas Temperature(^oF)	NR		64		82		88		98		90		87	
Valve Turns Open	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-6.7		-4.3		-4.2	
Well Side Pressure (in H_2O)	-3.30	-1.6	-0.60	-0.3	0.20	-0.3	-0.30	NC	-6.70	NC	-4.30	NC	0.30	-4.1
Orifice Plate DP (in H_2O)	0.010	0.01	0.01	0.01	0.19	0.01	0.021	NC	0.060	NC	0.070	NC	0.006	0.00
% CH_4	10.0		31.7		27.3		58.6		46.8		51.5		81.5	
% CO_2	11.2		21.8		13.7		17.9		13.1		16.6		17.7	
% O_2	11.1		5.6		10.3		4.3		7.1		6.8		0.0	
% Balance Gas	67.7		40.9		48.7		19.2		33.0		25.1		0.8	
Gas Temperature(^oF)	58		58		42		20		50		42		68	
Valve Turns Open	1	0.75	0.5	NR	NR	NR	1/8	1/2	1/2	3/8	3/8	1/2	1/2	3/4
Liquid Level (ft BTOC)	NR		NR		NM		8.97		8.79		8.14		8.03	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011		6/23/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-9.1		-8.4	
Well Side Pressure (in H_2O)	-9.10	NC	-1.2	NC
Orifice Plate DP (in H_2O)	0.090	NC	0.003	NC
% CH_4	71.3		0.1	
% CO_2	14.9		0.4	
% O_2	0.6		19.0	
% Balance Gas	13.2		80.5	
Gas Temperature(^oF)	60		69	
Valve Turns Open	3/4	NC	3/4	CLOSED
Liquid Level (ft BTOC)	8.63		8.63	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

Gas Probe Monitoring Data Table (August 2011)

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva/ Ray Babowice
Pressure Device: GEM 2000
Date: 7/18/2011
Gas Meter: GEM 2000
Water Level Device: Solinst Water Meter
Weather: Sunny
Serial #: GM12543
Ground Conditions: Tall grass and wet
Barometric Pressure: 30.08
Date Calibrated: 7/18/2011

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.0	0.0	0.4	18.1	81.5	20.31	
GP-33A	0.0	4.3	1.7	16.5	77.5	15.91	
GP-33B	0.1	3.7	1.6	16.3	78.4	15.13	
G-116	-3.7	39.6	15.0	6.5	38.9	NM	Connected to gas extraction system.
GP-2A	0.2	70.4	19.0	0.0	10.6	16.50	
GP-2B	0.1	0.0	0.0	18.2	81.8	11.34	
GP-34A	0.0	0.0	0.6	17.8	81.6	15.06	
GP-34B	0.1	0.0	0.4	18.0	18.0	15.59	
GP-3	0.0	0.0	0.2	18.1	81.7	13.7	
GP-4A	0.0	0.0	4.1	14.4	81.5	15.07	
GP-4B	0.1	0.0	0.3	18.2	81.5	14.41	
GP-4C	0.1	0.0	1.7	17.0	81.3	20.35	
GP-5	0.0	0.0	0.0	18.5	81.5	16.61	
P-1A	0.1	0.0	0.1	18.7	81.2	21.05	
GP-6	0.0	0.0	5.3	10.1	84.6	DRY	TD = 12.4
GP-7A	0.0	0.0	5.9	11.3	82.8	13.11	
GP-7B	0.0	0.0	0.1	18.7	81.2	22.41	
GP-8A	0.0	0.0	5.0	14.3	80.7	9.31	
GP-8B	0.1	0.0	0.0	18.6	81.4	16.69	
P-3A	0.0	0.0	4.9	8.5	86.6	20.21	
GP-9A	0.1	0.0	0.2	18.5	81.3	7.4	
GP-9B	0.1	0.0	0.0	18.8	81.2	21.33	
P-4C	0.0	0.0	3.1	15.5	81.4	DRY	TD = 7.08

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	4.1	13.5	82.4	8.1	
GP-10B	0.0	0.0	0.1	18.7	81.2	8.85	
GP-10C	0.0	0.0	0.1	18.7	81.2	10.29	
P-5A	0.0	0.0	0.0	18.9	81.1	10.61	
GP-11A	0.0	0.0	2.2	17.4	80.4	9.28	
GP-11B	0.2	0.0	0.1	18.8	81.1	11.51	
P-6C	0.0	0.0	3.8	12.9	83.3	8.16	
GP-12	0.0	0.0	0.1	18.9	81.0	6.25	
P-7A	0.0	0.0	3.5	15.6	80.9	6.63	
P-7B	0.0	0.0	0.0	18.8	81.2	6.39	
GP-13	0.0	0.0	0.0	18.8	81.2	7.4	
GP-14	0.0	0.0	0.0	18.8	81.2	5.21	
G-109	0.0	0.0	0.0	18.9	81.1	5.06	
GP-15A	0.0	0.0	0.2	18.7	81.1	3.02	
GP-15B	0.1	0.0	0.1	19.0	80.9	7.38	
GP-28A	0.0	0.0	0.0	18.8	81.2	8.37	
GP-28B	0.0	0.0	0.0	18.8	81.2	4.94	
GP-28C	0.0	0.0	0.0	18.8	81.2	5.01	
GP-16A	0.0	0.0	0.0	18.3	18.7	5.15	
GP-16B	0.0	0.0	0.0	18.7	81.3	3.71	
GP-16C	0.0	0.0	0.0	18.8	81.2	8.1	
GP-29A	0.0	0.0	0.0	18.6	81.4	6.26	
GP-29B	0.1	0.0	0.0	18.6	81.4	9.53	
G-110	0.0	0.0	0.0	18.5	81.5	8.05	
GP-17	0.0	0.1	0.0	18.5	81.4	5.27	
GP-18	0.0	0.0	0.0	18.6	81.4	8.27	
GP-19	0.0	0.0	0.1	18.5	81.4	8.87	
GP-20	0.0	0.0	0.0	18.5	81.5	7.07	
GP-21A	0.0	0.0	0.0	18.5	81.5	9.49	
GP-21B	0.0	0.0	0.0	18.5	81.5	10.11	
GP-22A	0.0	0.0	7.4	9.0	83.6	9.25	

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Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.0	0.0	18.2	81.8	19.42	
GP-30A	0.0	0.0	0.4	18.0	81.6	6.91	
GP-30B	0.0	0.0	18.4	18.1	63.5	7.45	
MW-204 East	0.0	29.2	6.1	6.8	57.9	20.72	
MW-204 West	0.0	0.0	0.0	18.4	81.6	27.73	
GP-23A	0.0	0.0	0.9	17.4	81.7	6.6	
GP-23B	0.1	0.0	0.1	18.1	81.8	10.95	
GP-24A	0.0	0.0	0.2	18.1	81.7	6.83	
GP-24B	4.1	80.4	8.9	0.0	10.7	18.95	
GP-25A	0.1	0.0	0.4	18.0	81.6	7.46	
GP-25B	0.0	0.0	0.0	18.3	81.7	21.31	
GP-31A	0.0	0.0	3.3	16.2	80.5	9.09	
GP-31B	0.0	0.3	0.1	18.1	81.5	16.38	
GP-26A	0.0	0.0	0.2	18.3	81.5	11.11	
GP-26B	0.0	0.0	0.2	18.8	81.0	16.95	
GP-27A	0.0	0.0	0.9	17.7	81.4	7.87	
GP-27B	0.0	0.0	0.4	17.9	81.7	22.69	
GP-35A	0.0	0.0	0.4	18.0	81.6	8.73	
GP-35B	0.0	0.0	0.1	18.2	81.7	12.51	
G-113	0.0	0.2	0.8	16.8	82.2	12.6	
G-121	0.0	0.0	0.5	18.0	81.5	12.56	
GP-32A	0.1	0.0	0.1	18.4	81.5	12.14	
GP-32B	0.0	0.0	0.1	18.4	81.5	12.96	
GP-37A	0.0	0.0	0.0	18.5	81.5	13.23	
GP-37B	0.0	0.0	0.3	18.3	81.4	13.55	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

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Mallard North Landfill Status Meeting
September 15, 2011

Meeting Logistics

- Location: Mallard Lake Landfill (MLL) conference room
- Time: Following 10 am MLL meeting

Discussion Topics

- Groundwater evaluation report review status
- Ongoing OM&M activities
- Landfill gas collection system extensions status (UAV-4 and G-116 now connected)
- Leachate force main project status

Attached Data

- Gas Probe Monitoring Data Table (August 2011)
- Methane Detections Figures (July 2011 and August 2011 gas monitoring rounds)
- Gas Probes with Methane Detections Table
- Liquid Pumping Volumes and Rates Table
- Southcentral Blower/Flare Summary Table
- Northwest Blower/Flare Summary Table
- Gas Extraction Well Summary Tables

Landfill Monitoring Data Attachments

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

Monitored By: Frank Silva
Gas Meter: GEM 2000
Serial #: GM12543
Date Calibrated: 8/15/2011

Pressure Device: GEM 2000
Water Level Device: Solinst
Ground Conditions: Wet

Date: 8/15/2011
Weather: Sunny
Barometric Pressure 30.01

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-1	0.1	0.0	0.8	17.4	81.8	19.11	
GP-33A	0.0	19.9	6.5	12.1	61.5	13.73	
GP-33B	0.0	5.6	1.7	16.3	76.4	13.25	
G-116	-1.5	0.0	0.1	18.4	81.5	11.82	Connected to gas extraction system.
GP-2A	0.0	3.9	2.5	15.8	77.8	13.13	
GP-2B	0.0	0.0	0.0	18.3	81.7	10.29	
GP-34A	0.0	0.0	0.4	17.9	81.7	10.64	
GP-34B	0.0	0.0	0.1	18.3	81.6	13.54	
GP-3	0.0	0.0	1.1	16.5	82.4	11.25	
GP-4A	0.0	0.0	2.4	15.9	81.7	12.70	
GP-4B	0.0	0.0	0.5	17.9	81.6	12.23	
GP-4C	0.0	2.4	3.5	14.9	79.2	20.19	
GP-5	0.2	0.0	0.0	18.8	81.2	16.55	
P-1A	0.0	0.0	0.1	18.7	81.2	20.35	
GP-6	0.0	0.0	5.7	10.6	83.7	DRY	TD = 12.33
GP-7A	0.0	0.0	7.8	8.1	84.1	11.75	
GP-7B	0.0	0.0	0.1	18.7	81.2	21.75	
GP-8A	0.1	0.0	0.1	18.7	81.2	8.22	
GP-8B	0.0	0.0	0.0	18.8	81.2	17.05	
P-3A	0.0	0.0	2.7	13.9	83.4	20.93	
GP-9A	0.0	0.0	0.0	18.8	81.2	5.97	
GP-9B	0.0	0.0	0.0	18.9	81.1	21.74	
P-4C	0.0	0.0	0.0	18.4	81.6	DRY	TD = 7.05

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-10A	0.0	0.0	4.1	14.5	81.4	DRY	TD = 9.04
GP-10B	0.0	0.0	0.3	18.4	81.3	10.78	
GP-10C	0.0	0.0	0.6	18.0	81.4	12.95	
P-5A	0.0	0.0	0.0	18.7	81.3	9.35	
GP-11A	0.0	0.0	2.2	16.2	81.6	8.88	
GP-11B	0.0	0.0	0.1	18.6	81.3	8.95	
P-6C	0.0	0.0	0.0	18.7	81.3	7.08	
GP-12	0.3	0.0	0.0	18.7	81.3	4.46	
P-7A	0.1	0.0	0.1	18.6	81.3	5.05	
P-7B	0.0	0.0	0.0	18.7	81.3	4.54	
GP-13	0.0	0.0	0.1	18.5	81.4	7.84	
GP-14	0.0	0.0	0.0	18.6	81.4	5.35	
G-109	0.0	0.0	0.0	18.5	81.5	5.93	
GP-15A	0.2	0.0	0.2	18.3	81.5	3.38	
GP-15B	0.0	0.0	0.0	18.4	81.6	7.42	
GP-28A	0.1	0.0	0.0	18.5	81.5	8.30	
GP-28B	0.1	0.0	0.0	18.4	81.6	4.35	
GP-28C	0.0	0.0	0.1	18.4	81.5	3.33	
GP-16A	0.4	0.0	0.0	18.3	81.7	4.22	
GP-16B	0.0	0.0	0.0	18.4	81.6	5.32	
GP-16C	0.0	0.0	0.0	18.4	81.6	9.02	
GP-29A	0.0	0.0	0.0	18.3	81.7	4.69	
GP-29B	0.1	0.0	0.0	18.3	81.7	9.25	
G-110	0.0	0.0	0.1	18.3	81.6	8.95	
GP-17	0.2	0.0	0.0	18.2	81.8	3.70	
GP-18	0.0	0.0	0.0	18.3	81.7	7.62	
GP-19	0.1	0.0	0.0	18.3	81.7	9.67	
GP-20	0.1	0.0	0.0	18.2	81.8	6.09	
GP-21A	0.0	0.0	0.0	18.3	81.7	6.22	
GP-21B	0.0	0.0	0.0	18.2	81.8	9.79	
GP-22A	0.1	0.0	0.1	18.3	81.6	6.22	

Gas Probe Monitoring
Mallard North Landfill
Hanover Park, Illinois

ID	Pressure (in. H_2O)	CH_4 (%)	CO_2 (%)	O_2 (%)	Balance (%)	Liquid Level (ft. BTOC)	Notes/Conditions
GP-22B	0.0	0.0	0.0	18.3	81.7	19.88	
GP-30A	0.2	0.0	0.0	18.3	81.7	4.68	
GP-30B	0.0	0.6	0.1	18.2	81.1	7.58	
MW-204 East	0.0	28.9	5.5	7.8	57.8	20.27	
MW-204 West	0.0	0.1	0.0	18.2	81.7	25.85	
GP-23A	0.0	0.0	0.0	18.5	81.5	5.95	
GP-23B	0.0	0.0	0.0	18.5	81.5	10.15	
GP-24A	0.0	0.0	0.0	18.4	81.6	5.51	
GP-24B	0.0	0.0	0.0	18.5	81.5	18.77	
GP-25A	0.0	0.0	1.1	17.3	81.6	8.95	
GP-25B	0.0	0.0	0.2	18.0	81.8	20.58	
GP-31A	0.0	0.0	3.3	15.0	81.7	9.00	
GP-31B	0.1	30.6	2.1	9.9	57.4	17.48	
GP-26A	0.0	0.0	0.0	18.5	81.5	7.94	
GP-26B	0.0	0.0	0.1	18.3	81.6	15.79	
GP-27A	0.0	0.0	0.0	18.3	81.7	5.05	
GP-27B	0.0	0.0	0.3	18.0	81.7	22.42	
GP-35A	0.0	0.0	0.0	18.5	81.5	8.01	
GP-35B	0.0	0.0	0.0	18.5	81.5	11.98	
G-113	0.0	0.0	0.3	18.4	81.3	11.43	
G-121	0.0	0.0	2.1	16.9	81.0	11.35	
GP-32A	0.1	0.0	0.1	18.5	81.4	11.05	
GP-32B	0.0	0.0	0.0	18.5	81.5	11.82	
GP-37A	0.0	0.0	0.1	18.5	81.4	12.00	
GP-37B	0.1	0.0	0.2	18.4	81.4	12.51	

Notes:
NR = Not recorded.
NA=Not applicable.
N/M=NOT MEASURED

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

Date:	8/17/2011					
Person (s) sampling	Frank Silva/ Ray Babowice		Weather Conditions:	Sunny		
Ambient Temperature:	81.9	°F	Ground Conditions:	WET GRASS		
Barometric Pressure:	30.01	in. Hg	Gas/O_2 Meter Model:	Gem 2000	Serial #:	GM12543
Trend in barometric pressure:	Steady		Date Last Calibrated:	8/17/2011		
Notes:						

	Blower/Flare Data					
	9:45AM	11:40AM		8:30AM	9:45AM	
Date / Time / Location	SC-FLARE	SC-FLARE		NW-FLARE	NW-FLARE	
Blower Inlet Vacuum (in H_2O)	-3.3	-3.9		-4.1	-4.2	
Inlet Valve (Turns) Open / 6	6	6		6	6	
Gas Inlet Temperature (°F)	100	104		88	88	
Blower Outlet Pressure (in H_2O)	2.0	1.3		1.1	1.2	
Orifice Plate DP (in H_2O)	0.06	0.06		0.02	0.07	
Approximate Flow (scfm)	5	13		7	14	
% CH_4	23.4	41.4		37.1	44.9	
% CO_2	12.2	20.8		24.4	28.2	
% O_2	10.4	6.0		1.9	0.0	
% Balance Gas	54.0	31.8		36.6	26.9	
Combustion Temperature(°F)	556	710		487	710	
Blower SPD%	40	40		40	40	
Blower Hours	317	318		388	318	
Blower Cycles	2	2		3	2	
Blower Amps	3.2	3.2		3.2	3.2	
Blower RPM	1466	1466		1470	1466	
Air Compressor Pressure (psi)	150	150		150	150	
Air Compressor Hours	1603.91	1603.91		1603.91	1603.91	
Well Field Air Pressure (psi)	80	80		80	80	
Comments						

Landfill Gas/Leachate Monitoring
Mallard North Landfill
Hanover Park, Illinois

DATE: 7/20/11

Gas Extraction Wells Frank Silva/ Ray Babowice

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^{0}F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
DV-1	-4.0	-4.0	NC	1.475	NC	3.7	50.7	26.6	0.2	22.5	90	4	NC	26.20
DV-8	-3.7	-2.2	NC	0.93	NC	2.9	45.7	27.1	0.0	27.2	84	3	NC	DRY 8.0
EWL-10	-3.7	-2.7	NC	1.483	NC	3.8	45.8	24.4	2.7	27.1	100	1/2	NC	16.13
EWL-11	-3.7	-2.4	NC	2.551	NC	5.0	40.2	27.0	0.0	32.8	100	1/2	NC	16.3
EWL-12	-3.7	0.00	NC	0	NC	0.0	2.1	13.7	6.7	77.5	106	Opened 1/4	Closed	14.24
GEW-1	-4.0	-4.0	NC	1.089	NC	3.3	64.5	31.8	0.0	3.7	82	3	NC	DRY 28.45
GEW-2	-3.7	-3.6	NC	1.48	NC	3.8	67.0	30.6	0.0	2.4	98	1/2	NC	16.45
UAV-1	-4.7	-4.7	NC	2.99	NC	5.4	39.8	27.8	0.0	32.4	72	1/4	NC	20.81
UAV-6	-3.7	0.5	NC	0.425	NC	2.0	62.9	31.0	0.0	6.1	110	1/2	Opened 1/4	DRY 4.5
SOUTHCENTRAL WELLS														
DV-6	-2.7	0.0	NC	0	NC	0.0	0.1	1.1	17.5	81.3	96	CLOSE	NC	8.85
DV-12	-2.6	0.3	NC	0.235	NC	1.4	27.5	12.3	10.0	50.2	86	Opened 1/4	NC	25.62
DV-13	-2.6	-1.2	NC	0.586	NC	2.3	58.6	20.6	4.0	16.8	100	4	Opened 1/2	12.50
EWL-2	-3.0	-0.90	NC	0.059	NC	0.5	32.1	15.2	7.1	45.6	92	CLOSE	Opened 1/4	11.45
SV-12	-2.8	-0.9	NC	0.416	NC	2.0	51.1	20.1	3.8	25.0	91	OPEN	Opened 1/4	5.03
DV-3	-2.7	-1.4	NC	0.361	NC	1.6	46.4	25.1	0.0	28.5	80	OPEN	Closed 2	18.70
UAV-2	-2.6	-2.5	NC	0.814	NC	2.7	23.1	14.9	6.8	55.2	100	3/4	Opened 1/4	8.82

Notes:

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

LOCATION	PRESSURE	% CH_4	%CO_2	%O_2	%BALANCE	FLAME PRESENT (yes/no)	BLOWER OPERATING (yes/no)	SPARKING UNIT OPERATING (yes/no)	COMMENTS
	I								
UAV-4	0	49.4	27.8	0.2	22.6	YES	YES	YES	

DATE: 8/17/11

Gas Extraction Wells Frank Silva/ Ray Babowice

LOCATION	HEADER SIDE PRESSURE	WELL SIDE PRESSURE		ORIFICE PLATE DP		APPROX. FLOW RATE (cfm)	% CH_4	%CO_2	%O_2	%BALANCE	TEMPERATURE (^{0}F)	VALVE TURNS OPEN		LIQUID LEVEL (ft BTOC)
	I	I	P	I	P							I	P	
DV-1	-4.2	-4.2	NC	1.235	NC	3.5	48.2	26.5	0.2	25.1	86	4	NC	20.75
DV-8	-4.4	-0.7	NC	0.169	NC	1.0	26.0	21.7	2.6	49.7	74	3	CLOSED 1	7.95
EWL-10	-4.0	-3.2	NC	0.595	NC	2.7	49.6	25.0	3.4	22.0	78	1/2	CLOSED 1/8	14.63
EWL-11	4.1	-2.5	NC	0.909	NC	3.0	23.7	25.2	0.0	51.1	82	1/2	NC	16.16
EWL-12	-3.7	0.00	NC	0	NC	0.0	6.8	5.6	14.7	72.9	89	Closed	NC	12.2
GEW-1	-4.1	-4.1	NC	1.049	NC	3.6	62.7	31.2	0.0	6.1	72	3	NC	24.85
GEW-2	-4.0	-4.0	NC	0.532	NC	2.5	63.0	30.6	0.0	6.4	78	1/2	NC	16.31
UAV-1	-4.2	-4.2	NC	2.927	NC	5.3	32.9	26.8	0.0	40.3	72	1/4	NC	21.25
UAV-6	-4.1	-2.9	NC	3.113	NC	5.5	59.8	29.0	0.0	11.2	80	1/4 OPEN	OPEN 1/2	4.05
SOUTHCENTRAL WELLS														
DV-6	-3.8	0.0	NC	0	NC	0.0	0.4	3.1	16.4	80.1	82	CLOSE	NC	8.61
DV-12	-3.4	-0.7	NC	0.52	NC	2.6	40.6	20.6	6.9	31.9	78	Opened 1/4	NC	25.12
DV-13	-3.5	0.0	NC	0	NC	0.0	2.4	1.0	17.8	78.8	80	1/2 OPEN	CLOSED	12.88
EWL-2	-3.3	-0.10	NC	0.005	NC	0.0	28.4	14.0	7.9	49.7	84	1/4 OPEN	NC	12.35
SV-12	-3.3	-0.9	NC	0.285	NC	1.4	30.6	15.2	8.0	46.2	78	1/4 OPEN	CLOSED 1/4	5.01
DV-3	-3.8	-3.7	NC	1.19	NC	4.4	61.0	26.7	0.0	12.3	82	1/2 OPEN	OPEN 1/2	18.59
UAV-2	-3.4	-2.7	NC	0.004	NC	0.0	61.4	31.4	0.0	7.2	91	1 OPEN	OPEN 1/2	9.04
UAV-4	-0.1	-3.7	NC	NM	NM	NM	25.2	15.7	9.7	49.4	NM	NM	OPEN 1/8	NM

I=initial reading; P= post adjustment; BTOC= below top of casing; NC= no change; FP=frozen port; NR=Not recorded ;NM=Not measured

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-2A	6/3/2009	**0.2***	NM	9.57	15.37	1st monitoring round
	6/17/2009	**0.6**	+0.10	13.00		
	7/22/2009	0.0	0.00	15.60		LCT pumps started 7/15
	7/29/2009	**3.0**	+0.10	14.53		
	8/4/2009	**2.9**	0.00	15.65		
	8/17/2009	**13.8**	+0.10	13.45		
	9/29/2009	**31.9**	0.00	16.91		
	10/19/2009	**31.1**	-0.20	14.36		
	11/17/2009	**13.5**	0.00	15.78		
	12/10/2009	**6.1**	0.00	14.23		
	1/27/2010	0.0	0.00	13.58		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	13.47		
	3/17/2010	0.0	+1.5	13.18		
	4/28/2010	**0.6**	0.00	14.15		
	5/24/2010	0.0	-0.10	NM		
	5/26/2010	0.0	0.00	14.23		
	6/28/2010	**0.1***	0.00	12.80		
	7/19/2010	0.0	0.11	15.22		
	8/16/2010	0.0	0.00	13.93		
	9/16/2010	0.0	+0.6	15.84		
	10/14/2010	0.0	0.00	17.54		
	11/15/2010	**49.9**	+0.1	19.11		
	12/1/2010	0.0	0.00	15.45		
	1/13/2011	**5.3**	0.00	14.99		
	2/14/2011	**77.3**	0.00	16.85		
	3/16/2011	**11.9**	0.00	13.53		
	4/28/2011	**44.1**	0.00	12.00		
	5/31/2010	**13.3**	0.00	13.53		
	6/21/2011	**12.0**	0.00	12.41		
	7/18/2011	**70.4**	0.20	16.50		
	8/15/2011	**3.9**	0.00	13.13		
GP-2B	6/3/2009	**0.6**	NM	12.97	28.60	1st monitoring round
	6/17/2009	0.0	+0.20	6.90		
	7/22/2009	**0.2***	+0.10	11.00		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	10.47		
	8/4/2009	0.0	0.00	11.06		
	8/17/2009	0.0	0.00	11.89		
	9/29/2009	0.0	0.00	12.25		
	10/19/2009	**0.3***	-0.40	11.83		
	11/17/2009	**1.6**	0.00	13.09		
	12/10/2009	**2.8**	+3.40	12.42		
	1/27/2010	**0.4**	-4.00	10.84		LFGCS started 1/22/10
	2/22/2010	**0.5**	+0.6	13.11		
	3/17/2010	0.0	+0.4	11.22		
	4/28/2010	0.0	0.00	10.87		
	5/24/2010	0.0	0.00	NM		
	5/26/2010	0.0	0.00	13.55		
	6/28/2010	**0.4**	0.00	10.27		
	7/19/2010	0.0	0.04	10.84		
	8/16/2010	0.0	0.00	11.00		
	9/16/2010	**0.1***	0.00	11.56		
	10/14/2010	0.0	0.00	12.97		
	11/15/2010	**0.3***	0.00	13.54		
	12/1/2010	0.0	0.00	12.79		
	1/13/2011	0.0	0.00	17.78		
	2/14/2011	0.0	-0.10	13.27		
	3/16/2011	0.0	0.00	11.67		
	4/28/2011	**5.4**	0.00	10.57		
	5/31/2011	0.0	0.00	10.21		
	6/21/2011	0.0	0.00	9.78		
	7/18/2011	0.0	+0.1	11.34		
	8/15/2011	0.0	0.00	10.29		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-3	11/15/2010	**0.2***	+0.1	15.18	29.70	
	12/1/2010	0.0	0.00	15.11		
	1/13/2011	0.0	0.00	13.61		
	2/14/2011	0.0	-0.10	14.72		
	3/16/2011	0.0	0.00	10.36		
	4/28/2011	0.0	0.00	4.75		
	5/31/2011	0.0	0.00	7.39		
	6/21/2011	0.0	+0.1	11.26		
	7/18/2011	0.0	0.00	13.70		
	8/15/2011	0.0	0.00	11.25		
GP-4C	6/3/2009	**0.5**	NM	Dry	30.14	1st monitoring round
	6/17/2009	**2.7**	+0.90			
	7/22/2009	0.0	+0.10	3.80		LCT pumps starte 7/16
	7/29/2009	**24.2**	+0.20	18.24		
	8/4/2009	**19.7**	0.00	18.19		
	8/17/2009	**24.3**	0.00	18.30		
	9/29/2009	**31.5**	+0.10	18.68		
	10/19/2009	**22.0**	+0.60	18.92		
	11/17/2009	**25.4**	0.00	19.93		
	12/10/2009	**5.1**	0.00	19.96		
	1/27/2010	**7.7**	0.00	18.69		LFGCS started 1/22/10
	2/22/2010	**7.5**	+7.6	18.58		
	3/17/2010	**6.0**	+5.2	17.62		
	4/28/2010	**2.5**	+0.5	17.84		
	5/24/2010	0.0	-4.8	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.75	NM		Increased vacuum
	5/26/2010	0.0	-6.0	17.91		
	6/10/2010	0.0	-6.0	NM		
	6/28/2010	0.0	-6.0	NM		
	7/19/2010	0.0	-2.0	NM		
	8/16/2010	**0.1***	-5.0	NM		
	9/16/2010	**0.1***	-6.0	NM		
	10/14/2010	0.0	-6.0	NM		
	11/15/2010	0.0	0.0	NM		Removed hose extraction
	12/1/2010	0.0	0.0	20.72		
	1/13/2011	0.0	+0.01	20.96		
	2/14/2011	0.0	-0.6	21.18		
	3/16/2011	0.0	0.0	20.64		
	4/28/2011	0.0	0.0	22.27		
	5/31/2011	0.0	0.0	19.46		
	6/21/2011	0.0	0.0	19.31		
	7/18/2011	0.0	+0.1	20.35		
	8/15/2011	**2.4**	0.0	20.19		
GP-8A	1/13/2011	**0.1***	0.0	6.61	7.53	
	2/14/2011	0.0	0.0	8.27		
	3/16/2011	0.0	+0.03	6.61		
	4/28/2011	0.0	0.0	5.21		
	5/31/2011	0.0	0.0	5.49		
	6/21/2011	0.0	0.0	6.81		
	7/18/2011	0.0	0.0	9.31		
	8/15/2011	0.0	+0.1	8.22		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-15A	1/27/2010	**2.4**	-10.00	3.21	10.40	LFGCS started 1/22/10
	2/22/2010	**0.3***	0.00	4.92		
	3/17/2010	**0.3***	+0.02	3.81		
	4/28/2010	0	+0.15	4.81		
	5/26/2010	0.0	+0.6	4.89		
	6/28/2010	0.0	0.00	4.06		
	7/20/2010	0.0	+0.15	4.51		
	8/16/2010	0.0	0.00	4.37		
	9/16/2010	0.0	0.00	4.91		
	10/14/2010	0.0	0.00	5.69		
	11/15/2010	0.0	0.00	6.22		
	12/1/2010	0.0	0.00	6.10		
	1/13/2011	**0.1***	+0.08	4.84		
	2/14/2011	0.0	0.00	3.60		
	3/16/2011	0.0	0.00	3.50		
	4/28/2011	0.0	0.00	3.22		
	5/31/2011	0.0	0.00	3.02		
	6/21/2011	0.0	0.00	3.02		
	7/18/2011	0.0	0.00	3.02		
	8/15/2011	0.0	+0.2	3.38		
GP-15B	7/20/2010	**0.4**	0.00	6.91	30.81	
	8/16/2010	**0.1***	0.00	6.98		
	9/16/2010	0.0	0.00	6.98		
	10/14/2010	0.0	+0.5	7.01		
	11/15/2010	0.0	0.00	7.16		
	12/1/2010	0.0	0.00	7.25		
	1/13/2011	**1.1**	0.00	7.35		
	2/14/2011	0.0	0.00	7.38		
	3/16/2011	0.0	+0.03	7.37		
	4/28/2011	**0.7**	-0.01	7.36		
	5/31/2011	0.0	0.00	7.38		
	6/21/2011	0.0	+0.1	7.38		
	7/18/2011	0.0	+0.1	7.38		
	8/15/2011	0.0	0.00	7.42		
GP-17	6/3/2009	**10.7**	NM	NM	13.25	1st monitoring round
	6/17/2009	**1.1**	+0.40	5.21		
	7/22/2009	0.0	+0.60	4.55		LCT pumps started 7/15
	7/29/2009	0.0	+0.20	4.15		
	8/4/2009	0.0	0.00	4.03		
	8/17/2009	0.0	0.00	3.87		
	9/29/2009	0.0	0.00	3.67		
	10/19/2009	0.0	+0.30	3.53		
	11/17/2009	0.0	0.00	4.43		
	12/10/2009	0.0	0.00	5.06		
	1/27/2010	0.0	0.00	4.36		LFGCS started 1/22/10
	2/22/2010	0.0	0.00	5.14		
	3/17/2010	0.0	+0.08	3.75		
	4/28/2010	0.0	+0.15	4.72		
	5/26/2010	0.0	+0.4	4.52		
	6/28/2010	0.0	0.00	3.93		
	7/20/2010	0.0	+0.03	4.20		
	8/16/2010	0.0	0.00	4.00		
	9/16/2010	0.0	0.00	4.85		
	10/14/2010	0.0	+0.4	5.96		
	11/15/2010	0.0	0.00	7.36		
	12/1/2010	0.0	0.00	6.14		
	1/13/2011	0.0	+0.14	4.50		
	2/14/2011	0.0	0.00	2.57		TD = 3.6' FROZEN?
	3/16/2011	0.0	0.00	2.44		
	4/28/2011	0.0	0.00	3.25		
	5/31/2011	0.0	0.00	2.73		
	6/21/2011	0.0	0.00	3.62		
	7/18/2011	**0.1***	0.00	5.27		
	8/15/2011	0.0	+0.2	3.70		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-19	2/23/2010	**0.2***	+1.1	11.44	30.33	LFGCS started 1/22/10
	3/17/2010	0.0	0.00	11.78		
	4/28/2010	0.0	+0.10	11.17		
	5/26/2010	0.0	0.00	11.35		
	6/28/2010	0.0	0.00	11.80		
	7/20/2010	0.0	+0.04	11.34		
	8/16/2010	0.0	+0.05	11.71		
	9/16/2010	0.0	0.00	11.95		
	10/14/2010	0.0	0.00	12.02		
	11/15/2010	0.0	0.00	12.89		
	12/1/2010	0.0	0.00	14.05		
	1/13/2011	**0.1***	+1.22	11.90		
	2/14/2011	0.0	-0.40	12.85		
	3/16/2011	0.0	0.00	6.14		
	4/28/2011	0.0	0.00	6.23		
	5/31/2011	0.0	0.00	7.21		
	6/21/2011	0.0	+0.1	7.70		
	7/18/2011	0.0	0.00	8.87		
	8/15/2011	0.0	+0.1	9.67		
GP-22A	8/16/2010	**0.5**	0.00	5.52	7.1	
	9/16/2010	0.0	0.00	9.34		
	10/16/2010	0.0	0.00	11.09		
	11/15/2010	0.0	0.00	11.72		
	12/1/2010	0.0	0.00	10.30		
	1/13/2011	0.0	0.00	8.76		
	2/14/2011	0.0	0.00	6.38		
	3/16/2011	0.0	0.00	3.51		
	4/28/2011	0.0	0.00	3.11		
	5/31/2011	0.0	0.00	4.11		
	6/21/2011	0.0	+0.1	4.55		
	7/18/2011	0.0	0.00	9.25		
	8/15/2011	0.0	+0.1	6.22		
GP-22B	6/28/2010	**0.2***	0.00	19.04	27.75	
	7/20/2010	**8.8**	+0.02	19.49		
	8/16/2010	**1.4**	0.00	19.43		
	9/16/2010	0.0	0.00	19.45		
	10/14/2010	0.0	+0.1	20.06		
	11/15/2010	0.0	0.00	11.76		
	12/1/2010	0.0	0.00	22.02		
	1/13/2011	**42.5**	+0.02	21.96		
	2/14/2011	**51.2**	0.00	21.54		
	3/16/2011	**2.4**	0.00	20.66		
	4/28/2011	**2.5**	0.00	19.50		
	5/31/2011	0.0	0.00	20.30		
	6/21/2011	**0.1***	0.00	19.06		
	7/18/2011	0.0	0.00	19.42		
	8/15/2011	0.0	0.00	19.88		
GP-23A	1/13/2011	**0.7**	+7.5	5.50		PRESSURE DIMINISHED DURING MEAS.
	2/14/2011	**1.0**	0.00	4.02		
	3/16/2011	**0.3***	0.00	4.53		
	4/28/2011	0.0	0.00	3.85		
	5/31/2011	0.0	0.00	4.21		
	6/21/2011	0.0	0.00	4.52		
	7/18/2011	0.0	0.00	6.60		
	8/15/2011	0.0	0.00	5.95		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-23B	2/23/2010	**0.3***	+1.8	12.26	20.75	LFGCS started 1/22/10
	3/17/2010	**0.2***	0.00	12.05		
	4/28/2010	0.0	+0.15	10.71		
	5/26/2010	0.0	0.00	10.44		
	6/28/2010	0.0	0.00	NM		
	7/20/2010	**1.1**	+0.03	10.87		
	8/16/2010	**0.1***	+0.03	10.79		
	9/16/2010	0.0	+0.10	11.61		
	10/14/2010	0.0	+0.2	12.78		
	11/15/2010	0.0	0.00	14.08		
	12/1/2010	0.0	0.00	14.95		
	1/13/2011	0.0	+0.31	14.16		
	2/14/2011	0.0	0.00	12.85		
	3/16/2011	0.0	+0.02	11.98		
	4/28/2011	**2.3**	0.00	14.45		
	5/31/2011	0.0	0.00	11.00		
	6/21/2011	0.0	0.00	10.13		
	7/18/2011	0.0	+0.1	10.95		
	8/15/2011	0.0	0.00	10.15		
GP-24A	9/16/2010	**0.1***	0.00	7.64	12.87	
	10/14/2010	0.0	+0.5	8.72		
	11/15/2010	0.0	-0.20	9.36		
	12/1/2010	0.0	0.00	8.25		
	1/13/2011	**0.2***	+0.30	6.26		
	2/14/2011	**0.5**	0.00	11.77		
	3/16/2011	0.0	0.00	4.99		
	4/28/2011	0.0	0.00	3.73		
	5/31/2011	0.0	0.00	4.64		
	6/21/2011	0.0	+0.4	4.65		
	7/18/2011	0.0	0.00	6.83		
	8/15/2011	0.0	0.00	5.51		
GP-24B	6/28/2010	**8.2**	0.00	13.48	22.02	
	7/20/2010	**12.1**	+0.02	17.62		
	8/16/2010	**1.2**	+0.02	16.91		
	9/16/2010	**36.5**	0.00	18.60		
	10/14/2010	**21.0**	-3.80	NM		Connected to hose extraction 10/7
	11/15/2010	**46.1**	0.00	NM		Removed hose extraction
	12/1/2010	**4.2**	0.00	21.35		
	1/13/2011	**0.4***	+0.02	20.95		
	2/14/2011	**1.3**	0.00	23.95		
	3/16/2011	0.0	0.00	17.33		
	4/28/2011	0.0	0.00	11.24		
	5/31/2011	0.0	0.00	13.47		
	6/21/2011	**89.8**	7.0	14.65		
	7/18/2011	**80.4**	+4.1	18.95		
	8/15/2011	0.0	0.0	18.77		
GP-26A	1/13/2011	**0.1***	0.00	9.92	16.65	
	2/14/2011	0.0	0.00	9.07		
	3/16/2011	0.0	0.00	5.71		
	4/28/2011	0.0	0.00	4.92		
	5/31/2011	0.0	0.00	4.46		
	6/21/2011	0.0	0.00	5.99		
	7/18/2011	0.0	0.00	11.11		
	8/15/2011	0.0	0.00	7.94		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-26B	6/3/2009	**0.6**	NM	16.76	27.45	1st monitoring round
	6/17/2009	**0.1***	+0.10	16.67		
	7/22/2009	0.0	+0.10	25.93		LCT pumps starte 7/16
	7/29/2009	**2.0**	-0.50	18.90		
	8/4/2009	**1.9**	-0.10	19.42		
	8/17/2009	**1.1**	0.00	20.32		
	9/29/2009	**3.4**	-2.50	20.28		
	10/19/2009	**6.4**	+3.60	20.65		
	11/17/2009	**4.6**	+0.10	18.56		
	12/10/2009	**3.9**	-4.00	17.31		
	1/27/2010	0.0	0.00	16.26		LFGCS started 1/22/10
	2/23/2010	0.0	+0.6	16.57		
	3/17/2010	0.0	0.00	16.12		
	4/28/2010	0.0	0.00	16.33		
	5/26/2010	0.0	0.00	16.14		
	6/28/2010	0.0	0.00	15.83		
	7/20/2010	0.0	+0.05	17.27		
	8/16/2010	0.0	0.00	17.05		
	9/16/2010	**0.1***	0.00	19.20		
	10/14/2010	**0.2***	+0.1	20.23		
	11/15/2010	**0.9**	+0.2	21.16		
	12/1/2010	0.0	0.00	20.44		
	1/13/2011	**24.4**	1.23	17.84		
	2/14/2011	**2.4**	0.00	23.84		
	3/16/2011	0.0	0.00	15.73		
	4/28/2011	**0.1***	0.00	14.91		
	5/31/2011	0.0	0.00	15.52		
	6/21/2011	0.0	0.00	14.28		
	7/18/2011	0.0	0.00	16.95		
	8/15/2011	0.0	0.00	15.79		
GP-29A	1/13/2011	**0.1***	0.00	4.31	13.36	
	2/14/2011	0.0	0.00	4.54		
	3/16/2011	0.0	0.00	4.84		
	4/28/2011	0.0	0.00	6.11		
	5/31/2011	0.0	0.00	4.41		
	6/21/2011	0.0	0.00	4.40		
	7/18/2011	0.0	0.00	6.26		
	8/15/2011	0.0	0.00	4.69		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-30B	6/3/2009	0.0	NM	dry	18.06	1st monitoring round
	6/17/2009	**13.2**	+0.10	7.83		
	7/22/2009	**17.3**	+0.20	7.92		LCT pumps started 7/15
	7/29/2009	**11.8**	-0.10	8.15		
	8/4/2009	**13.8**	+0.10	7.46		
	8/17/2009	**11.2**	0.00	6.76		
	9/29/2009	**7.0**	+0.50	7.82		
	10/19/2009	**16.0**	+0.20	9.22		
	11/17/2009	**80.0**	+0.10	10.21		
	12/10/2009	**31.5**	0.00	9.98		
	1/27/2010	**13.6**	0.00	8.30		LFGCS started 1/22/10
	2/23/2010	**5.5**	0.00	8.14		
	3/17/2010	**82.8**	-0.20	8.73		
	4/28/2010	**3.1**	+0.50	7.51		
	5/24/2010	0.0	-3.50	NR		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NR		
	5/26/2010	**0.5**	-3.70	7.18		
	6/10/2010	**0.3***	-6.00	NM		
	6/28/2010	**0.1***	-6.50	NM		
	7/20/2010	**0.2***	-3.50	NM		
	8/16/2010	**0.3***	-3.50	NM		
	9/16/2010	0.0	-3.70	7.85		
	10/14/2010	0.0	-3.80	NM		
	11/15/2010	**0.4***	0.00	NM		Removed hose extraction
	12/1/2010	**2.7**	0.00	5.45		
	1/13/2011	**0.4***	+0.01	10.12		
	2/14/2011	0.0	0.00	10.04		
	3/16/2011	**0.5**	0.00	9.59		
	4/28/2011	**0.4***	0.00	11.07		
	5/31/2011	0.0	0.00	6.81		
	6/21/2011	**0.1***	+0.1	6.51		
	7/18/2011	0.0	0.00	7.45		
	8/15/2011	**0.6**	0.00	7.58		
GP-31B	6/3/2009	0.0	NM	dry	18.09	1st monitoring round
	6/17/2009	**72.8**	+0.10	15.34		
	7/22/2009	**0.2***	+0.10	12.80		LCT pumps starte 7/16
	7/29/2009	**41.7**	+0.10	16.72		
	8/4/2009	**86.6**	+0.10	17.39		
	8/17/2009	**87.9**	0.00	18.21		
	9/29/2009	**68.8**	+0.10	19.07		
	10/19/2009	**38.1**	0.00	11.82		
	11/17/2009	**90.1**	0.00	19.34		
	12/10/2009	**55.6**	0.00	17.98		
	1/27/2010	**1.1**	0.40	14.06		LFGCS started 1/22/10
	2/23/2010	**12.1**	+0.20	5.42		
	3/17/2010	**1.2**	+0.02	12.48		
	4/28/2010	**42.6**	+0.10	14.88		
	5/24/2010	**2.8**	-3.50	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-3.50	NM		
	5/26/2010	**6.2**	-3.70	14.49		
	6/10/2010	**2.0**	-6.00	NM		
	6/28/2010	**1.2**	-6.50	NM		
	7/20/2010	**24.3**	-3.50	NM		
	8/16/2010	0.0	-3.50	NM		
	9/16/2010	**0.1***	-3.70	16.62		
	10/14/2010	**38.7**	0.00	18.58		Removed hose extraction 10/7/10
	11/15/2010	**50.1**	0.00	20.03		
	12/1/2010	0.0	0.00	20.50		
	1/13/2011	**64.7**	+0.01	20.26		
	2/14/2011	**81.7**	-0.10	18.80		
	3/16/2011	**2.3**	0.00	15.97		
	4/28/2011	**7.6**	0.00	11.51		
	5/31/2011	**2.9**	0.00	12.15		
	6/21/2011	0.0	0.00	14.15		Connected to hose extraction 6/3/11. Shut valve 6/15/11
	7/18/2011	**0.3***	0.00	16.38		
	8/15/2011	**30.6**	+0.1	17.48		

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ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-32A	8/16/2010	**0.2***	0.00	11.30	12.97	
	9/16/2010	0.0	0.00	11.80		
	10/14/2010	0.0	0.00	12.28		
	11/15/2010	0.0	0.00	12.33		
	12/1/2010	0.0	0.00	12.22		
	1/13/2011	**0.1***	0.00	11.64		
	2/14/2011	0.0	0.00	14.00		
	3/16/2011	0.0	0.00	11.09		
	4/28/2011	0.0	0.00	9.93		
	5/31/2011	0.0	0.00	10.25		
	6/21/2011	0.0	0.00	11.05		
	7/18/2011	0.0	+0.1	12.14		
	8/15/2011	0.0	+0.1	11.05		
GP-33A	6/17/2009	**62.7**	+0.40	13.84	16.13	
	7/22/2009	**0.1***	+1.10	13.31		LCT pumps starte 7/16
	7/29/2009	**4.1**	+0.20	15.47		
	8/4/2009	**1.8**	0.00	15.65		
	8/17/2009	**0.6**	0.00	15.92		
	9/29/2009	0.0	0.00	15.93		
	10/19/2009	**0.2***	+0.30	14.59		
	11/17/2009	0.0	0.00	15.42		
	12/10/2009	0.0	0.00	15.02		
	1/27/2010	0.0	-9.00	13.41		LFGCS started 1/22/10
	2/22/2010	0.0	+0.20	13.74		
	3/17/2010	0.0	0	13.47		
	4/28/2010	0.0	+0.04	14.12		
	5/26/2010	0.0	0.00	13.93		
	6/28/2010	0.0	0.00	13.57		
	7/19/2010	0.0	+0.06	15.46		
	8/16/2010	0.0	0.0	13.94		
	9/16/2010	0.0	0.0	15.41		
	10/14/2010	0.0	0.0	16.39		
	11/15/2010	**18.4**	0.0	17.16		
	12/1/2010	0.0	0.0	14.91		
	1/13/2011	**0.5**	0.0	14.45		
	2/14/2011	**11.4**	3.3	16.67		
	3/16/2011	**1.1**	0.0	12.01		
	4/28/2011	**0.1***	0.0	11.71		
	5/31/2011	0.0	0.0	11.70		
	6/21/2011	0.0	0.0	11.15		
	7/18/2011	**4.3**	0.0	15.91		
	8/15/2011	**19.9**	0.0	13.73		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
GP-33B	1/13/2011	**1.9**	0.0	14.29	30.44	
	2/14/2011	**5.3**	-1.5	14.01		
	3/16/2011	**4.0**	0.0	12.21		
	4/28/2011	**1.9**	0.0	12.49		
	5/31/2011	**0.4***	0.0	12.12		
	6/21/2011	0.0	+0.2	10.81		
	7/18/2011	**3.7**	+0.1	15.13		
	8/15/2011	**5.6**	0.0	13.25		
GP-35B	1/13/2011	**0.1***	0.0	13.21	18.23	
	2/14/2011	0.0	0.0	12.46		
	3/16/2011	0.0	0.0	5.31		
	4/28/2011	0.0	0.0	4.89		
	5/31/2011	0.0	0.0	4.91		
	6/21/2011	0.0	0.0	8.75		
	7/18/2011	0.0	0.0	12.51		
	8/15/2011	0.0	0.0	11.98		
GP-37A	6/17/2009	**0.2***	0.00	13.03	15.91	1st monitoring round
	7/22/2009	0.0	0.00	11.15		
	7/29/2009	**0.1***	0.00	11.40		LCT pumps started 7/15
	8/4/2009	0.0	+0.20	11.46		
	8/17/2009	0.0	0.00	11.69		
	9/29/2009	0.0	0.00	12.19		
	10/19/2009	0.0	0.00	12.42		
	11/17/2009	**2.7**	0.00	13.23		
	12/10/2009	**4.8**	0.00	13.35		
	1/27/2010	**9.1**	0.00	12.37		LFGCS started 1/22/10
	2/23/2010	**12.0**	0.00	12.42		
	3/17/2010	**14.4**	+0.2	12.35		
	4/28/2010	**16.5**	0.00	12.38		
	5/24/2010	**13.1**	-4.80	NM		Connected to hose extraction 5/19
	5/25/2010	0.0	-5.60	NM		Increased vacuum
	5/26/2010	**4.1**	-5.00	12.34		
	6/10/2010	**0.9**	-6.00	NM		
	6/28/2010	**0.1***	-6.00	NM		
	7/20/2010	**0.3***	-2.30	NM		
	8/16/2010	0.0	-5.00	NM		
	9/16/2010	0.0	-6.00	12.78		
	10/14/2010	**1.4**	-6.00	NM		
	11/15/2010	**0.5**	0.00	NM		Removed hose extraction
	12/1/2010	0.0	0.00	13.27		
	1/13/2011	**0.1***	0.00	12.96		
	2/14/2011	0.0	0.00	13.25		
	3/16/2011	**0.1***	0.00	12.21		
	4/28/2011	**0.1***	0.00	10.91		
	5/31/2011	0.0	0.00	11.49		
	6/21/2011	0.0	0.00	12.78		
	7/18/2011	0.0	0.00	13.23		
	8/15/2011	0.0	0.00	12.00		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
G-113	5/7/2009	0.0	0.00	11.43	17.86	
	6/3/2009	0.0	0.00	12.11		
	6/17/2009	0.0	0.00	12.00		
	7/22/2009	0.0	0.00	NM		LCT pumps started 7/15
	8/17/2009	**12.3**	-0.10	NM		
	10/14/2009	0.0	0.00	12.80		
	10/19/2009	**0.5**	+0.20	NM		
	11/17/2009	0.0	0.00	NM		
	12/10/2009	0.0	+0.20	NM		
	1/27/2010	0.0	+0.4	NM		LFGCS started 1/22/10
	2/23/2010	0.0	+0.20	NM		
	3/17/2010	0.0	0.00	NM		
	4/28/2010	0.0	0.00	NM		
	5/26/2010	0.0	+0.5	NM		
	6/28/2010	**0.2***	0.00	11.84		
	7/20/2010	0.0	0.00	12.37		
	8/16/2010	0.0	0.00	11.86		
	9/16/2010	0.0	0.00	12.39		
	10/14/2010	**14.4**	0.00	NM		
	11/15/2010	**13.1**	0.00	NM		
	12/1/2010	0.0	0.00	12.78		
	1/13/2011	0.0	+0.86	12.53		
	2/14/2011	0.0	-0.60	12.73		
	3/16/2011	0.0	0.00	11.79		
	4/28/2011	0.0	0.00	10.62		
	5/31/2011	0.0	0.00	11.13		
	6/21/2011	0.0	0.00	11.80		
	7/18/2011	**0.2***	0.00	12.60		
	8/15/2011	0.0	0.00	11.43		
G-116	5/7/2009	**76.1**	+24.00	12.24	36.89	1st monitoring round
	6/3/2009	**80.0**	+9.50	12.26		casing likely cracked at
	6/17/2009	**65.1**	0.00	11.90		~12' B/TOC
	7/22/2009	0.0	+0.10	12.01		LCT pumps starte 7/16
	7/29/2009	**73.4**	+0.10	12.72		
	8/4/2009	**73.9**	NM	12.93		
	8/17/2009	**67.6**	0.00	13.28		
	9/29/2009	**75.3**	0.00	13.50		
	10/19/2009	**72.7**	+0.20	13.32		
	11/17/2009	**79.8**	0.00	14.31		
	12/10/2009	**70.1**	+0.50	13.88		
	1/27/2010	**75.6**	0.40	12.41		LFGCS started 1/22/10
	2/22/2010	**80.1**	0.00	12.55		
	3/17/2010	**78.3**	+0.15	12.69		
	3/31/2010	**16.2**	-3.20	NM		hose vacuum extraction from EWL-11 began 3/26/10
	4/2/2010	**16.7**	-3.20	NM		
	4/5/2010	**12.7**	-3.30	NM		
	4/9/2010	**14.9**	-3.60	NM		
	4/28/2010	**24.7**	-4.60	NM		
	5/24/2010	**7.9**	-5.00	NM		Increased vacuum
	5/25/2010	**9.4**	-5.25	NM		
	5/26/2010	**12.1**	-5.00	NM		
	6/10/2010	0.0	-5.50	NM		
	6/28/2010	0.0	-5.50	NM		
	7/19/2010	**42.5**	+0.22	NM		
	8/16/2010	**13.7**	-5.00	NM		
	9/16/2010	**10.8**	-4.70	NM		
	10/14/2010	**15.6**	-5.30	NM		
	11/15/2010	**57.8**	0.00	NM		Removed hose extraction
	12/1/2010	**31.0**	0.00	14.00		
	1/13/2011	**71.8**	0.00	14.26		
	2/14/2011	**69.1**	0.00	14.15		
	3/16/2011	**78.1**	+0.9	13.46		
	4/28/2011	**76.8**	0.00	12.41		
	5/31/2011	**71.5**	0.00	12.00		
	6/21/2011	**25.7**	-4.7	NM		Connected hose extraction 6/6/11
	7/18/2011	**39.6**	-3.7	NM		
	8/15/2011	0.0	-1.5	11.82		

Gas Probes With Methane Detections
Mallard North Landfill, Hanover Park, Illinois

ID	Date	CH4 (%)	Pressure (" H2O)	Depth to Water (ft /BTOC)	Depth to Top of Screen (ft/BTOC)	Comments
MW-204D East (Shallow)	2/9/2009	**30.3**	0.00	21.49	22.02	
	3/5/2009	**15.0**	0.00	21.09		
	3/11/2009	**8.6**	0.00	20.44		
	4/8/2009	**12.8**	0.00	20.07		
	5/7/2009	**23.3**	0.00	19.65		
	6/3/2009	**19.1**	0.00	18.20		
	6/17/2009	**0.4**	0.00	20.00		
	7/22/2009	**60.0**	0.00	20.65		LCT pumps started 7/15
	7/29/2009	**48.3**	0.00	20.72		
	8/4/2009	**37.8**	0.00	21.00		
	8/17/2009	**17.7**	0.00	21.91		
	9/29/2009	**10.7**	0.00	23.86		
	10/19/2009	**57.5**	+0.10	22.80		
	11/17/2009	**35.2**	0.00	18.26		
	12/10/2009	**52.8**	0.00	21.88		
	1/27/2010	**34.2**	0.00	NM		LFGCS started 1/22/10
	2/23/2010	**42.2**	0.00	19.42		
	3/17/2010	**41.4**	0.00	17.21		
	4/28/2010	**41.0**	0.00	19.09		
	5/26/2010	**52.5**	0.00	18.47		
	6/28/2010	**35.9**	0.00	NM		
	6/29/2010	**27.9**	0.00	NM		
	7/20/2010	**47.6**	0.00	17.48		
	8/16/2010	**44.5**	0.00	20.25		
	9/16/2010	**40.2**	0.00	20.01		
	10/14/2010	**39.1**	0.00	19.63		
	11/15/2010	**44.1**	0.00	22.26		
	12/1/2010	**50.9**	0.00	23.09		
	1/13/2011	**69.8**	+0.01	22.93		
	2/14/2011	**32.8**	0.00	22.95		
	3/16/2011	**28.2**	0.00	20.22		
	4/28/2011	**22.2**	0.00	22.51		
	5/31/2011	**34.6**	0.00	22.49		
	6/21/2011	**35.9**	0.00	17.44		
	7/18/2011	**29.2**	0.00	20.72		
	8/15/2011	**28.9**	0.00	20.27		
GP-25A	4/28/2011	**0.3***	0.0	5.09	7.53	
	5/31/2011	0.0	0.0	5.34		
	6/21/2011	0.0	+0.1	4.86		
	7/18/2011	0.0	+0.1	7.46		
	8/15/2011	0.0	0.0	8.95		
MW-204S (Deep)	4/28/2011	**0.1***	0.0	23.53	43.58	
	5/31/2011	0.0	0.0	23.50		
	6/21/2011	0.0	0.0	23.99		
	7/18/2011	0.0	0.0	27.73		
	8/15/2011	**0.1***	0.0	25.85		

1. NM= not measured
2. Measurements prior to 12/1/10 were by RMT, Inc. Measurements on or after 12/1/10 were by FPDDC.
By: B. Zimmerman, 8/19/09
Checked by: J. Schoephoester, 8/19/09

Updated By: J. Schoephoester, 1/27/10; E. Watruba, 2/24/10
Updates Checked By: N. Braun, 2/3/10; J. Schoephoester, 2/24/10

Updated by: N. Braun, 3/24/10; update checked by E. Watruba, 3/24/10
Updated by: S. Inman 4/16/2010; update checked by J. Schoephoester 4/16/2010
Updated by: E. Watruba, 6/1/10; update checked by N. Braun, 6/1/10
Updated by: E. Watruba, 6/17/10; update checked by S. Inman, 6/21/10
Updated by: S. Jorgensen, 6/29/10; update checked by E. Watruba, 6/30/10
Updated by: S. Jorgensen, 7/30/10; update checked by N. Braun, 8/2/10
Updated by: S. Jorgensen, 8/18/10; update checked by T. Halena, 8/19/10
Updated by: J. Schoephoester, 10/20/10; update checked by: S. Jorgensen, 10/21/10
3. * Methane measurement within the margin of error for accuracy of the measuring instrument, and therefore may or may not indicate the presence of methane.
4. Updated by: D. Zinnen, 08/09/11.

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/15/2009	15.35	770.91	12,604	NA	NA	NA	NA	NA	Pumps started 8:30
EWL-2	7/15/2009	15.60	770.66	17,729	1,281	1,281	NA	NA	NA	
EWL-2	7/29/2009	12.00	774.26	161,485	35,939	37,220	NA	NA	2,567	
EWL-2	8/4/2009	14.55	771.71	217,980	14,124	51,344	10	NA	2,354	flowmeter installed
EWL-2	8/17/2009	14.72	771.54	323,881	26,475	77,819	30,790	30,780	2,368	
EWL-2	8/27/2009	NR	NR	419,307	23,857	101,676	58,472	27,682	2,768	
EWL-2	9/11/2009	NR	NR	NR	NA	NA	98,802	40,330	2,689	
EWL-2	9/14/2009	NR	NR	NR	NA	NA	105,214	6,412	2,137	
EWL-2	9/29/2009	12.84	773.42	694,983	68,919	170,595	134,780	29,566	1,971	
EWL-2	9/30/2009	13.09	773.17	701,168	1,546	172,141	136,420	1,640	1,640	
EWL-2	10/20/2009	11.40	774.86	808,950	26,946	199,087	164,580	28,160	1,408	
EWL-2	11/18/2009	12.85	773.41	1,134,398	81,362	280,449	254,880	90,300	3,114	
EWL-2	12/10/2009	10.96	775.30	1,303,001	42,151	322,599	303,151	48,271	2,194	
EWL-2	1/27/2010	NR	NR	1,653,759	87,690	410,289	NA	NA	1,827	flow totalizer removed, new TOC
EWL-2	2/4/2010	4.91	777.90	1,656,020	565	410,854	NA	NA	71	pump frozen, thawed out
EWL-2	2/5/2010	NR	NR	1,656,834	204	411,058	NA	NA	204	pump frozen, thawed out
EWL-2	2/8/2010	4.69	778.12	1,693,075	9,060	420,118	NA	NA	3,020	
EWL-2	2/10/2010	5.83	776.98	1,717,722	6,162	426,280	NA	NA	3,081	
EWL-2	2/12/2010	NR	NR	1,731,779	3,514	429,794	NA	NA	1,757	
EWL-2	2/19/2010	7.05	776.18	1,838,776	26,749	456,543	NA	NA	3,821	Pump raised,pumping rate lowered
EWL-2	2/22/2010	5.50	777.73	1,847,751	2,244	458,787	NA	NA	748	
EWL-2	2/24/2010	6.00	777.23	1,866,073	4,581	463,367	NA	NA	2,290	
EWL-2	2/25/2010	6.40	776.83	1,881,271	3,800	467,167	NA	NA	3,800	
EWL-2	3/1/2010	6.05	777.18	1,909,137	6,967	474,133	NA	NA	1,742	
EWL-2	3/4/2010	6.30	776.93	1,933,725	6,147	480,280	NA	NA	2,049	
EWL-2	3/5/2010	6.65	776.58	1,949,998	4,068	484,349	NA	NA	4,068	
EWL-2	3/8/2010	7.90	775.33	2,022,374	18,094	502,443	NA	NA	6,031	
EWL-2	3/9/2010	6.86	776.37	2,022,726	88	502,531	NA	NA	88	
EWL-2	3/10/2010	6.96	776.27	2,022,736	3	502,533	NA	NA	3	
EWL-2	3/11/2010	7.01	776.22	2,052,445	7,427	509,960	NA	NA	7,427	
EWL-2	3/12/2010	5.60	777.63	2,053,825	345	510,305	NA	NA	345	
EWL-2	3/15/2010	5.00	778.23	2,064,336	2,628	512,933	NA	NA	876	
EWL-2	3/16/2010	5.11	778.12	2,065,863	382	513,315	NA	NA	382	
EWL-2	3/17/2010	5.00	778.23	2,071,135	1,318	514,633	NA	NA	1,318	
EWL-2	3/18/2010	5.26	777.97	2,082,830	2,924	517,557	NA	NA	2,924	
EWL-2	3/22/2010	5.64	777.59	2,139,768	14,235	531,791	NA	NA	3,559	
EWL-2	3/24/2010	5.50	777.73	2,187,860	12,023	543,814	NA	NA	6,012	
EWL-2	3/29/2010	6.40	776.83	2,235,952	12,023	555,837	NA	NA	2,405	
EWL-2	3/31/2010	6.26	776.97	2,265,708	7,439	563,276	NA	NA	3,720	
EWL-2	4/2/2010	6.40	776.83	2,298,823	8,279	571,555	NA	NA	4,139	
EWL-2	4/5/2010	6.20	777.03	2,337,000	9,544	581,099	NA	NA	3,181	Pumps down 4/6 due to storm
EWL-2	4/9/2010	5.60	777.63	2,370,492	8,373	589,472	NA	NA	2,093	
EWL-2	4/12/2010	5.63	777.60	2,400,889	7,599	597,071	NA	NA	2,533	
EWL-2	4/13/2010	5.71	777.52	2,413,547	3,165	600,236	NA	NA	3,165	
EWL-2	4/14/2010	5.90	777.33	2,426,399	3,213	603,449	NA	NA	3,213	
EWL-2	4/16/2010	5.75	777.48	2,454,858	7,115	610,564	NA	NA	3,557	
EWL-2	4/20/2010	5.82	777.41	2,509,980	13,781	624,344	NA	NA	3,445	
EWL-2	4/22/2010	5.76	777.47	2,536,461	6,620	630,964	NA	NA	3,310	
EWL-2	4/28/2010	NR	NR	2,600,736	16,069	647,033	NA	NA	2,678	
EWL-2	5/5/2010	5.50	777.73	2,681,423	20,172	667,205	NA	NA	2,882	
EWL-2	5/11/2010	5.31	777.92	2,754,708	18,321	685,526	NA	NA	3,054	
EWL-2	5/19/2010	5.50	777.73	2,843,772	22,266	707,792	NA	NA	2,783	
EWL-2	5/24/2010	6.60	776.63	2,943,445	24,918	732,710	NA	NA	4,984	
EWL-2	5/26/2010	6.97	776.26	2,979,544	9,025	741,735	NA	NA	4,512	
EWL-2	5/27/2010	6.79	776.44	2,999,802	5,065	746,800	NA	NA	5,065	
EWL-2	6/1/2010	6.90	776.33	3,078,351	19,637	766,437	NA	NA	3,927	Pump lowered approx. 1 foot
EWL-2	6/7/2010	5.60	777.63	3,176,576	24,556	790,993	NA	NA	4,093	
EWL-2	6/15/2010	7.80	775.43	3,308,939	33,091	824,084	NA	NA	4,136	
EWL-2	6/28/2010	8.00	775.23	3,467,712	39,693	863,777	NA	NA	3,053	
EWL-2	6/29/2010	NR	NR	3,479,507	2,949	866,726	NA	NA	2,949	Started pump, repositioned counter

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
EWL-2	7/8/2010	8.98	774.25	3,598,121	29,654	896,379	NA	NA	3,295	
EWL-2	7/14/2010	9.33	773.90	3,683,489	21,342	917,721	NA	NA	3,557	Started pump
EWL-2	7/19/2010	8.90	774.33	3,740,884	14,349	932,070	NA	NA	2,870	Cleaned and repaired pump
EWL-2	7/26/2010	7.84	775.39	3,821,164	20,070	952,140	NA	NA	2,867	
EWL-2	8/16/2010	8.02	775.21	4,241,164	105,000	1,057,140	NA	NA	5,000	Cleaned pump
EWL-2	8/25/2010	9.71	773.52	4,365,147	30,996	1,088,136	NA	NA	3,444	
EWL-2	8/31/2010	9.12	774.11	4,441,784	19,159	1,107,295	NA	NA	3,193	
EWL-2	9/9/2010	8.99	774.24	4,558,004	29,055	1,136,350	NA	NA	3,228	
EWL-2	9/14/2010	10.37	772.86	4,639,764	20,440	1,156,790	NA	NA	4,088	Cleaned pump
EWL-2	9/22/2010	9.40	773.83	4,721,577	20,453	1,177,243	NA	NA	2,557	
EWL-2	9/28/2010	9.48	773.75	4,763,892	10,579	1,187,822	NA	NA	1,763	Counter not counting upon arrival, fixed
EWL-2	10/7/2010	9.46	773.77	4,856,923	23,258	1,211,080	NA	NA	2,584	Cleaned pump
EWL-2	10/14/2010	8.54	774.69	4,912,971	14,012	1,225,092	NA	NA	2,002	Replaced pump
EWL-2	10/22/2010	9.90	773.33	4,940,368	6,849	1,231,941	NA	NA	856	Repaired slight air leak
EWL-2	10/29/2010	-	-	4,988,452	12,021	1,243,962	NA	NA	1,717	Pump off due to leaking tank
EWL-2	11/5/2010	9.15	774.08	5,018,662	7,553	1,251,515	NA	NA	1,079	Counter not counting upon arrival, fixed
EWL-2	11/9/2010	9.05	774.18	5,038,101	4,860	1,256,374	NA	NA	1,215	
EWL-2	11/16/2010	-	-	5,072,572	8,618	1,264,992	NA	NA	1,231	
EWL-2	11/23/2010	9.20	774.03	5,106,373	8,450	1,273,442	NA	NA	1,207	
EWL-2	11/29/2010	8.60	774.63	5,132,434	6,515	1,279,958	NA	NA	1,086	
EWL-2	12/3/2010	8.29	774.94	5,258,014	31,395	1,311,353	NA	NA	7,849	
EWL-2	12/21/2010	8.19	775.04	5,267,780	2,442	1,313,794	NA	NA	136	
EWL-2	12/30/2010	10.30	772.93	5,339,165	17,846	1,331,640	NA	NA	1,983	
EWL-2	1/4/2011	9.87	773.36	5,351,855	3,173	1,334,813	NA	NA	635	
EWL-2	1/14/2011	10.51	772.72	5,377,783	6,482	1,341,295	NA	NA	648	
EWL-2	1/20/2011	12.00	771.23	5,094,899	-	1,341,295	NA	NA	-	COUNTER MALFUNCTION
EWL-2	1/26/2011	12.17	771.06	5,096,408	377	1,341,672	NA	NA	63	
EWL-2	2/2/2011	12.05	771.18	5,096,408	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/9/2011	11.91	771.32	5,974,854	-	1,341,672	NA	NA	-	COUNTER MALFUNCTION
EWL-2	2/14/2011	10.23	773.00	5,984,866	2,503	1,344,175	NA	NA	501	
EWL-2	2/25/2011	10.24	772.99	6,096,503	27,909	1,372,084	NA	NA	2,537	
EWL-2	3/4/2011	11.46	771.77	6,191,381	23,720	1,395,804	NA	NA	3,389	
EWL-2	3/11/2011	11.50	771.73	6,314,056	30,669	1,426,473	NA	NA	4,381	
EWL-2	3/18/2011	10.53	772.70	6,375,502	15,362	1,441,834	NA	NA	2,195	
EWL-2	3/22/2011	10.36	772.87	6,391,164	3,916	1,445,750	NA	NA	979	
EWL-2	4/8/2011	9.71	773.52	6,671,634	70,118	1,515,867	NA	NA	4,125	
EWL-2	4/19/2011	7.31	775.92	6,837,285	41,413	1,557,280	NA	NA	3,765	
EWL-2	4/29/2011	5.91	777.32	6,879,900	10,654	1,567,934	NA	NA	1,065	
EWL-2	5/6/2011	5.86	777.37	6,972,251	23,088	1,591,021	NA	NA	3,298	
EWL-2	5/13/2011	5.96	777.27	7,030,265	14,504	1,605,525	NA	NA	2,072	
EWL-2	5/20/2011	6.60	776.63	7,171,357	35,273	1,640,798	NA	NA	5,039	
EWL-2	5/27/2011	6.15	777.08	7,194,435	5,770	1,646,567	NA	NA	824	
EWL-2	5/31/2011	6.03	777.20	7,365,792	42,839	1,689,407	NA	NA	10,710	
EWL-2	6/10/2011	6.73	776.50	7,490,089	31,074	1,720,481	NA	NA	3,107	
EWL-2	6/17/2011	8.36	774.87	7,540,694	12,651	1,733,132	NA	NA	1,807	
EWL-2	6/21/2011	7.66	775.57	7,681,685	35,248	1,768,380	NA	NA	8,812	
EWL-2	6/30/2011	9.41	773.82	7,827,628	36,486	1,804,866	NA	NA	4,054	
EWL-2	7/8/2011	8.88	774.35	7,951,969	31,085	1,835,951	NA	NA	3,886	
EWL-2	7/15/2011	11.23	772.00	8,167,203	53,809	1,889,759	NA	NA	7,687	
EWL-2	7/20/2011	11.45	771.78	8,203,183	8,995	1,898,754	NA	NA	1,799	
EWL-2	8/5/2011	11.75	771.48	8,543,598	85,104	1,983,858	NA	NA	5,319	
EWL-2	8/12/2011	11.85	771.38	8,556,141	3,136	1,986,994	NA	NA	448	COUNTER MALFUNCTION?
EWL-2	8/16/2011	12.35	770.88	8,699,999	35,965	2,022,958	NA	NA	8,991	COUNTER STUCK AT 699,999
EWL-2	8/26/2011	12.31	770.92	8,699,999	-	2,022,958	NA	NA	-	COUNTER STUCK AT 699,999
EWL-2	12/31/2050									
MH-2	7/15/2009	1.00	773.76	1,260	NA	NA	NA	NA	NA	Pumps started 8:30
MH-2	7/15/2009	1.30	773.46	7,005	1,436	1,436	NA	NA	NA	
MH-2	7/29/2009	3.00	771.76	NR	NR	NA	NA	NA	NA	
MH-2	7/30/2009	3.50	771.71	24,551	4,387	5,823	63,060	NA	4,387	flowmeter installed

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	8/4/2009	3.60	771.61	24,856	76	5,899	63,060	0	15	
MH-2	8/17/2009	2.42	772.79	24,894	10	5,909	62,240	NA	NA	counter reset to current reading
MH-2	8/27/2009	NR		24,906	3	5,912	62,240	0	0	pump off, check valve damaged
MH-2	9/8/2009	NR		NR	NA	NA	63,058	818	68	
MH-2	9/14/2009	NR		NR	NA	NA	63,419	361	60	
MH-2	9/29/2009	2.33	772.88	39,108	3,551	9,462	66,380	2,961	197	adjusted pump air pressure
MH-2	9/30/2009	2.74	772.47	49,539	2,608	12,070	69,010	2,630	2,630	
MH-2	10/20/2009	2.42	772.79	92,726	10,797	22,867	79,640	10,630	532	
MH-2	11/18/2009	4.15	771.06	123,722	7,749	30,616	87,280	7,640	263	
MH-2	12/10/2009	3.95	771.26	126,700	745	31,360	87,990	710	32	pump frozen, thawed out
MH-2	1/27/2010	3.44	771.50	199,716	18,254	49,614	NA	NA	380	totalizer removed, new TOC
MH-2	2/4/2010	3.32	771.62	235,688	8,993	58,607	NA	NA	1,124	seep noticed
MH-2	2/5/2010	NR		247,728	3,010	61,617	NA	NA	3,010	
MH-2	2/8/2010	3.21	771.73	251,841	1,028	62,645	NA	NA	343	pump frozen
MH-2	2/10/2010	3.86	771.08	259,868	2,007	64,652	NA	NA	1,003	
MH-2	2/12/2010	NR		281,358	5,373	70,025	NA	NA	2,686	
MH-2	2/19/2010	3.50	771.44	297,081	3,931	73,955	NA	NA	562	pump frozen, thawed,cleaned pump
MH-2	2/22/2010	3.46	771.48	344,840	11,940	85,895	NA	NA	3,980	
MH-2	2/24/2010	3.75	771.19	373,985	7,286	93,181	NA	NA	3,643	
MH-2	2/25/2010	4.10	770.84	388,752	3,692	96,873	NA	NA	3,692	
MH-2	3/1/2010	4.80	770.14	491,779	25,757	122,630	NA	NA	6,439	
MH-2	3/4/2010	3.90	771.04	551,398	14,905	137,535	NA	NA	4,968	
MH-2	3/5/2010	3.72	771.22	574,532	5,784	143,318	NA	NA	5,784	
MH-2	3/8/2010	1.70	773.24	596,559	5,507	148,825	NA	NA	1,836	
MH-2	3/9/2010	1.97	772.97	603,947	1,847	150,672	NA	NA	1,847	
MH-2	3/10/2010	1.60	773.34	619,702	3,939	154,611	NA	NA	3,939	
MH-2	3/11/2010	2.10	772.84	625,665	1,491	156,101	NA	NA	1,491	
MH-2	3/12/2010	2.00	772.94	630,055	1,098	157,199	NA	NA	1,098	
MH-2	3/15/2010	1.90	773.04	640,345	2,573	159,771	NA	NA	858	
MH-2	3/16/2010	2.10	772.84	652,193	2,962	162,733	NA	NA	2,962	
MH-2	3/17/2010	2.17	772.77	679,023	6,708	169,441	NA	NA	6,708	
MH-2	3/18/2010	2.36	772.58	701,663	5,660	175,101	NA	NA	5,660	
MH-2	3/22/2010	1.93	773.01	794,114	23,113	198,214	NA	NA	5,778	
MH-2	3/24/2010	2.30	772.64	838,635	11,130	209,344	NA	NA	5,565	
MH-2	3/29/2010	2.70	772.24	958,776	30,035	239,379	NA	NA	6,007	
MH-2	3/31/2010	2.69	772.25	1,003,281	11,126	250,505	NA	NA	5,563	
MH-2	4/2/2010	3.08	771.86	1,064,389	15,277	265,782	NA	NA	7,639	
MH-2	4/5/2010	2.25	772.69	1,160,301	23,978	289,760	NA	NA	7,993	Pumps down 4/6 due to storm
MH-2	4/9/2010	2.55	772.39	1,239,020	19,680	309,440	NA	NA	4,920	
MH-2	4/12/2010	2.65	772.29	1,325,089	21,517	330,957	NA	NA	7,172	
MH-2	4/13/2010	2.72	772.22	1,353,820	7,183	338,140	NA	NA	7,183	
MH-2	4/14/2010	3.00	771.94	1,387,650	8,458	346,598	NA	NA	8,458	
MH-2	4/16/2010	3.00	771.94	1,454,058	16,602	363,200	NA	NA	8,301	
MH-2	4/20/2010	3.15	771.79	1,549,130	23,768	386,968	NA	NA	5,942	
MH-2	4/22/2010	2.85	772.09	1,601,244	13,029	399,996	NA	NA	6,514	
MH-2	4/28/2010	2.92	772.02	1,714,015	28,193	428,189	NA	NA	4,699	
MH-2	5/5/2010	2.92	772.02	1,884,924	42,727	470,916	NA	NA	6,104	
MH-2	5/11/2010	1.54	773.40	1,995,268	27,586	498,502	NA	NA	4,598	
MH-2	5/19/2010	2.20	772.74	2,204,675	52,352	550,854	NA	NA	6,544	
MH-2	5/24/2010	2.45	772.49	2,253,910	12,309	563,163	NA	NA	2,462	
MH-2	5/27/2010	2.63	772.31	2,294,720	10,203	573,365	NA	NA	3,401	
MH-2	6/1/2010	2.10	772.84	2,357,977	15,814	589,179	NA	NA	3,163	Pump cleaned
MH-2	6/7/2010	2.88	772.06	2,542,367	46,098	635,277	NA	NA	7,683	
MH-2	6/15/2010	3.08	771.86	2,674,941	33,144	668,420	NA	NA	4,143	
MH-2	6/23/2010	3.67	771.27	2,811,945	34,251	702,671	NA	NA	4,281	
MH-2	6/28/2010	2.99	771.95	2,904,158	23,053	725,725	NA	NA	4,611	
MH-2	7/8/2010	3.97	770.97	3,010,092	26,484	752,208	NA	NA	2,648	Started and repositioned pump
MH-2	7/14/2010	3.37	771.57	3,080,295	17,551	769,759	NA	NA	2,925	Started pump
MH-2	7/19/2010	3.47	771.47	3,101,147	5,213	774,972	NA	NA	1,043	Started and cleaned pump
MH-2	7/26/2010	2.72	772.22	3,166,720	16,393	791,365	NA	NA	2,342	

Liquid Pumping Volumes and Rates
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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
MH-2	8/16/2010	3.00	771.94	3,251,015	21,074	812,439	NA	NA	1,004	Cleaned pump
MH-2	8/25/2010	3.07	771.87	3,286,988	8,993	821,432	NA	NA	999	
MH-2	8/31/2010	3.35	771.59	3,295,550	2,141	823,573	NA	NA	357	
MH-2	9/9/2010	2.99	771.95	3,339,234	10,921	834,494	NA	NA	1,213	
MH-2	9/14/2010	3.29	771.65	3,345,736	1,626	836,119	NA	NA	325	Cleaned pump
MH-2	9/22/2010	3.35	771.59	3,355,477	2,435	838,554	NA	NA	304	
MH-2	9/28/2010	3.45	771.49	3,406,720	12,811	851,365	NA	NA	2,135	
MH-2	10/7/2010	4.18	770.76	3,461,855	13,784	865,149	NA	NA	1,532	
MH-2	10/14/2010	4.18	770.76	3,527,895	16,510	881,659	NA	NA	2,359	Replaced pump
MH-2	10/22/2010	5.41	769.53	3,794,068	83,053	964,712	NA	NA	10,382	
MH-2	10/29/2010	NR	NR	3,871,264	85,842	1,050,554	NA	NA	12,263	Pump off due to leaking tank
MH-2	11/5/2010	5.30	769.64	4,024,543	38,320	3,111,832	NA	NA	5,474	
MH-2	11/9/2010	4.88	770.06	4,089,583	16,260	3,128,092	NA	NA	4,065	Cut-off wall installed 11/9-11/11
MH-2	11/23/2010	4.20	770.74	4,302,141	53,140	3,181,232	NA	NA	3,796	
MH-2	11/29/2010	3.19	771.75	4,373,837	17,924	3,199,156	NA	NA	2,987	
MH-2	12/3/2010	3.37	771.57	4,731,348	89,378	3,288,534	NA	NA	22,344	
MH-2	12/21/2010	5.13	769.81	4,903,964	43,154	3,331,688	NA	NA	2,397	
MH-2	12/30/2010	3.36	771.58	4,991,078	21,779	3,353,466	NA	NA	2,420	
MH-2	1/4/2011	2.56	772.38	5,091,387	25,077	3,378,543	NA	NA	5,015	
MH-2	1/14/2011	2.82	772.12	5,095,504	1,029	3,379,573	NA	NA	103	
MH-2	1/20/2011	2.73	772.21	5,290,345	48,710	3,428,283	NA	NA	8,118	
MH-2	1/26/2011	3.26	771.68	5,292,630	571	3,428,854	NA	NA	95	
MH-2	2/2/2011	2.50	772.44	5,292,630	-	3,428,854	NA	NA	-	
MH-2	2/9/2011	2.36	772.58	5,430,045	34,354	3,463,208	NA	NA	4,908	
MH-2	2/14/2011	2.21	772.73	5,456,089	6,511	3,469,719	NA	NA	1,302	
MH-2	2/25/2011	1.86	773.08	5,671,148	53,765	3,523,484	NA	NA	4,888	
MH-2	3/4/2011	2.83	772.11	5,828,428	39,320	3,562,804	NA	NA	5,617	
MH-2	3/11/2011	1.09	773.85	6,000,380	42,988	3,605,792	NA	NA	6,141	
MH-2	3/18/2011	1.11	773.83	6,005,061	1,170	3,606,962	NA	NA	167	
MH-2	3/22/2011	1.95	772.99	6,009,623	1,141	3,608,102	NA	NA	285	
MH-2	4/8/2011	1.53	773.41	6,106,195	24,143	3,632,245	NA	NA	1,420	
MH-2	4/19/2011	1.60	773.34	6,189,711	20,879	3,653,124	NA	NA	1,898	
MH-2	4/29/2011	1.75	773.19	6,231,266	10,389	3,663,513	NA	NA	1,039	
MH-2	5/6/2011	2.01	772.93	6,274,726	10,865	3,674,378	NA	NA	1,552	
MH-2	5/13/2011	2.67	772.27	6,661,467	96,685	3,771,063	NA	NA	13,812	
MH-2	5/20/2011	3.02	771.92	7,078,180	104,178	3,875,242	NA	NA	14,883	
MH-2	5/27/2011	2.95	771.99	7,208,437	32,564	3,907,806	NA	NA	4,652	
MH-2	5/31/2011	2.62	772.32	7,486,617	69,545	3,977,351	NA	NA	17,386	
MH-2	6/10/2011	2.63	772.31	7,566,011	19,849	3,997,199	NA	NA	1,985	
MH-2	6/17/2011	3.35	771.59	7,628,820	15,702	4,012,902	NA	NA	2,243	
MH-2	6/21/2011	3.15	771.79	7,659,600	7,695	4,020,597	NA	NA	1,924	
MH-2	6/30/2011	3.51	771.43	7,795,480	33,970	4,054,567	NA	NA	3,774	
MH-2	7/8/2011	2.67	772.27	7,827,559	8,020	4,062,586	NA	NA	1,002	
MH-2	7/15/2011	2.56	772.38	7,845,239	4,420	4,067,006	NA	NA	631	
MH-2	7/20/2011	2.39	772.55	7,954,151	27,228	4,094,234	NA	NA	5,446	
MH-2	8/5/2011	1.66	773.28	8,075,476	30,331	4,124,566	NA	NA	1,896	
MH-2	8/12/2011	2.69	772.25	8,108,618	8,286	4,132,851	NA	NA	1,184	
MH-2	8/16/2011	1.25	773.69	8,164,255	13,909	4,146,760	NA	NA	3,477	
MH-2	8/26/2011	2.06	772.88	8,277,287	28,258	4,175,018	NA	NA	2,826	
MH-2	12/31/2050									
SP-1	7/15/2009	9.60	771.54	7,923	NA	NA	NA	NA	NA	Pumps started 8:30
SP-1	7/15/2009	9.85	771.29	10,483	640	640	NA	NA	NA	
SP-1	7/29/2009	8.70	772.44	114,354	25,968	26,608	NA	NA	1,855	
SP-1	7/30/2009	10.00	771.14	129,660	3,827	30,434	52,620	NA	3,827	flowmeter installed
SP-1	8/4/2009	9.85	771.29	165,240	8,895	39,329	61,590	8,970	1,794	
SP-1	8/17/2009	7.61	773.53	240,262	18,756	58,085	83,410	21,820	1,678	
SP-1	8/27/2009	NR	NR	300,884	15,156	73,240	99,410	16,000	1,600	
SP-1	9/11/2009	NR	NR	NR	NA	NA	123,444	24,034	1,602	
SP-1	9/14/2009	NR	NR	NR	NA	NA	127,467	4,023	1,341	

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ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	9/29/2009	7.88	773.26	492,611	47,932	121,172	145,210	17,743	1,183	
SP-1	9/30/2009	7.65	773.49	494,466	464	121,636	145,680	470	470	
SP-1	10/20/2009	7.99	773.15	565,050	17,646	139,282	164,620	18,940	947	
SP-1	11/18/2009	9.39	771.75	790,447	56,349	195,631	221,320	56,700	1,955	
SP-1	12/10/2009	NR	NR	943,127	38,170	233,801	254,970	33,650	1,530	
SP-1	1/27/2010	1.61	775.73	1,262,285	79,790	313,591	NA	NA	1,662	totalizer removed, new TOC
SP-1	2/4/2010	4.58	772.76	1,362,850	25,141	338,732	NA	NA	3,143	
SP-1	2/5/2010	NR	NR	1,370,391	1,885	340,617	NA	NA	1,885	
SP-1	2/8/2010	1.62	775.72	1,381,453	2,766	343,383	NA	NA	922	
SP-1	2/10/2010	1.95	775.39	1,382,333	220	343,603	NA	NA	110	pump frozen, thawed out
SP-1	2/12/2010	NR	NR	1,386,697	1,091	344,694	NA	NA	546	pump frozen, thawed out
SP-1	2/19/2010	1.17	776.17	1,394,300	1,901	346,594	NA	NA	272	seep noticed, cleaned pump
SP-1	2/22/2010	2.10	775.24	1,416,771	5,618	352,212	NA	NA	1,873	
SP-1	2/25/2010	4.20	773.14	1,458,714	10,486	362,698	NA	NA	3,495	
SP-1	3/1/2010	4.60	772.74	1,494,578	8,966	371,664	NA	NA	2,242	
SP-1	3/4/2010	5.10	772.24	1,520,800	6,556	378,219	NA	NA	2,185	
SP-1	3/5/2010	4.33	773.01	1,532,125	2,831	381,051	NA	NA	2,831	
SP-1	3/8/2010	2.40	774.94	1,560,836	7,178	388,228	NA	NA	2,393	
SP-1	3/9/2010	2.10	775.24	1,563,562	682	388,910	NA	NA	682	
SP-1	3/10/2010	2.20	775.14	1,577,390	3,457	392,367	NA	NA	3,457	
SP-1	3/11/2010	2.70	774.64	1,592,173	3,696	396,063	NA	NA	3,696	
SP-1	3/12/2010	1.80	775.54	1,606,218	3,511	399,574	NA	NA	3,511	
SP-1	3/15/2010	0.80	776.54	1,606,486	67	399,641	NA	NA	22	
SP-1	3/16/2010	1.68	775.66	1,619,059	3,143	402,784	NA	NA	3,143	
SP-1	3/17/2010	2.41	774.93	1,641,860	5,700	408,484	NA	NA	5,700	
SP-1	3/18/2010	2.95	774.39	1,660,939	4,770	413,254	NA	NA	4,770	
SP-1	3/22/2010	2.22	774.29	1,710,384	12,361	425,615	NA	NA	3,090	
SP-1	3/24/2010	3.60	772.91	1,746,376	8,998	434,613	NA	NA	4,499	
SP-1	3/29/2010	3.05	773.46	1,796,543	12,542	447,155	NA	NA	2,508	
SP-1	3/31/2010	2.65	773.86	1,813,347	4,201	451,356	NA	NA	2,101	
SP-1	4/2/2010	2.41	774.10	1,831,163	4,454	455,810	NA	NA	2,227	
SP-1	4/5/2010	2.30	774.21	1,862,075	7,728	463,538	NA	NA	2,576	Pumps down 4/6 due to storm
SP-1	4/9/2010	2.30	774.21	1,903,010	10,234	473,772	NA	NA	2,558	
SP-1	4/12/2010	2.52	773.99	1,947,779	11,192	484,964	NA	NA	3,731	
SP-1	4/13/2010	2.73	773.78	1,962,072	3,573	488,537	NA	NA	3,573	
SP-1	4/14/2010	2.55	773.96	1,973,876	2,951	491,488	NA	NA	2,951	
SP-1	4/16/2010	2.25	774.26	2,001,292	6,854	498,342	NA	NA	3,427	
SP-1	4/20/2010	3.43	773.08	2,063,675	15,596	513,938	NA	NA	3,899	
SP-1	4/22/2010	3.67	772.84	2,094,199	7,631	521,569	NA	NA	3,816	
SP-1	4/28/2010	4.00	772.51	2,164,536	17,584	539,153	NA	NA	2,931	
SP-1	5/5/2010	2.38	774.13	2,224,586	15,013	554,166	NA	NA	2,145	
SP-1	5/11/2010	3.97	772.54	2,298,736	18,538	572,703	NA	NA	3,090	
SP-1	5/19/2010	2.66	773.85	2,406,017	26,820	599,524	NA	NA	3,353	
SP-1	5/24/2010	2.70	773.81	2,474,336	17,080	616,603	NA	NA	3,416	
SP-1	5/27/2010	4.16	772.35	2,523,668	12,333	628,936	NA	NA	4,111	
SP-1	6/1/2010	2.78	773.73	2,562,800	9,783	638,719	NA	NA	1,957	
SP-1	6/7/2010	4.33	772.18	2,648,770	21,493	660,212	NA	NA	3,582	
SP-1	6/15/2010	3.51	773.00	2,724,395	18,906	679,118	NA	NA	2,363	
SP-1	6/23/2010	3.08	773.43	2,802,034	19,410	698,528	NA	NA	2,426	
SP-1	6/28/2010	2.46	774.05	2,846,380	11,087	709,614	NA	NA	2,217	
SP-1	7/8/2010	2.62	773.89	2,966,573	30,048	739,663	NA	NA	3,005	
SP-1	7/14/2010	1.01	775.50	3,016,072	12,375	752,037	NA	NA	2,062	Pump replaced on 7/13/2010
SP-1	7/19/2010	3.95	772.56	3,074,879	14,702	766,739	NA	NA	2,940	Started and cleaned pump
SP-1	7/26/2010	1.04	775.47	3,134,541	14,916	781,655	NA	NA	2,131	
SP-1	8/16/2010	4.00	772.51	3,554,106	104,891	886,546	NA	NA	4,995	Started and cleaned pump
SP-1	8/25/2010	3.16	773.35	3,620,175	16,517	903,063	NA	NA	1,835	
SP-1	8/31/2010	2.35	774.16	3,653,116	8,235	911,298	NA	NA	1,373	
SP-1	9/9/2010	2.67	773.84	3,716,271	15,789	927,087	NA	NA	1,754	
SP-1	9/14/2010	3.27	773.24	3,749,763	8,373	935,460	NA	NA	1,675	
SP-1	9/22/2010	3.00	773.51	3,796,013	11,563	947,023	NA	NA	1,445	Cleaned pump

Liquid Pumping Volumes and Rates
Mallard North Landfill, Hanover Park, IL

ID	Date	Liquid Depth (ft, BTOC)	Liquid Elevation (ft, MSL)	Pump Cycle Counter Reading	Period Volume Pumped (gallons)(1)	Cumulative Volume Pumped (gallons)	Flowmeter Totalizer (Gallons)	Period Volume Pumped (gallons)(2)	Average Volume Pumped (gallons/day)	Comments
SP-1	9/28/2010	2.90	773.61	3,828,460	8,112	955,134	NA	NA	1,352	
SP-1	10/7/2010	3.21	773.30	3,876,635	12,044	967,178	NA	NA	1,338	Cleaned pump
SP-1	10/14/2010	3.01	773.50	3,913,500	9,216	976,394	NA	NA	1,317	
SP-1	10/22/2010	3.12	773.39	3,944,246	7,687	984,081	NA	NA	961	
SP-1	10/29/2010	NR	NR	3,973,045	7,200	991,281	NA	NA	1,029	Pump off due to leaking tank
SP-1	11/5/2010	3.10	773.41	3,994,762	5,429	996,710	NA	NA	776	
SP-1	11/9/2010	2.83	773.68	4,008,694	3,483	1,000,193	NA	NA	871	
SP-1	11/23/2010	2.78	773.73	4,047,147	9,613	1,009,806	NA	NA	687	Regulator removed due to leak
SP-1	11/29/2010	2.31	774.20	4,054,706	1,890	1,011,696	NA	NA	315	
SP-1	12/3/2010	2.23	774.28	4,080,361	6,414	1,018,110	NA	NA	1,603	
SP-1	12/21/2010	2.00	774.51	4,080,889	132	1,018,242	NA	NA	7	
SP-1	12/30/2010	3.61	772.90	4,125,983	11,274	1,029,515	NA	NA	1,253	
SP-1	1/4/2011	2.35	774.16	4,140,614	3,658	1,033,173	NA	NA	732	
SP-1	1/14/2011	2.21	774.30	4,145,475	1,215	1,034,388	NA	NA	122	
SP-1	1/20/2011	2.15	774.36	4,157,669	3,049	1,037,437	NA	NA	508	
SP-1	1/26/2011	2.65	773.86	4,158,398	182	1,037,619	NA	NA	30	
SP-1	2/2/2011	2.25	774.26	4,158,398	-	1,037,619	NA	NA	-	
SP-1	2/9/2011	1.88	774.63	4,166,635	2,059	1,039,678	NA	NA	294	
SP-1	2/14/2011	1.41	775.10	4,166,747	28	1,039,706	NA	NA	6	
SP-1	2/25/2011	1.22	775.29	4,179,676	3,232	1,042,938	NA	NA	294	
SP-1	3/4/2011	1.03	775.48	4,193,424	3,437	1,046,375	NA	NA	491	
SP-1	3/11/2011	1.43	775.08	4,193,502	20	1,046,395	NA	NA	3	
SP-1	3/18/2011	1.01	775.50	4,201,373	1,968	1,048,363	NA	NA	281	
SP-1	3/22/2011	1.31	775.20	4,219,245	4,468	1,052,831	NA	NA	1,117	
SP-1	4/8/2011	2.02	774.49	4,246,961	6,929	1,059,760	NA	NA	408	
SP-1	4/19/2011	2.87	773.64	4,351,984	26,256	1,086,015	NA	NA	2,387	
SP-1	4/29/2011	1.48	775.03	4,503,523	37,885	1,123,900	NA	NA	3,788	
SP-1	5/6/2011	2.55	773.96	4,618,536	28,753	1,152,653	NA	NA	4,108	
SP-1	5/13/2011	2.25	774.26	4,703,095	21,140	1,173,793	NA	NA	3,020	
SP-1	5/20/2011	2.20	774.31	4,787,654	21,140	1,194,933	NA	NA	3,020	
SP-1	5/27/2011	2.72	773.79	4,933,654	36,500	1,231,433	NA	NA	5,214	
SP-1	5/31/2011	1.51	775.00	5,000,503	16,712	1,248,145	NA	NA	4,178	
SP-1	6/10/2011	2.25	774.26	5,176,710	44,052	1,292,197	NA	NA	4,405	
SP-1	6/17/2011	2.03	774.48	5,311,885	33,794	1,325,991	NA	NA	4,828	
SP-1	6/21/2011	1.87	774.64	5,386,209	18,581	1,344,572	NA	NA	4,645	
SP-1	6/30/2011	2.12	774.39	5,460,587	18,595	1,363,166	NA	NA	2,066	
SP-1	7/8/2011	3.11	773.40	5,543,823	20,809	1,383,975	NA	NA	2,601	
SP-1	7/15/2011	2.11	774.40	5,562,531	4,677	1,388,652	NA	NA	668	
SP-1	7/20/2011	2.81	770.70	5,642,547	20,004	1,408,656	NA	NA	4,001	
SP-1	8/5/2011	2.41	774.10	5,767,351	31,201	1,439,857	NA	NA	1,950	
SP-1	8/12/2011	2.21	774.30	5,963,417	49,017	1,488,874	NA	NA	7,002	
SP-1	8/16/2011	1.45	775.06	5,987,741	6,081	1,494,955	NA	NA	1,520	
SP-1	8/26/2011	2.43	774.08	6,085,032	24,323	1,519,277	NA	NA	2,432	
SP-1	12/31/2050									
					Total System Gallons Pumped	**5,722,569**			**7,413**	**Average Daily Volume (gal/day Since Startup)**

NA = not applicable
NR= not recorded
Notes:
1. Gallons pumped calculated from pump cycle counts. Based on manufacturer's information, each cycle pumps approximately 0.25 gallons of liquid

Updated by: D. Zinnen 09/09/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/17/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010	3/4/2010	3/4/2010
Time	NR	9:30 AM	9:45 AM	1:15 PM	12:00 PM	7:30 AM	8:50 AM	10:45 AM	11:55 AM	12:12 PM	9:55 AM	11:30 AM	8:45 AM	11:35 AM
Blower Inlet Vacuum (in H_2O)	3.1	3	4	4.3	4	Frozen	2.9	NR	2.8	2.4	2.8	2.8	2.8	NR
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	NR
Gas Inlet Temperature (^oF)	32	38	NR	38	55	30	36	NR	48	45	44	46	60	NR
Blower Outlet Pressure (in H_2O)	0.34	NR	NR	0.5	0.4	0.5	0.4	NR	0.65	0.5	+0.5	NR	0.3	NR
Orifice Plate DP (in H_2O)	0.04	0.05	0.06	0.03	0.02	0.03	0.03	NR	0.03	0.04	0.045	0.055	0.02	NR
Approximate Flow (scfm)	11	12	13	9	7	9	9	NR	9	11	11	12	7	NR
% CH_4	49.7	59.1	NR	52.3	20.2	24.0	24.9	21.3	30.1	21.4	38.2	33.7	NR	27.5
% CO_2	24.3	23.4	NR	24.7	11.5	15.1	14.5	11.1	15.9	11.4	34.1	15.1	NR	12.5
% O_2	2.7	3.1	NR	2.7	10.8	6.3	7.9	10.4	6.6	9.7	7.2	7.1	NR	10.6
% Balance Gas	23.3	14.4	NA	20.3	57.5	54.6	52.7	57.2	47.4	57.5	20.5	44.1	NR	49.4
Combustion Temperature(^oF)	491	826	NR	1045	1082	804	946	1151	1104	1009	576	629	518	NR
Blower SPD%	NR	30	35	35	35	30	30	NR	30	30	30	30	30	NR
Blower Hours	134	156	NR	180	193	235	252	NR	58[1]	73	93.4	NR	134	NR
Blower Cycles	58	60	NR	61	78	78	86	NR	26	4	7	NR	10	NR
Blower Amps	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Blower RPMs	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Air Compressor Pressure (psi)	NR	140	NR	155	NR	150	160	NR	150	85 (flux.)	80	NR	90	NR
Well Field Air Pressure (psi)	NR	78	NR	80	NR	80	75	NR	80	78	80	NR	75	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR	NR	NR	84.75 in	28 in.	NR	NR	NR	NR
Comments						Blower outlet pressure fluctuating.					Pre-blower: 58.1% CH4 31.0% CO2 3.4% 02	Pre-blower: 45.9% CH4 21.1% CO2 4.5% O2		Pre-blower: 42.6% CH4 18.7% CO2 5.2% O2

Notes:
NA = not available
NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/15/2010	3/16/2010	3/17/2010	3/18/2010	3/22/2010	3/24/2010
Time	7:40 AM	10:13 AM	9:05 AM	2:00 PM	8:00 AM	10:45 AM	12:00 PM	10:12 AM	1:36 PM	7:15 AM	11:50 AM	11:00 AM	9:30 AM	10:23 AM
Blower Inlet Vacuum (in H_2O)	3.0	3.1	3.0	3.0	2.9	3.0	2.7	3.4	3.4	3.4	NR	3.2	3.0	3.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	42	51	55	60	50	54	65	51	56	38	NR	70	58	58
Blower Outlet Pressure (in H_2O)	0.3	0.3	0.3	0.3	0.3	NR	0.0	0.2	0.2	0.16	NR	0.2	0.3	0.4
Orifice Plate DP (in H_2O)	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.005	0.01	0.01	NR	0.03	0.01	0.07
Approximate Flow (scfm)	5	5	5	5	5	12	7	4	5	5	NR	8	5	13
% CH_4	23.9	27.9	28.4	30.4	31.7	33.7	30.6	12.0	10.3	10.2	NR	14.2	22.1	21.6
% CO_2	11.7	11.8	12.7	12.9	12.8	14.6	12.8	7.5	6.4	7.6	NR	6.9	9.6	9.0
% O_2	10.8	10.9	10.6	10.1	10.2	7.4	10.3	15.2	16.2	15.0	NR	15.3	13.0	13.4
% Balance Gas	53.6	49.4	48.3	46.6	45.3	44.3	46.3	65.3	67.1	67.2	NR	63.6	55.3	56.0
Combustion Temperature(^oF)	493	661	727	670	771	846	654	530	191	404	465	808	1013	518
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	30	30	0.3
Blower Hours	146	192	207	210	221	238.5	253	297	297	301	321	333	412	452
Blower Cycles	14	14	14	14	14	14	14	14	14	16	17	19	19	19
Blower Amps	NR	3.0	3.0	3.0	NR	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.1
Blower RPMs	NR	1093	1094	1092	NR	1090	1093	1093	1093	1094	1094	1093	1093	1093
Air Compressor Pressure (psi)	150	160	140	NR	150	140	NR	0	0	160	160	160	160	160
Well Field Air Pressure (psi)	80	80	80	NR	80	80	NR	0	0	80	79	80	80	80
Approx. Leachate Tank Level	39 in	47" @ (9:45)	2.5" @ 9:41 am	7" @ 12:44 pm			5"	1.5 inches	NR	7.5 inches	NR	29"	NR	11"
Comments	Pre-blower:	Flare on	Pre-blower	Pre-blower	Pre-blower	Pre Blower	Vac. Side	Compressor off upon	Compressor off		Rewire, sparker off	Comp hrs: 334.81	Pre-blower	
	38.8% CH4	Access roads need	48.9 CH4	51 CH4	56.7 CH4	58.1 CH4	47.0	arrival.		Pre blower:			CH4-39.2%	
	18.0% CO2	repair/gravel.	20.6 CO2	20.7 CO2	22.0 CO2	22.6 CO2	19.0	Pre-blower	Pre-blower	CH4=34.1%		Inlet side	CO2-16.6%	
	6.2% O2		5.5 O2	3.3 O2	2.1 O2	2.4 O2	4.9	28.1 CH4	28.0 CH4	CO2=20.2%		38.0	O2-7.1%	
	Blower amps-3.0	No hours logged.	25.3 BAL	25.1 BAL	19.2 BAL		29.1	17.5 CO2	17.5 CO2	O2=5.1%		18.5		
	Blower RPM-1093							6.6 O2	6.7 O2			5.6		
	Two leachate loads	Vac Side	Water present in									37.9		
	hauled offsite.	CH4=48%	air valve vault					Ray said a leachate						
		CO2=19.8%	south of compressor					load was hauled out						
		O2=4.0%	building. No air leaks.					on Saturday.						

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	9:40 AM	9:30 AM	8:05 AM	11:00 AM	9:00 AM	3:00 PM	7:55 AM	10:40 AM	11:26 AM	11:45 AM	10:00 AM	9:42 AM	12:15 PM	10:38 AM	9:35 AM
Blower Inlet Vacuum (in H_2O)	2.9	2.8	2.8	2.8	3.0	2.9	3.0	3.0	3.0	2.8	2.8	4.0	4.0	4.5	4.1
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	50	68	70	82	NR	84	64	NR	75	86	68	80	76	66	88
Blower Outlet Pressure (in H_2O)	0.40	0.50	0.50	0.40	NR	0.30	0.20	0.30	0.3	0.2	0.3	0.3	0.3	0.0	0.0
Orifice Plate DP (in H_2O)	0.03	0.03	0.03	0.05	0.04	0.03	0.03	0.05	0.03	0.02	0.01	0.03	0.03	0.08	0.00
Approximate Flow (scfm)	9	9	8	11	11	9	9	12	9	6	5	9	9	15	0
% CH_4	23.4	25.2	24.7	26.5	17.3	33.1	25.7	32.1	10.4	33.3	59.0	24.9	25.8	19.3	21.8
% CO_2	9.3	9.9	9.8	10.8	9.2	12.2	10.1	12.2	11.1	12.7	21.5	10.0	10.7	9.7	10.7
% O_2	13.0	12.1	12.4	11.3	11.3	10.0	12.7	10.1	11.7	9.9	3.0	12.8	12.2	14.5	12.9
% Balance Gas	54.3	52.8	53.1	51.4	62.2	44.7	51.5	45.6	66.8	44.1	16.5	52.3	51.3	56.5	54.6
Combustion Temperature(^oF)	523	952	933	761	453	770	663	750	807	798	680	651	795	542	806
Blower SPD%	30	30	30	30	30	30	30	30	30	30	30	35	35	35	35
Blower Hours	552	592	630	692.8	37.2	0	14	36.7	77	157	196	315	457	576	730
Blower Cycles	19	19	19	20	1	1	1	1	1	41	1	1	4	4	4
Blower Amps	3.0	3.1	3.1	NR	NR	3.1	3.1	NR	3.1	NR	NR	3.1	3.1	3.1	3.1
Blower RPMs	1093	1093	1093	NR	NR	1093	1093	NR	1093	NR	NR	1280	1279	1280	1279
Air Compressor Pressure (psi)	140	150	150	140	140	150	150	140	160	152	145	150	160	140	160
Well Field Air Pressure (psi)	75	75	75	80	80	80	80	80	60	65	75	NR	75	75	75
Approx. Leachate Tank Level	NA	6"	4"	NA	NR	34"	4"	2" @ 10:12	10%	18.5" @ 9:43	NR	4" @ 9:50 am	NR	12"	3"
Comments			Pre blower:	Pre blower:	Pre-blower	Pre blower:	Pre blower	Pre blower		Pre-blower:					
			CH4-34.2	CH4-35.8	CH4=44.5	CH4 63.0	CH4 53.4	CH_4 60.4	HI 1500	CH_4 61.4	Gas readings were				
			CO2-13.6	CO2-14.5	CO2=22.7	CO2 22.0	CO2 19.9	CO_2 21.3	LO 200	CO_2 21.8	taken pre-blower				
			O2-9.0	O2-7.9	O2=4.5	O2 1.5	O2 4.0	O_2 2.4	HI HI 1900	O_2 2.1					
									LO LO 200		Compressor oil				
					Blower hours reset	blower down approx					level is OK				
					after storm damage	1.3 hrs, gas readings			Pre-blower:			Pre-blower:	Pre-blower:	Pre-blower:	Pre-blower:
						after system running			CH_4 31.8			CH_4 50.9	CH_4 53.0	CH_4 65.2	CH_4 51.7
						for approx 1 hr			CO_2 21.7			CO_2 20.2	CO_2 21.6	CO_2 30.2	CO_2 22.2
									O_2 2.5			O_2 4.3	O_2 3.9	O_2 0	O_2 4.5

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/1/2010	6/7/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010
Time	9:40 AM		10:37 AM	11:57 AM	1:30 PM	7:54 AM	4:20 PM	8:50 AM	10:04 AM	8:40 AM	9:30 AM	10:10 AM	9:50 AM	12:40 PM	10:50 AM	12:20 PM
Blower Inlet Vacuum (in H_2O)	NR	2.8	2.7	NR	NR	2.7	NR	6.0	6.5	6.5	6.5	6.0	3.5	3.5	3.5	3.5
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	NR	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	88	100	NR	NR	74	NR	NR	95	NR	102	104	104	102	104	98
Blower Outlet Pressure (in H_2O)	NR	0	0.4	NR	NR	0.0	NR	NR	0.07	0.40	0.50	0.50	0.50	0.50	0.40	0.50
Orifice Plate DP (in H_2O)	NR	0	0.03	NR	NR	0.00	NR	NR	0.01	0.02	0.03	0.04	0.01	0.02	0.06	0.075
Approximate Flow (scfm)	NR	8	9	NR	NR	0	NR	NR	5	7	9	5	5	7	13	14
% CH_4	21.9	61.8	37.8	50.1	63.9	50.8	51.6	48.1	48.0	50.0	49.0	26.4	27.9	26.6	34.7	26.0
% CO_2	10.8	23.0	14.5	17.6	22.3	19.9	19.5	19.5	20.1	21.4	21.2	12.3	12.3	12.6	15.0	13.7
% O_2	12.1	1.8	8.8	5.4	2.0	5.8	5.5	5.9	5.2	5.0	5.2	11.1	10.7	11.3	9.0	11.1
% Balance Gas	NR	13.4	39.0	26.9	11.8	23.5	23.4	26.5	26.7	23.6	24.6	50.2	49.1	49.5	41.3	49.2
Combustion Temperature(^oF)	593	740	760	NR	NR	783	NR	NR	557	491	1061	631	663	641	686	920
Blower SPD%	35	35	30	NR	NR	30	45	45	45	45	45	45	35	35	35	35
Blower Hours	107	NR	114	NR	NR	230	NR	NR	392	551	651	852	959	74	100	521
Blower Cycles	1	NR	1	NR	NR	3	NR	NR	3	3	3	3	48	1	3	3
Blower Amps	3.1	NR	3.1	NR	NR	3.1	NR	NR	3.3	3.3	3.3	3.3	3.1	3.1	3.1	3.1
Blower RPMs	1279	NR	1092	NR	NR	1093	NR	NR	1650	1649	1649	1650	1280	1280	1280	1280
Air Compressor Pressure (psi)	160	NR	149	NR	NR	80	160	NR	150	160	145	160	155	160	170	140
Well Field Air Pressure (psi)	75	NR	70	NR	NR	60	78	NR	70	75	75	70	75	72	73	70
Approx. Leachate Tank Level	8.5"	NR	40"@8:40	NR	NR	75%	NR	NR	NR	NR	49 inches	47 inches	NR	36.5 inches	54-66 inches	12.5-24.5 in
Comments																
				After plate installe	Pre Blower	Pre-blower	Pre-blower	Pre blower	Pre-blower			Pre blower	Pre blower	Pre blower	Pre blower	Pre blower
					CH4 72.3	CH4-51.6	CH4-53.6	CH4-48.6%	CH4-49.2			CH4-25.7%	CH4-29.0%	CH4-60.9%	CH4-62.2%	CH4-26.2%
					CO2 24.5	CO2-20.1	CO-20.2	CO2-19.8%	CO2-20.8			CO2-11.9%	CO2-12.9%	CO2-38.9%	CO2-37.1%	CO2-14.0%
		Gas reading	Pre Blower	Pre Blower	O2 0.5	O2-5.3	O2-4.8	O2-5.7%	O2-4.7			O2-11.4%	O2-10.3%	O2-0.1%	O2-0.4%	O2-10.9%
		was taken	CH4 62.9	CH4 66.5	Applied more duct tape and											
		pre-blower.	CO2 24.8	CO2 22.7	silicone and let sit			Flare running	swapped cf							
		No post-	O2 1.0	O2 1.6					card							
		blower reading			Swapped card at SC											
		was recorded.														

Notes:
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NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/23/2010	11/29/2010	12/3/2010
Time	10:40 AM	11:00 AM	3:50 PM	12:20 PM	10:20 AM	10:20 AM	9:00 AM	7:53 AM	9:30 AM	10:23 AM	9:30	11:00	10:00	10:50	10:50		
Blower Inlet Vacuum (in H_2O)	3.5	3.5	4.0	3.6	3.7	3.8	3.9	3.9	4.0	3.7	4.20	4.0	3.90	4.1	4.1	4.0	4.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	6	Fully Open
Gas Inlet Temperature (^oF)	102	100	89	100	78	78	66	82	66	65	50	72	NR	51	51	42	42
Blower Outlet Pressure (in H_2O)	0.50	0.50	0.35	0.40	0.35	0.40	0.40	0.30	0.30	0.22	0.5	0.26	0.2	0.3	0.3	2.9	2.9
Orifice Plate DP (in H_2O)	0.060	0.025	0.035	0.025	0.010	0.015	0.050	0.010	0.025	0.025	0.02	0.02	0.02	0.23	0.23	0.55	0.55
Approximate Flow (scfm)	13	8	10	8	5	6	12	5	8	8	8	8	8	25	25	37	37
% CH_4	29.3	37.2	39.8	39.2	36.8	40.6	37.5	43.2	41.0	38.4	36.8	35.5	37.7	28.1	28.1	35.1	35.1
% CO_2	15.0	19.0	20.8	20.3	19.7	21.5	23.8	24.0	23.8	24.3	23.9	23.0	23.7	20.2	20.2	20.4	20.4
% O_2	10.1	7.3	6.9	6.8	7.3	6.2	6.6	4.3	4.3	4.1	5.4	4.8	3.1	6.2	6.2	5.9	5.9
% Balance Gas	45.6	36.5	32.5	33.7	36.2	31.7	32.1	28.5	30.9	33.2	33.9	36.7	35.5	45.5	45.5	39.1	39.1
Combustion Temperature(^oF)	625	882	836	526	685	689	570	531	711	632	714 - 908	530	NR	861	861	713	713
Blower SPD%	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Blower Hours	700	820	1004	1101	1259	1379	1558	1717	1858.9	1999	2138	2221	NR	2500	2500	2619	2619
Blower Cycles	3	3	4	4	4	4	4	4	4	4	4	4	NR	4	4	4	4
Blower Amps	3.1	3.1	3.1	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.1	3.1	NR	3.1	3.1	3.2	3.2
Blower RPMs	1280	1280	1280	1280	1279	1280	1279	NR	1280	1280	1280	1280	1279	1280	1280	1279	1279
Air Compressor Pressure (psi)	139-170	139-170	N/A	139-170	160	160	150	140	140	-	150	-	140	135	135	5790	80
Well Field Air Pressure (psi)	74	71	N/A	72	75	72	70	75	78	-	75	-	80	73	73	75	75
Approx. Leachate Tank Level	29-41.5 in	11-21 in	89 in	65 in	55 in	30 in	36.5 in	20.8 in	12.5 in	30 in	-	-	-	-	-	16417 GAL	90"
Comments	Pre blower	Pre blower	Pre blower	Pre blower	Pre blower								Post Adjustment				Post Adjustment
	CH4-30.6%	CH4-38.8%	CH4-41.3%	CH4-38.1%	CH4-36.1%								CH4-35.7%				CH4-38.7%
	CO2-15.7%	CO2-20.0%	CO2-21.7%	CO2-19.6%	CO2-19.6%								CO2-22.1%				CO2-22.8%
	O2-9.6%	O2-6.8%	O2-6.3%	O2-7.2%	O2-7.6%								O2-4.7%				O2-4.7%
			Compressor														
			off due to full														
			frac tank.														

Notes:
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NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/11

Southcentral Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/16/2011	3/22/2011	4/29/2011	5/13/2011	6/1/2011	6/23/2011	7/20/2011	8/17/2011
Time				7:30	10:07	7:36	7:36	8:30	7:14	1:12	9:04	9:45
Blower Inlet Vacuum (in H_2O)	4.0	1.9	1.9	1.2	6.7	-4.5	-4.2	-5.5	-9.1	-8.2	-3.3	-3.3
Inlet Valve (Turns) Open / 6	6	6	6	6	6	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	42	48	15	5	61	50	71	75	92	92	104	100
Blower Outlet Pressure (in H_2O)	3.1	3.7	4.0	4.6	4.3	1.3	1.4	1.5	1.6	2.1	0.6	2.0
Orifice Plate DP (in H_2O)	0.09	1.30	0.19	0.10	0.05	0.08	0.03	0.26	0.10	0.02	0.01	0.06
Approximate Flow (scfm)	16	60	23	16	12	16	9	25	16	8	8	5
% CH_4	38.7	37.4	35.1	40.5	22.1	50.3	33.8	38.5	31.9	32.6	39.2	23.4
% CO_2	22.8	18.0	17.6	16.4	11.8	21.5	13.8	17.9	15.6	16.5	19.5	12.2
% O_2	4.7	6.9	8.2	6.3	10.1	3.9	7.6	5.5	5.6	5.7	4.7	10.4
% Balance Gas	33.8	37.7	39.1	36.8	56.0	24.3	44.8	38.1	46.9	45.2	36.6	54.0
Combustion Temperature(^oF)	589	714	970	355	576	687	425	478	442	772	544	556
Blower SPD%	35	40	40	40	55	40	40	45	55	55	35	40
Blower Hours	2739	3179	3278	3296	342	115	839	1125	107	510	1047	317
Blower Cycles	193	193	193	193	149	2	143	209	186	190	190	2
Blower Amps	3.2	3.2	3.2	3.2	3.7	3.2	3.1	3.3	3.6	3.6	3.1	3.2
Blower RPMs	1277	1466	1464	1466	2020	1466	1466	1650	2020	2020	1279	1466
Air Compressor Pressure (psi)	150	150	149	149	0.55	125	150	150	150	150	150	150
Well Field Air Pressure (psi)	75	75	75	75	80	65	80	80	80	80	80	80
Approx. Leachate Tank Level	5961GAL	5768 GAL	13289 GAL	13,289 GAL	17199	8401	1403	1929	2630	2630	877	
Comments												
				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment		Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment
				CH4-52.5%	CH4-41.1%	CH4-41.2%	CH4-37.3		CH4-33.7	CH4-34.0	CH4-41.0	CH4-41.4
				CO2-21.4%	CO2-19.8%	CO2-27.3%	CO2-14.7		CO2-15.9	CO2-18.0	CO2-20.6	CO2-20.8
				O2-2.6%	O2-3.8%	O2-0.4%	02-6.3		02-4.3	02-6.6	02-5.0	02-6.0

Notes:
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NR = not recorded
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Updated by: D. Zinnen, 06/08/11

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010	2/5/2010	2/8/2010	2/8/2010	2/8/2010	2/10/2010	2/12/2010	2/15/2010	2/16/2010	2/17/2010	2/23/2010	2/24/2010	3/1/2010	3/1/2010
Time		1:20 PM	12:45 PM	1:00 PM	2:10 PM	2:00 PM	11:30 AM	8:10 AM	11:10 AM	8:13 AM	12:15 PM	12:45 PM	8:45 AM	2:30 PM
Blower Inlet Vacuum (in H_2O)	2.2	1.7	1.8	3	3.6	4	3.5	Frozen	3.8	NR	3.8	3.8	4	4
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	82	84	85	NR	NR	72	84	81	84	84	88	88	85	86
Blower Outlet Pressure (in H_2O)	0.54	0.5	NR	NR	NR	1.1	1.4	1.3	1	NR	1.65	1.4	+1.4	+1.3
Orifice Plate DP (in H_2O)	0.04	0.02	0.09	NR	0.13	0.08	0.08	0.02	0.06	NR	0.13	0.1	0.15	0.14
Approximate Flow (scfm)	11	7	16	NR	19	15	15	7	13	NR	19	17	20	20
% CH_4	47.7	52.5	66.1	NR	NR	53.7	60.2	57.6	47.3	48.0	44.1	44.0	38.9	42.6
% CO_2	27.8	32.9	26.7	NR	NR	29.1	28.6	33.7	26.7	28.6	27.0	27.2	24.0	25.6
% O_2	2.5	2.5	3.0	NR	NR	1.6	0.4	0.0	1.2	0.6	2.8	2.4	4.1	2.6
% Balance Gas	22.0	12.1	4.2	NA	NA	15.6	10.8	8.7	24.8	22.8	26.1	26.4	33.0	29.2
Combustion Temperature(^oF)	1124	1130	1070	NR	NR	1080	910	724	1128	980	945	1042	971	NR
Blower SPD%	NR	30	30	40	45	45	45	45	45	45	45	45	45	45
Blower Hours	193	211	237.5	NR	NR	268	282	324	341	354	48[1]	62	125.5	NR
Blower Cycles	14	14	15	NR	NR	15	17	17	17	17	3	3	4	NR
Blower Amps														
Blower RPMs														
Air Compressor Pressure (psi)	NR	140	NR	NR	NR	NR	160	150	NR	160	NR	NR	80	NR
Well Field Air Pressure (psi)	NR	78	NR	NR	NR	NR	79	80	NR	75	NR	NR	80	NR
Approx. Leachate Tank Level	NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	28	NR	NR
Comments								Blower outlet pressure fluctuating.						

Notes:
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NR = not recorded
[1] Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/4/2010	3/4/2010	3/5/2010	3/8/2010	3/9/2010	3/9/2010	3/10/2010	3/11/2010	3/12/2010	3/15/2010	3/17/2010	3/18/2010
Time	9:00 AM	11:30 AM	8:45 AM	10:40 AM	10:43 AM		7:40 AM	12:30 PM	12:30 PM	9:52 AM	10:50 AM	10:40 AM
Blower Inlet Vacuum (in H_2O)	3.0	NR	4.3	4.2	4.1	4.0	4.1	4.3	4.8	NR	NR	NR
Inlet Valve (Turns) Open / 6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	NR	6/6	6/6
Gas Inlet Temperature (^oF)	88	NR	85	85	85	83	82	82	84	NR	NR	80
Blower Outlet Pressure (in H_2O)	1.2	NR	1.3	1.1	1.0	1.0	1.0	NR	1.6	NR	NR	0.2
Orifice Plate DP (in H_2O)	0.11	NR	0.075	0.07	0.10	0.10	0.08	0.15	0.13	NR	NR	0.17
Approximate Flow (scfm)	17	NR	14	14	17	17	15	20	19	NR	NR	22
% CH_4	NR	43.8	43.6	47.0	48.0	48.1	49.6	48.1	47.8	67.0	55.4	44.9
% CO_2	NR	26.2	25.7	25.8	26.2	26.4	26.2	26.0	26.0	32.7	27.3	23.8
% O_2	NR	2.3	3.0	2.2	2.3	2.1	2.2	2.5	2.6	0.2	2.6	3.8
% Balance Gas	NR	27.7	27.7	25.0	23.5	23.4	22.0	23.4	23.6	0.1	14.7	27.5
Combustion Temperature(^oF)	817	NR	1029	660	988	948	903	953	56	NR	520	202-840
Blower SPD%	45	NR	45	45	45	45	45	45	50	NR	50	40
Blower Hours	170	NR	184	230	245	247	258	276	291	NR	0	313
Blower Cycles	4	NR	6	6	6	6	6	6	6	NR	1	14
Blower Amps			3	3.0	3.0	3.0	3.0	3.0	3.0	NR	3.5	3.3
Blower RPMs			1650	1651	1651	1651	1650	1841	1838	NR	1838	1468
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	160
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	29"
Comments				Flare on	Pre-blower	Pre-blower	Pre-blower		Blower motor max	NW blower/flare		Inlet side
					47.6 CH4	47.9 CH4	49.3 CH4		starts faults	system down.		49.5
				No hours logged	26.0 CO2	26.3 CO2	26.3 CO2					26.2
					2.3 O2	2.2 O2	2.2 O2		Blower on			2.0
					23.5 BAL	23.6 BAL	22.2 BAL					22.3
									No flame			
									Sparker on			

Notes:
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Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2010	3/24/2010	3/29/2010	3/31/2010	4/2/2010	4/5/2010	4/9/2010	4/12/2010	4/13/2010	4/14/2010	4/16/2010	4/20/2010	4/22/2010	4/28/2010	5/5/2010	5/11/2010	5/19/2010
Time	8:32 AM	11:24 AM	10:34 AM	8:15 AM	8:25 AM	11:35 AM	11:20 AM	2:00 PM	6:53 AM	10:50 AM	11:50 AM	12:00 PM	1:00 PM	9:31 AM	12:20 PM	10:00 AM	9:10 AM
Blower Inlet Vacuum (in H_2O)	4.0	4.0	4.2	4.0	4.0	4.1	4.5	5.0	5.5	5.5	5.0	5.1	4.6	5.0	5.0	5.3	4.9
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	76	74	74	70	70	84	NR	72	68	NR	70	72	72	70	69	66	70
Blower Outlet Pressure (in H_2O)	1.9	0.2	0.20	0.19	1.90	NR	NR	2.40	2.20	2.00	2.2	2.2	2.0	2.0	1.8	2.0	1.8
Orifice Plate DP (in H_2O)	0.17	0.14	0.13	0.15	0.19	0.18	0.20	0.20	0.19	0.22	0.20	0.19	0.20	0.19	0.15	0.30	0.14
Approximate Flow (scfm)	22	20	19	20	23	22	24	24	23	25	24	23	24	23	20	29	20
% CH_4	45.3	40.2	37.2	39.2	38.6	38.6	36.8	40.0	36.6	40.1	NR	38.7	43.3	40.6	42.0	48.3	45.0
% CO_2	26.1	23.0	21.7	23.0	22.7	22.5	21.7	23.2	22.0	22.5	NR	22.7	25.5	24.8	25.4	28.4	26.2
% O_2	2.3	4.8	5.3	4.5	4.6	4.2	5.1	4.3	5.3	4.2	NR	4.5	2.4	2.7	2.9	1.2	2.2
% Balance Gas	26.3	32.0	35.8	33.3	34.1	34.7	36.4	32.5	36.1	36.1	NR	34.1	28.8	31.9	29.7	22.1	26.6
Combustion Temperature(^oF)	1118	862	594	1021	1043	760	940	834	680	442	885	430*	573	548	820	629	602
Blower SPD%	40	40	40	40	40	40	40	45	45	45	45	45	45	45	35	45	45
Blower Hours	376	417	516	555	595	658.1	737.6	800	814	837.4	875	958	999	1115	1257	1376	1535
Blower Cycles	114	120	120	120	120	120	121	121	121	121	121	22	121	121	127	127	127
Blower Amps	3.2	3.2	3.2	3.2	3.2	NR	NR	3.3	3.3	NR	3.3	NR	NR	3.3	3.2	3.3	3.3
Blower RPMs	1467	1468	1468	1468	1469	NR	NR	1650	1651	NR	1650	NR	NR	1650	1652	1650	1652
Air Compressor Pressure (psi)	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	160	152	NA	NA	160	NA	160
Well Field Air Pressure (psi)	NA	80	NA	NA	NA	NA	NA	NA	NA	NA	60	65	NA	NA	75	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	7"	NA	10%	27" @ 13:20	NA	NA	NA	NA	NA
Comments	Blower/flare off upon arrival. Restarted and kept shutting down when flare temp reached 1100F (after 3 min). Changed preset for normal operating temp range to 200-1500F. Blower/flare stayed running.						Pre-blower: CH4=43.0 CO2=25.4 O2=2.8	3 loads today		Pre-blower: CH_4 43.6 CO_2 25.1 O_2 2.3	HI 1500 LO 200 HI HI 1900 LO LO 200	*Low value due to position of thermo-couple.	Gas readings are pre-blower values.	Pre-blower: CH_4 40.4 CO_2 25.2 O_2 2.2	Pre-blower: CH_4 40.5 CO_2 25.3 O_2 2.3	Post-blower: CH_4 46.1 CO_2 27.4 O_2 2.0	Post-blower: CH_4 43.5 CO_2 25.2 O_2 2.9
												Pre-blower: CH_4 43.6 CO_2 25.6 O_2 2.3					

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/26/2010	5/27/2010	6/1/2010	6/1/2010	6/7/2010	6/10/2010	6/15/2010	6/23/2010	6/28/2010	7/8/2010	7/14/2010	7/19/2010	7/26/2010	8/16/2010	8/25/2010	8/31/2010	9/9/2010	9/14/2010	9/22/2010
Time	10:00 AM		10:00 AM	2:00 PM	7:16 AM	9:04 AM	10:25 AM	9:13 AM	8:55 AM	9:28 AM	1:30 PM	1:10 PM	11:30 AM	12:56 PM	11:25 AM	11:25 AM	2:30 PM	1:15 PM	11:20 AM
Blower Inlet Vacuum (in H_2O)	NR	6.4	6.5	NR	6.5	6.0	6.5	6.5	6.5	5.0	5.3	2.5	2.6	4.5	6.0	6.0	5.5	6.0	6.0
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	NR	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Gas Inlet Temperature (^oF)	NR	64	69	NR	70	NR	72	61	55	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blower Outlet Pressure (in H_2O)	NR	2.6	3.0	NR	2.3	NR	2.3	2.4	3.00	3.20	3.30	1.50	1.60	3.50	3.00	3.00	3.00	3.20	3.00
Orifice Plate DP (in H_2O)	NR	NR	0.23	NR	0.21	NR	0.22	0.18	0.18	0.21	0.19	0.09	0.11	0.14	0.175	0.25	0.19	0.17	0.18
Approximate Flow (scfm)	NR	NA	25	NR	24	NR	25	22	22	24	24	16	17	20	22	26	23	22	22
% CH_4	NR	39.5	38.4	42.9	39.3	39.4	39.7	40.0	41.7	46.5	49.8	45.5	48.2	47.5	40.4	38.9	37.9	36.0	34.0
% CO_2	NR	23.8	23.4	24.1	25.0	25.5	24.7	25.1	25.3	27.2	26.4	26.4	25.3	29.9	26.3	26.4	26.4	25.0	25.2
% O_2	NR	3.4	3.5	3.4	3.3	3.2	3.1	3.7	3.6	2.7	3.2	3.0	3.7	1.8	2.9	2.5	2.6	2.9	3.0
% Balance Gas	NR	33.3	34.7	29.6	32.4	31.9	32.5	31.2	29.4	23.6	20.6	25.1	22.8	20.8	30.4	32.2	33.1	36.1	37.8
Combustion Temperature(^oF)	460	761	337	NR	625	NR	356	615	770	262	415	232	NA	1200	1002	938	933	832	800
Blower SPD%	50	50	50	NR	50	50	50	50	50	50	50	35 - 45*	45	45	50	50	50	50	50
Blower Hours	107	NR	227	NR	344	NR	506	665	765	906	956	2	102	522	701	821	1005	1103	1261
Blower Cycles	1	NR	1	NR	3	NR	3	3	4	398	862	13	270	272	272	272	272	272	273
Blower Amps	3.6	NR	3.4	NR	3.4	NR	3.4	3.4	3.4	3.5	3.5	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4
Blower RPMs	1838	NR	1840	NR	1838	NR	1840	1840	1838	1838	1839	1283	1283	1656	1838	1838	1838	1840	1838
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Comments																			
			Pre Blower	Pre Blower	Pre-blower	Well side	Pre-blower			Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower	Pre-blower
			CH4 40.5	CH4 41.0	CH4-39.5	CH4-39.6%	CH4-37.9			CH4-46.4%	CH4-50.1%	CH4-45.5%	CH4-48.2%	CH4-47.5%	CH4-40.4%	CH4-38.9%	CH4-37.9%	CH4-36.1%	CH4-33.2%
			CO2 25.1	CO2 23.3	CO2-25.2	CO2-25.6%	CO2-23.8			CO2-27.2%	CO2-26.5%	CO2-26.3%	CO2-25.3%	CO2-29.9%	CO2-26.4%	CO2-26.4%	CO2-26.3%	CO2-25.1%	CO2-24.5%
	Post-blower:	Gas reading	O2 3.1	O2 3.4	O2-3.3	O2-2.9%	O2-3.9			O2-2.6%	O2-3.1%	O2-2.9%	O2-3.6%	O2-1.7%	O2-2.7%	O2-2.4%	O2-2.7%	O2-3.0%	O2-3.2%
	CH_4 43.6	was taken																	
	CO_2 25.3	pre-blower.	Swapped card at NW			Flare running	swapped cf					*Blower SPD		*Blower speed					
	O_2 2.10	No post-					card					increased to		increased to					
		blower reading										45% on 7/21		50%					
		was recorded.																	

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/28/2010	10/7/2010	10/15/2010	10/22/2010	10/29/2010	11/5/2010	11/9/2010	11/16/2010	11/23/2010	11/29/2010	12/3/2010	12/8/2010	12/30/2010	1/4/2011	1/14/2011	2/17/2011	03/34/11	4/29/2011
Time	12:00 PM	11:15 AM	11:25 AM	10:15 AM	12:22 PM	9:40	10:30	NR	11:10							8:38	7:36	
Blower Inlet Vacuum (in H_2O)	6.5	6.3	6.9	6.5	4.1	4.5	4.30	4.00	4.50	4.10	-4.10	3.90	3.20	4.00	1.10	7.10	4.50	5.03
Inlet Valve (Turns) Open / 6	6/6	6/6	6/6	6/6	6/6	6	6	6	6	6	Fully Open	6	6	6	6	6	6	6
Gas Inlet Temperature (^oF)	NA	NA	NA	68	60	50	75	68	48	47	47	45	42	5	10	54	36	78
Blower Outlet Pressure (in H_2O)	2.30	2.70	2.20	2.00	1.30	1.6	1.5	4.7	2.5	1.3	1.3	2.2	4.0	2.2	5.6	2.6	0.5	1.1
Orifice Plate DP (in H_2O)	0.14	0.20	0.18	0.18	0.14	0.10	0.14	0.19	0.09	0.01	-0.01	0.17	0.50	0.20	0.10	0.26	0.14	0.33
Approximate Flow (scfm)	20	24	22	22	20	17	20	23	16	5	5	21	37	24	16	28	21	26
% CH_4	38.4	36.5	35.3	32.6	37.1	34.3	34.0	33.4	33.6	31.7	31.7	40.4	47.2	43.8	47.5	40.5	33.5	41.7
% CO_2	27.0	27.2	26.8	25.3	27.3	26.5	26.1	25.0	26.7	25.5	25.5	29.3	30.0	30.2	28.0	27.4	22.1	24.8
% O_2	2.0	1.8	1.9	2.6	2.8	6.3	3.1	3.6	3.4	4.1	4.1	1.1	1.5	1.9	2.2	1.4	5.5	0.1
% Balance Gas	32.6	34.5	36.0	39.5	32.8	32.9	36.8	38.0	36.3	38.7	38.7	29.2	21.3	24.1	22.3	30.7	38.9	33.4
Combustion Temperature(^oF)	810	759	573	769	1054	894	690	580	950	530	530	665	1055	1058	1156	1040	684	668
Blower SPD%	50	50	50	50	40	40	40	40	40	40	40	40	42	42	42	52	42	42
Blower Hours	1381	1561	1697	1837.3	1957	2095	2176	2318	2457	2575	2575	2693	3195	3295	3494	4174	4873	5598
Blower Cycles	273	274	426	426	571	571	NR	573	579	573	573	573	573	573	573	574	574	574
Blower Amps	3.4	3.4	NR	3.4	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.2	35.0	3.3	3.2
Blower RPMs	1838	1838	NR	1838	1470	1470	1468	1469	1470	1279	1470	1505	1544	1542	1544	1914	1541	1544
Air Compressor Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	80	150	150	149	149	0.55		150
Well Field Air Pressure (psi)	NA	NA	NA	NA	NA	NA	NA	NA	NA	75	75	75	75	75	75	80		80
Approx. Leachate Tank Level	NA	NA	NA	NA	NA	NA	NA	NA	NA	16417 GAL	90"	5961 GAL	5768 GAL	13289 GAL	13,289 GAL	17199		1403
Comments				Replaced	down on arrival													
				temp	had difficulties getting			Post Adjustment			Post Adjustment				Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment
				probe	started. Turned off			CH4-34.7%			CH4-40.4%				CH4-46.9%	CH4-35.7%	CH4-41.2%	CH4-40.8
					blower and let sit			CO2-25.8%			CO2-29.3%				CO2-29.7%	CO2-24.3%	CO2-27.3%	CO2-23.1
					2 hrs to build up			O2-3.3%			O2-1.1%				O2-1.7%	O2-3.8%	O2-0.4%	O2-1.9
					methane conc.													
					After 2hr wait, flare													
					lit on first startup													
					attempt.													

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

Northwest Blower/Flare Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/13/2011	6/1/2011	6/23/2011	7/20/2011	8/17/2011
Time	8:45	9:45	10:02	10:58	8:30
Blower Inlet Vacuum (in H_2O)	-4.50	-4.90	-4.60	-4.10	-4.10
Inlet Valve (Turns) Open / 6	6	6	6	6	6
Gas Inlet Temperature (^oF)	77	81	79	104	88
Blower Outlet Pressure (in H_2O)	1.6	1.2	1.1	1.0	1.1
Orifice Plate DP (in H_2O)	0.15	0.13	0.06	0.26	0.02
Approximate Flow (scfm)	21	18	13	26	7
% CH_4	54.3	40.7	43.0	49.3	37.1
% CO_2	28.7	23.8	25.5	27.9	24.4
% O_2	0.0	1.4	1.0	0.1	1.9
% Balance Gas	17.0	34.1	30.5	22.7	36.6
Combustion Temperature(^oF)	975	603	913	655	487
Blower SPD%	42	42	42	40	40
Blower Hours	0	161	563	22	388
Blower Cycles	1	4	5	2	3
Blower Amps	3.3	3.2	3.2	2.3	3.2
Blower RPMs	1544	1544	1544	1469	1470
Air Compressor Pressure (psi)	150	150	150	150	150
Well Field Air Pressure (psi)	80	80	80	80	80
Approx. Leachate Tank Level	1929	2630	2630	877	
Comments					
		Post Adjustment	Post Adjustment	Post Adjustment	Post Adjustment
		CH4-64.3	CH4-43.4	CH4-44.1	CH4-44.9
		CO2-32.9	CO2-26	CO2-25.0	CO2-28.2
		O2-0.0	O2-0.9	O2-3.1	O2-0.0

Notes:
NA = not available
NR = not recorded
(1) Cycle counter was reset to zero on 2/19/2010 at 15:00.

Updated by: D. Zinnen, 06/08/111

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.8		-3.9		-3.7		-3.8		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.6	NC	-3.7	-3.7	-3.9	NR	-3.7	-3.7	NR	-3.1	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.4	NR	0.9	1	1.6	NC	1.40	1.50	0.20	NR	1.30	1.50	NR	1.60	1.80	1.80
% CH_4	67.6		68.6		64.8		62.5		61.8		59.1		58.3		51.3	
% CO_2	32.4		30.1		32.9		29.5		29.5		28.0		28.7		27.2	
% O_2	0		0		0.7		0.4		0.0		0.0		0.0		0.4	
% Balance Gas	0.0		1.3		1.6		7.6		8.7		12.9		13.0		21.1	
Gas Temperature(^oF)	40		43		42		48		48		NR		NR		82	
Valve Turns Open	NC	NR	2.5	3.5	4	NC	4	5	NR	NR	5	6.5	6.5	9.5	8	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NR	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.5		-5.5		-6.6		-3.8		-3.1	
Well Side Pressure (in H_2O)	-5.8	NC	-6.0	NC	-2.4	NC	-5.5	NR	-5.5	NR	-6.5	NR	-3.7	-3.5	-0.8	NC
Orifice Plate DP (in H_2O)	2.60	NC	0.25	NC	1.00	NC	3.00	NR	2.80	NR	3.50	NR	1.80	1.10	1.95	NC
% CH_4	50.7		53.3		60.5		60.5		48.0		41.5		37.2		43.3	
% CO_2	26.5		27.4		34.1		30.9		29.5		28.3		26.2		26.6	
% O_2	0.0		0.0		0.0		0.0		0.0		0.6		1.9		2.3	
% Balance Gas	22.8		19.3		5.4		8.6		22.5		29.6		34.7		27.8	
Gas Temperature(^oF)	64		70		73		72		72		68		68		60	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	8	2	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR		NM	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.6		-7.1		-4.7		-4.9		-4.8		-4.7		-4.0		-4.2	
Well Side Pressure (in H_2O)	-0.5	NC	-6.9	NC	-4.6	NC	-4.9	-4.9	-4.7	-4.7	-4.7	NC	-4.0	NC	-4.2	NC
Orifice Plate DP (in H_2O)	0.165	NC	3.2	NC	1.4	NC	1.8	1.20	2.0	1.98	1.09	NC	1.48	NC	1.24	NC
% CH_4	50.0		44.6		47.1		45.9		49.7		51.2		50.7		48.2	
% CO_2	27.1		28.8		28.5		24.0		23.8		25.8		26.6		26.5	
% O_2	2.3		0.0		0.0		0.0		0.6		0.0		0.2		0.2	
% Balance Gas	20.6		26.6		24.4		30.1		25.9		23.0		22.5		25.1	
Gas Temperature(^oF)	30		50		40		60		86		78		90		86	
Valve Turns Open	1	2	2	4	4	NC	4	4	4	NC	4	NC	4	NC	4	NC
Liquid Level (ft BTOC)	22.90		21.37		20.84		22.71		21.86		20.05		26.20		20.75	
Comments																

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.5	NR	-3.5	NC	-3.2	-2.0	-2.4	NR	-2.4	-1.0	NR	NC
Orifice Plate DP (in H_2O)	0.8	0.8	1.3	1.45	1.6	NC	1.60	1.00	0.20	NR	1.20	0.50	NR	NC
% CH_4	63.4		72.5		40.5		36.0		44.8		29.4		34.9	
% CO_2	32.1		26.8		31.6		27.5		27.4		23.2		24.2	
% O_2	0.5		0		0.0		0.0		0.0		0.4		1.8	
% Balance Gas	4.0		0.7		27.9		36.5		27.8		47.0		39.1	
Gas Temperature(^oF)	40		40		38		46		50		NR		NR	
Valve Turns Open	NR	+0.75	2.5	3	2	NC	2	1	NR	NR	1	0.5	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6		-6.0		-2.1		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-1.25	NC	-1.50	NC	-1.50	NC	-0.65	NC	-2.75	NC	-1.50	NC	-2.10	NC
Orifice Plate DP (in H_2O)	0.50	NC	0.40	NC	0.70	NC	0.35	NC	1.00	NC	0.50	NC	0.10	NC
% CH_4	35.2		37.8		44.3		46.1		47.7		32.5		30.4	
% CO_2	24.0		25.2		26.9		26.2		30.2		27.8		27.3	
% O_2	0.4		0.0		0.0		1.5		0.0		0.0		0.3	
% Balance Gas	40.4		37.0		28.8		26.2		22.1		39.7		42.0	
Gas Temperature(^oF)	66		70		76		82		80		74		56	
Valve Turns Open	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	19.49		19.43		NR		DRY		DRY		DRY		20.08	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.5		-5.7		-4.2		-4.7		-4.3	
Well Side Pressure (in H_2O)	-1.30	-0.8	-0.20	NC	-0.20	NC	-5.30	NC	-4.20	NC	-4.50	-2.5	-4.30	NC
Orifice Plate DP (in H_2O)	0.75	0.55	0.49	NC	0.173	NC	3.140	NC	2.080	NC	1.342	0.80	1.980	NC
% CH_4	35.3		36.6		37.3		32.0		29.8		28.1		30.1	
% CO_2	28.9		29.4		26.2		26.6		24.2		21.0		19.9	
% O_2	0.1		1.3		1.8		1.9		0.6		0.1		1.4	
% Balance Gas	35.7		32.7		34.7		39.5		45.4		50.8		48.6	
Gas Temperature(^oF)	53		42		20		49		42		60		86	
Valve Turns Open	0.75	0.25	NR	NR	1/4	1/2	1/2	7/8	1	NC	1	3	3	NC
Liquid Level (ft BTOC)	20.32		NM		20.46		8.65		7.93		8.05		8.01	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-8 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.7		-3.7		-4.4	
Well Side Pressure (in H_2O)	-2.40	NC	-2.20	NC	-0.07	NC
Orifice Plate DP (in H_2O)	0.900	NC	0.930	NC	0.169	NC
% CH_4	37.9		45.7		26.0	
% CO_2	24.6		27.1		21.7	
% O_2	0.0		0.0		2.6	
% Balance Gas	37.5		27.2		49.7	
Gas Temperature(^oF)	70		84		74	
Valve Turns Open	3	NC	3	NC	3	CLOSED 1
Liquid Level (ft BTOC)	7.97		DRY @ 8.0		7.95	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.7	-2.8	-3.6	NC	-3.8	NC	-3.9	NR	-3.7	-3.7	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.04	NR	0.1	0.15	0.04	NC	0.05	NC	0.03	NR	NR	NR	0.02	0.02
% CH_4	20.1		46.2		16.9		12.5		26.6		18.2		17.3	
% CO_2	17.4		20		19.2		13.0		21.1		16.2		16.8	
% O_2	5.4		4		6.1		7.3		0.0		3.6		3.4	
% Balance Gas	57.1		29.8		57.8		67.2		52.3		62.0		62.5	
Gas Temperature(^oF)	34		40		30		40		50		NR		74	
Valve Turns Open	NC	NR	2.75	3.5	4	NC	4	NC	NR	NR	4	4	4	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		16.4	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	-5.0	-5.5	NC	-2.3	NR	-5.0	NC	-5.5	NC	-6.6	NC	-3.2	NC
Orifice Plate DP (in H_2O)	0.10	0.08	0.03	NC	0.00	NR	0.025	NC	0.020	NC	0.010	NC	0.030	NC
% CH_4	24.1		32.7		37.5		49.1		28.7		24.8		26.3	
% CO_2	19.5		20.3		23.3		26.2		23.4		24.7		25.3	
% O_2	1.6		2.5		2.5		2.0		1.3		0.5		0.4	
% Balance Gas	54.8		44.5		36.7		22.7		46.6		50.0		48.0	
Gas Temperature(^oF)	76		88		84		90		84		62		50	
Valve Turns Open	2	NR	2	NC	2	1	1	NC	1	NC	1	NC	0.25	NC
Liquid Level (ft BTOC)	16.62		16.32		17.01		15.54		16.74		17.26		17.79	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.5		-6.5		-4.7		-4.8		-4.8		-4.7	
Well Side Pressure (in H_2O)	0.0	NC	-1.2	NC	-6.5	NC	-4.7	NC	-4.7	-4.7	-4.8	NC	-4.6	NC
Orifice Plate DP (in H_2O)	0.050	NC	0.119	NC	1.740	NC	0.002	NC	0.717	0.70	0.090	NC	0.62	NC
% CH_4	39.3		31.4		21.5		56.0		54.6		60.0		68.3	
% CO_2	28.5		23.3		15.8		24.4		19.6		19.9		26.9	
% O_2	1.3		2.5		6.0		0.0		2.2		1.2		0.0	
% Balance Gas	30.9		42.8		56.7		19.6		23.6		18.9		4.8	
Gas Temperature(^oF)	36		19		48		30		74		75		73	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	1/4	1/4	1/2	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	NM		18.66		16.78		16.78		13.81		14.21		14.00	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-10 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/20/2011		8/17/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.0	
Well Side Pressure (in H_2O)	-2.7	NC	-3.2	NC
Orifice Plate DP (in H_2O)	1.48	NC	0.60	NC
% CH_4	45.8		49.6	
% CO_2	24.4		25.0	
% O_2	2.7		3.4	
% Balance Gas	27.1		22.0	
Gas Temperature(^oF)	100		78	
Valve Turns Open	1/2	NC	1/2	CLOSED 1/8
Liquid Level (ft BTOC)	16.13		14.63	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/29/2010		3/31/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.6		-3.8		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.6	-1.3	-2.4	-2.7	-3.6	NC	-3.7	-3.8	-3.9	NR	-3.7	0.2	-3.7	NR
Orifice Plate DP (in H_2O)	0.3	0.2	0.25	0.4	0.8	NC	0.65	0.70	0.20	NR	0.20	NR	0.50	NR
% CH_4	18.4		53.2		16.6		11.5		12.0		11.3		12.1	
% CO_2	21.2		24.5		21.6		15.5		14.7		12.2		13.3	
% O_2	3.3		1.2		1.0		5.7		5.2		8.0		6.4	
% Balance Gas	57.1		21.1		60.8		67.3		73.3		68.5		68.2	
Gas Temperature(^oF)	34		38		32		42		44		NR		70	
Valve Turns Open	NR	-0.75	0.75	1.5	4	NC	5.75	6.5	NR	NR	7	7	7	7
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/2/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.7		-4.4		-6.0		-6.0		-2.4		-5.0	
Well Side Pressure (in H_2O)	-3.8	NR	-3.3	-3.4	-4.4	NC	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NC
Orifice Plate DP (in H_2O)	0.60	NR	0.60	0.65	0.50	NC	0.50	NC	0.50	NC	0.12	NC	0.50	NC
% CH_4	12.1		11.2		12.2		12.8		17.4		30.0		19.1	
% CO_2	12.8		14.3		14.0		15.3		18.8		27.2		19.8	
% O_2	7.2		6.4		6.3		5.3		2.9		0.0		3.9	
% Balance Gas	67.9		68.1		67.5		66.6		60.9		42.8		57.2	
Gas Temperature(^oF)	60		NR		58		80		88		88		90	
Valve Turns Open	7	7	6.5	7	7	NC	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		16.1		15.05		15.70		16.77		15.65	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-5.5		-6.6		-3.8		-3.0		-1.5		-6.5		-4.7	
Well Side Pressure (in H_2O)	-5.5	NC	-6.6	NC	-3.8	NC	-3.0	NC	-1.5	NC	-6.5	NC	-0.8	NC
Orifice Plate DP (in H_2O)	0.40	NC	0.85	NC	0.45	NC	0.29	NC	0.623	NC	0.670	NC	0.090	NC
% CH_4	16.0		13.5		16.5		14.7		17.1		10.0		20.3	
% CO_2	19.6		19.4		23.7		21.5		20.6		19.4		22.1	
% O_2	2.9		3.8		0.2		2.0		2.9		2.4		0.3	
% Balance Gas	61.5		63.3		59.6		61.8		59.4		68.2		57.3	
Gas Temperature(^oF)	82		62		50		34		20		46		30	
Valve Turns Open	7	NC	7	NC	7	NC	NR	NR	1/8	CLOSED	CLOSED	1/4	1/4	NC
Liquid Level (ft BTOC)	15.59		17.38		17.82		NM		18.59		17.27		16.52	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-11 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.8		-4.8		-4.7		-3.7		-4.1	
Well Side Pressure (in H_2O)	-3.8	-2.9	-2.9	NC	-3.1	NC	-2.4	NC	-2.5	NC
Orifice Plate DP (in H_2O)	0.550	0.00	0.060	NC	0.070	NC	2.551	NC	0.909	NC
% CH_4	14.8		20.4		26.0		40.2		23.7	
% CO_2	18.5		18.6		23.0		27.0		25.2	
% O_2	0.0		0.0		0.0		0.0		0.0	
% Balance Gas	66.7		61.0		51.0		32.8		51.1	
Gas Temperature(^oF)	60		75		70		100		82	
Valve Turns Open	1/4	1/2	1/2	NC	1/2	NC	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	15.08		15.98		15.55		16.30		16.16	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		NR		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-0.2	NR	-0.35	NR	-3.6	NC	-0.5	-0.8	-1.0	NR	-3.5	NR	-1.0	-0.8
Orifice Plate DP (in H_2O)	0.1	NR	0.1	0.05	0	NC	0.05	0.10	0.20	NR	NR	NR	0.20	0.15
% CH_4	22.2		24.8		18.6		19.8		27.1		21.1		22.9	
% CO_2	13.8		12.4		13.8		14.0		15.1		15.8		14.4	
% O_2	11.2		11		10.8		9.5		10.5		8.6		10.3	
% Balance Gas	52.8		51.8		56.8		56.7		57.8		54.5		52.4	
Gas Temperature(^oF)	30		38		28		40		48		NR		64	
Valve Turns Open	NC	NR	0.75	0.5	0	NC	NR	NR	NR	NR	0.25	NR	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.5		-2.3		-5.0		-5.5		-6.6		-3.8	
Well Side Pressure (in H_2O)	-1.2	NC	-0.7	NC	-0.1	NR	-0.5	NC	0.11	NC	-0.20	NC	-1.60	-0.2
Orifice Plate DP (in H_2O)	0.15	NC	0.08	NC	0.02	NR	0.09	NC	0.05	NC	0.01	NC	1.20	0.10
% CH_4	25.2		33.1		32.6		37.9		16.2		10.0		2.1	
% CO_2	17.7		21.6		22.2		25.4		10.8		8.2		16.1	
% O_2	7.7		6.7		0.7		6.1		13.3		14.1		15.4	
% Balance Gas	49.4		38.6		44.5		30.6		59.7		67.7		66.4	
Gas Temperature(^oF)	78		84		84		82		78		60		50	
Valve Turns Open	0.5	NC	0.5	NC	0.5	0.25	0.25	NC	0.25	NC	0.25	NC	1	0.5
Liquid Level (ft BTOC)	NR		12.54		13.43		10.97		13.91		15.41		17.48	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.3		-5.6		-4.2		-4.9		-4.8		-4.7	
Well Side Pressure (in H_2O)	-0.30	NC	0.00	NC	-4.80	NC	0.00	NC	0.00	0.0	0.00	NC	-4.60	NC
Orifice Plate DP (in H_2O)	0.60	NC	0.001	NC	0.937	NC	0.010	NC	0.006	0.00	0.000	NC	3.734	NC
% CH_4	2.0		3.1		16.5		5.2		7.6		10.7		11.4	
% CO_2	12.5		3.2		17.2		4.8		11.0		9.6		20.1	
% O_2	13.6		17.0		4.2		16.6		11.0		0.0		0.0	
% Balance Gas	71.9		76.7		62.1		73.4		70.4		79.7		68.5	
Gas Temperature(^oF)	32		19		40		32		72		76		70	
Valve Turns Open	NR	NR	1/4	1/2	1/2	1/2	1/2	CLOSED	CLOSED	CLOSED	CLOSED	NC	CLOSED	1/4
Liquid Level (ft BTOC)	NM		15.36		13.03		10.11		10.2		10.17		12.33	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/20/2011		8/17/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.7	
Well Side Pressure (in H_2O)	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.000	NC	0.000	NC
% CH_4	2.1		6.8	
% CO_2	13.7		5.6	
% O_2	6.7		14.7	
% Balance Gas	77.5		72.9	
Gas Temperature(^oF)	106		89	
Valve Turns Open	1/4	CLOSED	CLOSED	NC
Liquid Level (ft BTOC)	14.24		12.2	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.5		-3.9		-3.7		-3.8	
Well Side Pressure (in H_2O)	-1.7	-1.7	-2.6	NR	-3.6	NC	-3.5	-3.5	-3.9	NR	-3.7	-3.7	NR	NR
Orifice Plate DP (in H_2O)	0.8	0.9	1.5	1.65	1.3	NC	1.30	1.40	0.19	NR	1.50	1.80	NR	1.60
% CH_4	64.9		74.1		71.4		66.8		67.2		67.2		59.3	
% CO_2	34.1		23		37.5		31.9		32.7		31.8		31.0	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	1.0		2.9		0.0		1.3		0.1		1.0		9.7	
Gas Temperature(^oF)	40		45		40		48		50		NR		NR	
Valve Turns Open	NR	+0.25	3	3.5	3	NC	3	4.5	NR	NR	5%	6.5	6.5	8.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.0		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	-4.4	-5.4	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.0	NC	-6.5	NC
Orifice Plate DP (in H_2O)	2.00	2.00	2.80	NC	2.50	NC	0.90	NC	2.00	NR	2.40	NC	3.00	NC
% CH_4	62.2		56.4		57.1		56.1		59.9		53.0		53.7	
% CO_2	31.8		31.6		32.2		29.7		33.9		32.9		32.9	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0		0.4	
% Balance Gas	5.7		12.0		10.7		14.2		6.2		14.1		13.0	
Gas Temperature(^oF)	62		62		68		75		72		68		62	
Valve Turns Open	8.5	10	10.0	NC	10.0	NC	10.0	NC	10.0	10.25	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.54		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.2		-0.6		-6.9		-4.2		-4.8		-4.8	
Well Side Pressure (in H_2O)	-3.8	NC	-3.2	NC	-0.6	NC	-6.6	NC	-4.2	NC	-4.7	-4.7	-4.8	NC
Orifice Plate DP (in H_2O)	2.40	NC	1.03	NC	0.311	NC	3.980	NC	1.590	NC	1.709	1.50	1.810	NC
% CH_4	54.9		53.5		59.6		62.0		64.9		62.5		61.4	
% CO_2	33.7		31.4		29.3		33.5		34.8		29.6		28.6	
% O_2	0.2		1.9		3.3		0.0		0.1		0.0		1.1	
% Balance Gas	11.2		13.2		7.8		4.5		0.2		7.9		8.9	
Gas Temperature(^oF)	60		48		32		52		52		60		60	
Valve Turns Open	10.25	NC	NR	NR	3/4	1	1	3	3	NC	3	3	3	3
Liquid Level (ft BTOC)	NR		NM		26.16		26.29		25.79		24.85		24.85	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.7		-4.0		-4.1	
Well Side Pressure (in H_2O)	-4.6	NC	-4.0	NC	-4.1	NC
Orifice Plate DP (in H_2O)	0.03	NC	1.09	NC	1.05	NC
% CH_4	68.6		64.5		62.7	
% CO_2	29.4		31.8		31.2	
% O_2	0.0		0.0		0.0	
% Balance Gas	2.0		3.7		6.1	
Gas Temperature(^oF)	62		82		72	
Valve Turns Open	3	NC	3	NC	3	NC
Liquid Level (ft BTOC)	23.99		DRY @ 28.45		24.85	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.6		-2.8		-3.6		-3.8		-3.9		-3.7		-4.4	
Well Side Pressure (in H_2O)	-1.6	-1.6	-2.6	NR	-3.6	NC	-3.8	-3.8	-3.9	NR	-3.7	NR	-4.4	-4.4
Orifice Plate DP (in H_2O)	0.02	0.04	0.1	0.15	0.08	NC	0.10	0.10	0.08	NR	0.15	0.20	0.05	0.08
% CH_4	58		71.1		43.6		37.1		54.4		47.9		48.9	
% CO_2	29		28		28.8		23.1		27.0		26.0		26.7	
% O_2	1.9		0		1.9		3.9		0.9		1.3		1.4	
% Balance Gas	11.1		0.9		25.7		35.9		18.6		24.8		23.0	
Gas Temperature(^oF)	36		40		34		46		50		NR		68	
Valve Turns Open	NR	+0.75	2.75	3.5	5	NC	5	6	NR	NR	6	7	7.5	10
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		17.3	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.4		-5.0		-5.5		-6.6		-3.7	
Well Side Pressure (in H_2O)	-6.0	NC	-6.0	NC	-2.4	NC	-5.0	NR	-5.5	NC	-6.6	NC	NR	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.03	NC	0.01	NC	0.04	NR	0.00	NC	0.03	NC	0.02	NC
% CH_4	56.1		67.8		65.3		66.4		66.2		63.3		65.4	
% CO_2	29.4		30.6		30.7		31.9		33.5		32.7		34.0	
% O_2	0.0		0.4		0.9		1.0		0.1		0.7		0.4	
% Balance Gas	14.5		1.2		3.1		0.7		0.2		3.3		0.2	
Gas Temperature(^oF)	74		84		85		90		88		64		63	
Valve Turns Open	10	NC	10	NC	10	NC	10	10.25	10.25	NC	10.25	NC	10.25	NC
Liquid Level (ft BTOC)	NR		17.22		17.28		17.00		17.04		17.18		17.04	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-1.4		-6.6		-4.7		-4.8		-4.8		-4.7	
Well Side Pressure (in H_2O)	-3.0	NC	-1.4	NC	-6.5	NC	-4.7	NC	-4.8	-4.8	-4.8	NC	-4.7	NC
Orifice Plate DP (in H_2O)	0.05	NC	0.254	NC	0.003	NC	0.020	NC	0.556	0.00	0.020	NC	1.110	NC
% CH_4	62.4		60.2		65.7		65.9		71.2		69.6		60.6	
% CO_2	31.4		31.5		33.4		33.9		28.7		27.2		30.4	
% O_2	1.9		2.5		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	4.3		5.8		0.9		0.2		0.1		3.2		9.0	
Gas Temperature(^oF)	38		22		50		32		72		75		62	
Valve Turns Open	NR	NR	3/4	1	1	2	2	1/4	1/4	1/2	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	NM		16.96		16.91		16.93		16.77		16.83		14.36	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

GEW-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/20/2011		8/17/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-4.0	
Well Side Pressure (in H_2O)	-3.6	NC	-4.0	NC
Orifice Plate DP (in H_2O)	1.480	NC	0.532	NC
% CH_4	67.0		63.0	
% CO_2	30.6		30.6	
% O_2	0.0		0.0	
% Balance Gas	2.4		6.4	
Gas Temperature(^oF)	98		78	
Valve Turns Open	1/2	NC	1/2	NC
Liquid Level (ft BTOC)	16.45		16.31	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/9/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.8		-3.7		-3.7		-3.9		-3.8		-4	
Well Side Pressure (in H_2O)	-1.7	NR	-2.8	NR	-3.7	NC	-3.3	-3.5	-3.9	NR	-3.8	-3.8	NR	NR
Orifice Plate DP (in H_2O)	0.2	NR	1.8	2.1	0.4	NC	2.40	2.60	0.20	NR	2.30	2.40	NR	2.70
% CH_4	65.1		63.5		64.0		57.6		60.7		55.2		56.0	
% CO_2	34.9		30.9		38.2		32.3		32.6		30.9		31.8	
% O_2	0		0		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	0.0		5.6		0.0		10.1		6.7		13.9		12.2	
Gas Temperature(^oF)	38		40		38		48		48		NR		NR	
Valve Turns Open	NC	NR	3	3.5	4	NC	3	3.5	NR	NR	3.5	4.5	4.5	6.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/22/2010		5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.4		-6.0		-6.0		-2.4		-5.5		-5.5		-6.6	
Well Side Pressure (in H_2O)	-4.4	NC	-5.4	NC	-6.0	-6.0	-2.4	NC	-5.0	NC	-5.5	NC	-6.5	NC
Orifice Plate DP (in H_2O)	3.00	NC	3.80	NC	3.80	3.80	1.60	NC	4.00	NC	4.00	NC	2.00	NC
% CH_4	48.7		51.9		52.2		57.7		50.3		43.9		32.9	
% CO_2	29.5		29.9		30.6		33.2		32.4		30.7		27.7	
% O_2	0.6		0.4		0.0		0.0		0.2		0.2		0.9	
% Balance Gas	21.2		17.8		17.2		9.1		17.1		25.2		38.5	
Gas Temperature(^oF)	56		78		66		72		72		70		64	
Valve Turns Open	6.5	NC	6.5	NC	6.5	7.0	7	NC	7	NC	7	NC	7	NC
Liquid Level (ft BTOC)	NR		NR		NR		DRY		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.1		-0.5		-6.6		-4.7		-4.9		-4.8	
Well Side Pressure (in H_2O)	-3.8	-2.8	-0.6	NC	-0.2	NC	-6.5	NC	-4.6	NC	-3.7	-4.9	-4.2	NC
Orifice Plate DP (in H_2O)	3.20	2.20	1.66	NC	0.003	NC	3.210	NC	3.000	NC	0.480	2.10	3.100	NC
% CH_4	37.5		35.9		44.4		45.4		36.9		41.7		41.3	
% CO_2	30.0		28.2		28.6		30.7		28.6		25.8		25.4	
% O_2	0.3		1.6		1.7		0.0		0.5		0.4		1.1	
% Balance Gas	32.2		34.3		25.3		23.9		34.0		32.1		32.2	
Gas Temperature(^oF)	60		50		32		50		42		54		86	
Valve Turns Open	8.5	4.5	NR	NR	1/4	1/2	1/2	2.0	2	1/4	1/4	1/4	1/4	NC
Liquid Level (ft BTOC)	22.5		NM		7.50		23.46		22.60		21.67		21.71	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-1 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/23/2011		7/20/2011		6/23/2011	
	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.7		-4.7		-4.2	
Well Side Pressure (in H_2O)	-4.7	NC	-4.7	NC	-4.2	NC
Orifice Plate DP (in H_2O)	2.99	NC	2.99	NC	2.93	NC
% CH_4	39.8		39.8		32.9	
% CO_2	27.8		27.8		26.8	
% O_2	0.0		0.0		0.0	
% Balance Gas	32.4		32.4		40.3	
Gas Temperature(^oF)	72		72		72	
Valve Turns Open	1/4	NC	1/4	NC	1/4	NC
Liquid Level (ft BTOC)	20.81		20.81		21.25	
Comments						

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		4/5/2010		4/22/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-1.7		-2.6		-3.6		-3.6		-3.9		NR		-4.4	
Well Side Pressure (in H_2O)	-1.3	-0.8	-1.2	NR	-3.0	NC	-3.2	-0.5	-0.6	NR	NR	NC	-0.8	-0.9
Orifice Plate DP (in H_2O)	1.3	0.8	1	0.15	3.2	NC	2.70	0.60	0.50	NR	NR	NC	0.65	0.85
% CH_4	23.8		43.5		21.2		18.1		34.1		28.2		34.4	
% CO_2	14.1		17.9		15.4		11.9		17.5		14.5		16.5	
% O_2	10.1		6.8		9.2		10.5		8.4		9.4		8.8	
% Balance Gas	52.0		31.8		54.2		59.5		48.4		47.9		40.3	
Gas Temperature(^oF)	38		44		38		46		52		NR		74	
Valve Turns Open	NR	-0.5	1	0.5	3	NC	3	1.75	NR	NR	1.75	NC	1	1.25
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		12.8	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	5/27/2010		6/28/2010		7/19/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-6.0		-6.0		-2.5		-5.0		-5.25		-6.60		-3.80	
Well Side Pressure (in H_2O)	-5.6	NC	-5.5	NC	-2.0	NR	-3.5	NC	-2.0	NR	-0.2	NR	0.1	NC
Orifice Plate DP (in H_2O)	5.00	NC	5.00	NC	1.95	NR	2.00	NC	2.00	NR	0.20	NR	0.10	NC
% CH_4	21.1		21.2		21.7		32.5		19.8		21.2		27.5	
% CO_2	12.9		11.5		12.9		19.7		11.6		14.0		16.4	
% O_2	10.5		10.6		10.7		6.9		11.2		11.2		9.4	
% Balance Gas	55.5		56.7		54.7		40.9		57.4		53.6		46.7	
Gas Temperature(^oF)	72		80		84		84		84		64		58	
Valve Turns Open	1.25	NC	1.25	NC	1.25	0.75	0.75	NC	0.75	0.25	0.75	0.25	0.5	NC
Liquid Level (ft BTOC)	11.95		NR		DRY		DRY		DRY		12.34		12.51	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	12/3/2010		1/14/2011		2/17/2011		3/24/2011		4/29/2011		6/1/2011		6/23/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.30		-0.80		-5.70		-3.80		-4.60		-4.50		-4.80	
Well Side Pressure (in H_2O)	0.0	NC	-0.5	NC	0.5	NC	-1.1	NC	0.0	-0.8	-4.0	NC	-0.3	NC
Orifice Plate DP (in H_2O)	0.01	NC	0.583	NC	0.236	NC	0.010	NC	0.028	0.60	0.040	NC	0.27	NC
% CH_4	23.3		52.0		21.3		21.1		71.8		36.7		24.6	
% CO_2	14.2		28.3		10.3		11.6		28.0		24.0		11.8	
% O_2	11.5		2.5		12.9		12.1		0.0		0.0		10.8	
% Balance Gas	51.0		17.2		55.5		55.2		0.2		39.3		52.8	
Gas Temperature(^oF)	40.0		24.0		52.0		30.0		74.0		84.0		72.0	
Valve Turns Open	NR	NR	1/2	3/4	3/4	1/2	1/4	1/8	1/8	1/2	1/2	NC	1/2	CLOSED
Liquid Level (ft BTOC)	NM		7.50		4.51		4.11		DRY		4.08		4.99	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/20/2011		8/17/2011	
	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.70		-4.10	
Well Side Pressure (in H_2O)	0.5	NC	-2.9	NC
Orifice Plate DP (in H_2O)	0.43	NC	3.11	NC
% CH_4	62.9		59.8	
% CO_2	31.0		29.0	
% O_2	0.0		0.0	
% Balance Gas	6.1		11.2	
Gas Temperature(^oF)	110.0		80.0	
Valve Turns Open	1/2	OPENED 1/4	1/4	1/2
Liquid Level (ft BTOC)	DRY @ 4.5		4.05	
Comments				

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		0.35		0.35		NR		-2.5		-2.7		-2.7	
Well Side Pressure (in H_2O)	+0.2	NR	0.35	NR	NR	NR	NR	NR	-1.6	NC	-2.6	-2.7	-2.7	NR
Orifice Plate DP (in H_2O)	0.05	NR	NR	NR	NR	NR	NR	NR	0.6	NC	0.50	0.65	0.20	NR
% CH_4	75.5		NR		70.1		79.9		71.6		69.1		72.3	
% CO_2	24.5		NR		28.2		25.9		28.0		22.9		23.2	
% O_2	0		NR		0		0		0.4		1.5		0.1	
% Balance Gas	0.0		NR		1.7		0		0.0		6.5		4.5	
Gas Temperature(^oF)	34		38		NR		NR		32		40		48	
Valve Turns Open	NR	NR	NR	NR	NR	NR	NR	NR	1	NC	1	1.75	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.2		NR		NR		-2.4		-2.6		-6.0		-3.4	
Well Side Pressure (in H_2O)	+0.2	NC	NR	NR	NR	NR	-2.4	NC	-2.6	NC	-6.0	NC	3.4	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.70	NC	0.70	NC	1.60	NC	0.92	NC
% CH_4	77.7		NR		73.1		69.1		70.6		67.1		64.8	
% CO_2	22.3		NR		22.3		22.1		22.6		26.2		25.9	
% O_2	0.0		NR		0.0		0.1		0.0		0.0		0.4	
% Balance Gas	0.0		NR		4.6		8.7		6.8		6.7		8.9	
Gas Temperature(^oF)	52		NR		NR		50		68		68		82	
Valve Turns Open	1.75	NC	1.75	NC	8	10	10	NC	12	NC	12	NC	12	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.0		-3.7		-3.8		-3.8		-2.9		-1.2		-8.0	
Well Side Pressure (in H_2O)	-3.0	NR	-3.6	NC	-3.7	NC	-3.8	NC	-2.9	NC	-0.8	NC	-7.9	NC
Orifice Plate DP (in H_2O)	0.75	NR	1.20	NC	1.25	NC	2.00	NC	1.45	NC	0.461	NC	3.250	NC
% CH_4	67.3		60.9		52.8		39.3		39.8		50.3		52.0	
% CO_2	28.9		30.3		30.1		27.4		25.0		21.9		24.0	
% O_2	0.2		0.3		0.4		0.1		1.8		1.5		0.5	
% Balance Gas	3.6		8.5		16.7		33.2		33.4		26.3		23.5	
Gas Temperature(^oF)	72		70		58		54		46		36		38	
Valve Turns Open	12	12.25	12.25	NC	12.25	NC	12.25	NC	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN
Liquid Level (ft BTOC)	NR		NR		NR		NR		NM		12.31		20.13	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-3 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/22/2011		4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-4.3		-8.9		-8.4		-2.7		-3.8	
Well Side Pressure (in H_2O)	-3.8	NC	-4.3	-4.2	-8.9	NC	-8.4	NC	-1.4	NC	-3.7	NC
Orifice Plate DP (in H_2O)	2.510	NC	0.690	0.90	1.750	NC	2.55	NC	0.36	NC	1.19	NC
% CH_4	60.2		68.7		68.7		51.3		46.4		61.0	
% CO_2	24.4		22.0		21.9		24.0		25.1		26.7	
% O_2	0.3		0.0		0.0		0.0		0.0		0.0	
% Balance Gas	15.1		9.3		9.4		24.7		28.5		12.3	
Gas Temperature(^oF)	44		52		72		60		80		82	
Valve Turns Open	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	OPEN	NC	OPEN	NC	OPEN	CLOSED 2	1/2 OPEN	1/2 OPEN
Liquid Level (ft BTOC)	20.09		18.38		19.3		14.61		18.7		18.59	
Comments												

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.28		NR		NR		-2.7		-2.7		-2.8	
Well Side Pressure (in H_2O)	0	NR	0	NR	NR	NR	NR	NR	0.0	NC	0.0	-0.6	-2.8	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	0.05	0.01	NR
% CH_4	61.3		NR		NR		65.7		58.2		64.4		0.2	
% CO_2	30.4		NR		NR		34.9		35.2		33.7		0.2	
% O_2	2.5		NR		NR		0		2.5		0.5		21.2	
% Balance Gas	5.8		NR		NR		0		4.1		1.4		99.6	
Gas Temperature(^oF)	32.0		40.0		NR		NR		24		36		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	0.5	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/19/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.04		NR		NR		-2.4		-2.6		-6.0		0.0	
Well Side Pressure (in H_2O)	+0.01	NC	NR	NR	NR	NR	-2.4	NC	-1.8	-0.3	-4.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.00	NC	NR	NR	NR	NR	0.00	NC	0.02	0.01	0.02	NC	0.00	NC
% CH_4	9.8		NR		0.5		4.0		0.4		0.2		0.5	
% CO_2	4.4		NR		0.6		2.5		0.2		0.1		0.6	
% O_2	18.0		NR		19.2		18.8		20.2		19.3		19.3	
% Balance Gas	67.8		NR		79.7		74.7		79.2		80.4		79.6	
Gas Temperature(^oF)	46		NR		NR		58		76		84		82	
Valve Turns Open	0.5	NC	0.5	NC	0.25	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	7/21/2010		8/16/2010		9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.5		-3.5		-3.7		-3.9		-3.8		-2.9		-0.7	
Well Side Pressure (in H_2O)	-0.3	NC	-0.5	NC	-0.5	NC	-0.8	NC	-1.3	-0.1	-2.9	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.03	NC	0.015	NC	0.005	NC	0.030	NC	0.01	0.01	1.45	NC	0.005	NC
% CH_4	0.1		0.3		0.3		0.0		0.2		0.8		1.3	
% CO_2	0.4		0.4		0.5		0.6		0.7		2.1		4.0	
% O_2	18.6		19.7		19.9		19.3		19.5		19.1		18.2	
% Balance Gas	80.9		79.6		79.3		80.1		79.6		78.0		76.5	
Gas Temperature(^oF)	98		88		80		58		58		28		20	
Valve Turns Open	0.125	NC	0.125	NC	0.125	NC	0.125	NC	0.25	NR	NR	NR	CLOSED	CLOSED
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NM		11.02	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-6 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/16/2011		3/22/2011		4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-8.3		-3.5		-4.3		-8.9		-8.4		-2.7		-3.8	
Well Side Pressure (in H_2O)	0.0	NC	0.0	NC	0.0	0.0	0.0	NC	0.0	NC	0.0	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.000	NC	0.000	NC	0.000	0.00	0.000	NC	0	NC	0	NC	0	NC
% CH_4	1.2		0.0		1.9		0.0		0.1		0.1		0.4	
% CO_2	1.1		0.2		0.5		0.5		0.8		1.1		3.1	
% O_2	19.1		19.7		18.6		18.7		18.5		17.5		16.4	
% Balance Gas	78.6		80.1		79.0		80.8		80.6		81.3		80.1	
Gas Temperature(^oF)	50		40		64		70		70		96		82	
Valve Turns Open	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	NC	CLOSED	NC	CLOSED	NC	CLOSED	NC
Liquid Level (ft BTOC)	11.55		8.86		7.86		8.41		7.54		8.85		8.61	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-3.9		-2.9		-2.8		-2.7		-3.2		-2.8	
Well Side Pressure (in H_2O)	-2.9	NR	-3.8	NR	-2.8	NC	-2.4	-2.0	-1.0	NR	-1.0	-0.8	-0.7	NC
Orifice Plate DP (in H_2O)	2.4	NR	0.08	NR	2.2	NC	0.21	0.16	0.20	NR	0.70	0.60	0.50	NC
% CH_4	36.3		59.3		20.3		38.1		43.2		31.9		43.2	
% CO_2	21.1		23.6		19.3		20.4		22.1		20.2		22.1	
% O_2	2.6		2.6		4.8		5.1		3.3		4.3		3.0	
% Balance Gas	40.0		14.5		55.6		36.4		34.7		43.6		31.7	
Gas Temperature(^oF)	44		44		42		42		49		48		NR	
Valve Turns Open	NC	NR	2.5	NC	3	NC	3	2	NR	NR	2	1.75	1.75	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-0.1	-0.5	-0.5	NC	-1.0	NC	-0.4	NR	-2.5	NC	-1.3	NR
Orifice Plate DP (in H_2O)	NR	NR	0.10	0.30	0.35	NC	0.80	NC	0.40	NR	2.00	NC	1.30	NR
% CH_4	43.5		66.3		55.2		46.9		44.8		31.4		34.5	
% CO_2	22.3		28.7		25.1		21.8		21.0		17.6		17.9	
% O_2	4.0		1.1		2.5		5.9		6.2		8.2		8.7	
% Balance Gas	30.2		3.9		17.2		25.4		28.0		42.8		38.9	
Gas Temperature(^oF)	NR		50		72		76		88		72		72	
Valve Turns Open	0.75	0.5	1	1.5	1.5	NC	1.5	NC	1.5	0.75	0.75	NC	0.75	0.5
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
(1) Based on initial reading.
(2) Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.8		-3.8		-1.2		-0.8		-6.7		-4.3		-4.3	
Well Side Pressure (in H_2O)	-0.9	-0.2	-0.2	-0.2	-1.0	-0.2	-0.3	NC	-6.5	NC	-0.2	NC	-0.2	NC
Orifice Plate DP (in H_2O)	0.50	0.10	0.22	0.10	0.50	0.10	0.188	NC	1.080	NC	1.270	NC	1.270	NC
% CH_4	29.4		36.7		47.5		65.7		23.0		23.0		48.8	
% CO_2	16.1		20.1		24.4		24.4		16.0		16.0		22.5	
% O_2	10.2		7.1		5.6		1.5		5.9		5.9		3.7	
% Balance Gas	44.3		36.1		22.5		8.4		55.1		55.1		25.0	
Gas Temperature(^oF)	62		58		42		30		48		48		46	
Valve Turns Open	1	0.75	0.75	0.25	NR	NR	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NM		26.52		26.63		26.63		26.19	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1		-8.4		-2.6		-3.4	
Well Side Pressure (in H_2O)	-2.4	-1.5	-9.1	NC	-2.3	NC	0.3	NC	-0.7	NC
Orifice Plate DP (in H_2O)	0.688	0.10	1.250	NC	1.77	NC	0.24	NC	0.52	NC
% CH_4	31.1		33.1		22.3		27.5		40.6	
% CO_2	15.5		16.5		14.4		12.3		20.6	
% O_2	6.8		5.5		8.1		10.0		6.9	
% Balance Gas	46.6		44.9		55.2		50.2		31.9	
Gas Temperature(^oF)	52		70		64		86		78	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC	OPEN	9 3/4	OPENED 1/4	NC	1/4	NC
Liquid Level (ft BTOC)	25.41		25.63		24.91		25.62		25.12	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.8		-2.8		-2.8		-3.2		-2.8	
Well Side Pressure (in H_2O)	-3	-3	-4	NR	-2.8	NC	-2.8	NC	-2.8	NR	-0.2	-0.2	-2.8	-2.8
Orifice Plate DP (in H_2O)	0.02	0.03	0.02	NR	0	NC	0.03	NC	0.01	NR	0.01	0.01	0.15	0.10
% CH_4	56.5		63.4		52.0		51.9		43.3		19.8		32.6	
% CO_2	19.1		17.6		19.0		17.9		14.1		5.8		8.7	
% O_2	5.1		4		6.1		4.7		8.7		15.6		11.4	
% Balance Gas	19.3		15		22.9		25.5		42.6		58.8		47.3	
Gas Temperature(^oF)	34		36		24		38		52		50		NR	
Valve Turns Open	NR	+0.25	2.25	2.5	3	NC	3	NC	NR	NR	3	2.5	2.5	2
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.0		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	-2.2	-1.3	-2.5	-0.5	+1.2	-0.6	0.0	NC	-0.05	NC	-0.70	NR
Orifice Plate DP (in H_2O)	NR	NR	0.02	0.01	0.40	0.03	0.02	0.03	0.10	NC	0.01	NC	0.045	NR
% CH_4	0.2		27.2		0.3		81.7		56.0		53.2		17.5	
% CO_2	0.6		7.3		0.3		20.9		21.4		21.4		7.4	
% O_2	19.0		13.5		20.1		0.0		2.9		4.6		14.9	
% Balance Gas	80.2		52.0		79.3		-2.6		19.7		20.8		60.2	
Gas Temperature(^oF)	NR		62		88		90		100		88		80	
Valve Turns Open	2	0.5	1	0.75	0.75	0.625	0.75	1.50	1.5	NC	1.5	NC	1.5	1.0
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-7.3		-4.3		-4.4	
Well Side Pressure (in H_2O)	0.01	-0.1	-0.01	-0.2	-0.70	NC	0.00	NC	-4.80	NC	-1.00	NC	-2.20	-0.7
Orifice Plate DP (in H_2O)	0.010	0.08	0.010	0.12	0.119	NC	0.018	NC	0.080	NC	0.720	NC	0.242	0.10
% CH_4	71.9		72.6		11.0		60.8		14.3		30.3		9.4	
% CO_2	28.1		27.1		4.9		21.2		6.0		10.9		3.4	
% O_2	0.0		0.2		17.3		3.3		15.9		11.5		16.4	
% Balance Gas	0.0		0.1		66.8		14.7		63.8		47.3		70.8	
Gas Temperature(^oF)	62		72		40		28		42		40		58	
Valve Turns Open	0.25	0.75	1.5	0.75	NR	NR	3/4	1	1	2	2	NC	2	4
Liquid Level (ft BTOC)	NR		NR		NM		14.73		15.21		13.61		12.06	
Comments														

Notes:
NA = not available
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[1] Based on initial reading.
[2] Number of turns open out of 10

DV-13 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-9.1		-8.4		-2.6		-3.5	
Well Side Pressure (in H_2O)	-2.00	NC	-0.1	NC	-1.2	NC	0.0	NC
Orifice Plate DP (in H_2O)	1.100	NC	0.014	NC	0.586	NC	0.000	NC
% CH_4	16.2		6.5		58.6		2.4	
% CO_2	10.1		2.3		20.6		1.0	
% O_2	13.0		17.7		4.0		17.8	
% Balance Gas	60.7		73.5		16.8		78.8	
Gas Temperature(^oF)	65		68		100		80	
Valve Turns Open	4	NC	4	3 7/8	4	OPENED 1/2	1/2	CLOSED
Liquid Level (ft BTOC)	15.55		10.77		12.5		12.88	
Comments								

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	0		0.5		-0.8		NR		-2.9		-2.8		NR	
Well Side Pressure (in H_2O)	0	NR	0	NR	0	NR	NR	NR	0.0	NC	0.0	NC	NR	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	0	NR	NR	NR	0	NC	0.00	NC	NR	NR
% CH_4	9.0		NR		2.4		NR		3.4		9.1		11.2	
% CO_2	1.9		NR		1.1		NR		2.0		3.6		1.3	
% O_2	18.9		NR		19.4		NR		16.7		14.8		18.4	
% Balance Gas	70.2		NR		77.1		NR		77.9		72.5		87.5	
Gas Temperature(^oF)	66.0		35.0		NR		NR		34		36		45	
Valve Turns Open	NR	NR	100	NR	0	NC	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	4.91		NR		NR		NR		NR		NR		NR	
Comments														

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NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-0.7		NR		-2.6		-2.6		-6.5		-3.5		-3.5	
Well Side Pressure (in H_2O)	0.0	NR	NR	NR	0.0	NC	0.0	NC	0.0	NC	-3.5	NC	-3.5	NC
Orifice Plate DP (in H_2O)	0.00	NR	NR	NR	0.00	NC	0.00	NC	0.00	NC	2.3-2.7	NC	2.00	NC
% CH_4	0.4		NR		2.2		7.0		4.5		1.8		5.7	
% CO_2	0.2		NR		1.0		2.2		1.8		0.8		2.0	
% O_2	20.5		NR		20.1		18.7		18.4		18.5		18.4	
% Balance Gas	78.9		NR		76.7		72.1		75.3		78.9		73.9	
Gas Temperature(^oF)	44		NR		70		72		90		87		75	
Valve Turns Open	CL	NC	0	NC	0	NC	0	NC	0	NC	0	NC	0	NC
Liquid Level (ft BTOC)	NR		NR		5.8		6.79		8.00		8.69		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.9		-0.9		-2.0		-6.7		-4.3	
Well Side Pressure (in H_2O)	-0.2	NC	0.0	NC	0.02	NC	-0.20	NC	0.00	NC	0.00	NC	0.00	NC
Orifice Plate DP (in H_2O)	0.02	NC	0.00	NC	0.01	NC	0.60	NC	0.017	NC	0.000	NC	0.000	NC
% CH_4	14.1		1.1		35.8		2.0		1.4		1.1		2.0	
% CO_2	6.1		2.5		16.6		12.5		3.0		1.3		0.8	
% O_2	15.3		19.1		7.5		13.6		19.8		19.4		18.6	
% Balance Gas	64.5		77.3		40.1		71.9		75.8		78.2		78.6	
Gas Temperature(^oF)	79		54		56		32		38		42		42	
Valve Turns Open	0	NC	0.25	NC	0.125	NC	NR	NR	1/8	CLOSED	1/8	CLOSED	CLOSED	CLOSED
Liquid Level (ft BTOC)	10.24		8.54		8.75		NM		10.20		11.40		10.38	
Comments														

Notes:
NA = not available
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NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

EWL-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.2		-9.1		-8.2		-3.0		-3.3	
Well Side Pressure (in H_2O)	0.00	0.0	0.00	NC	0.00	NC	-0.90	NC	-0.10	NC
Orifice Plate DP (in H_2O)	0.002	0.00	0.000	NC	0	NC	0.059	NC	0.005	NC
% CH_4	2.6		1.4		0.0		32.1		28.4	
% CO_2	0.7		1.0		0.1		15.2		14.0	
% O_2	18.6		18.6		19.1		7.1		7.9	
% Balance Gas	78.1		79.0		80.8		45.6		49.7	
Gas Temperature(^oF)	66		65		70		92		84	
Valve Turns Open	CLOSED	CLOSED	CLOSED	NC	CLOSED	NC	CLOSED	OPENED 1/4	1/4	NC
Liquid Level (ft BTOC)	5.91		6.01		7.66		11.45		12.35	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/5/2010		2/8/2010		2/172010		2/24/2010		3/1/2010		3/10/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.1		0.3		0.2		NR		-2.9		-2.8		-2.8	
Well Side Pressure (in H_2O)	0	NR	0.08	NR	NR	NR	NR	NR	0.0	NC	0.0	NC	-0.02	NR
Orifice Plate DP (in H_2O)	0	NR	NR	NR	NR	NR	NR	NR	0	NC	0.00	NC	0.02	NR
% CH_4	75.5		NR		68.1		48.2		17.0		29.8		41.7	
% CO_2	23.8		NR		27.4		17.6		6.7		11.9		13.4	
% O_2	0.4		NR		0		5.2		13.2		9.1		9.4	
% Balance Gas	0.3		NR		4.5		29		63.1		49.2		35.5	
Gas Temperature(^oF)	32		NR		NR		30		28		34		50	
Valve Turns Open	NR	NR	0	NR	NR	NR	NR	NR	0	NC	0	NC	NR	NR
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	3/15/2010		4/5/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	+0.15		NR		-2.4		-2.6		-6.0		-3.5		-3.5	
Well Side Pressure (in H_2O)	+0.03	-0.01	NR	NR	0.0	-0.80	-0.04	NC	-0.11	NC	-0.04	NC	-0.04	NC
Orifice Plate DP (in H_2O)	0.00	0.005	NR	NR	0.15	0.05	0.01	NC	0.08	NC	0.03	NC	0.05	NC
% CH_4	76.5		NR		58.3		47.8		39.1		30.5		34.0	
% CO_2	22.9		NR		19.3		17.7		15.8		14.0		16.3	
% O_2	0.1		NR		4.1		6.5		7.8		8.6		8.0	
% Balance Gas	0.5		NR		18.3		28.0		37.3		46.9		41.7	
Gas Temperature(^oF)	44		NR		56		76		80		98		84	
Valve Turns Open	CL	0.125	0.125	NC	0	0.125	0.125	NC	0.125	NC	0.125	NC	0.125	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	9/15/2010		10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/16/2011		3/22/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.7		-3.9		-3.8		-3.9		-1.4		-7.5		-4.3	
Well Side Pressure (in H_2O)	-0.025	NR	-0.400	-0.10	-0.1	-3.0	0.0	NC	-1.4	NC	-6.8	NC	-1.0	NC
Orifice Plate DP (in H_2O)	0.02	NR	0.24	0.05	0.05	0.23	0.02	NC	1.439	NC	0.320	NC	0.820	NC
% CH_4	64.6		23.7		61.5		27.2		68.8		10.6		53.8	
% CO_2	27.0		13.2		25.9		12.9		21.1		5.3		20.4	
% O_2	1.5		11.0		0.2		11.8		1.5		15.8		5.3	
% Balance Gas	6.9		52.1		12.4		48.1		8.6		68.3		20.5	
Gas Temperature(^oF)	80		64		60		40		10		38		40	
Valve Turns Open	0.125	0.25	1	0.75	0.25	0.5	NR	NR	FULL OPEN	FULLOPEN	FULL OPEN	FULLOPEN	FULL OPEN	1/4
Liquid Level (ft BTOC)	NR		NR		NR		NM		5.05		5.03		5.02	
Comments														

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[1] Based on initial reading.
[2] Number of turns open out of 10

SV-12 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/29/2011		6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-4.1		-9.1		-8.4		-2.8		-3.3	
Well Side Pressure (in H_2O)	-1.1	-0.7	-9.1	NC	-0.5	NC	-0.9	NC	-0.9	NC
Orifice Plate DP (in H_2O)	0.570	0.40	0.980	NC	0.153	NC	0.416	NC	0.285	NC
% CH_4	14.3		21.8		25.3		51.1		30.6	
% CO_2	6.4		15.4		10.6		20.1		15.2	
% O_2	14.7		7.9		10.8		3.8		8.0	
% Balance Gas	64.6		54.9		53.3		25.0		46.2	
Gas Temperature(^oF)	52		72		69		91		78	
Valve Turns Open	1/4	FULL OPEN	OPEN	NC	OPEN	9 3/4	OPEN	1/4	1/4	CLOSED 1/4
Liquid Level (ft BTOC)	DRY		5.03		5.04		5.03		5.01	
Comments										

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	2/4/2010		2/8/2010		2/24/2010		3/1/2010		3/10/2010		3/15/2010		4/5/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3		-4		-2.9		-2.8		-3		-3.2		NR	
Well Side Pressure (in H_2O)	-2.4	NR	0.1	-3	-0.2	NC	0.0	-1.0	0.0	NR	+0.07	-0.2	NR	NR
Orifice Plate DP (in H_2O)	0.1	NR	0	0.02	0	NC	0.00	0.04	0.01	NR	0.00	0.01	NR	NR
% CH_4	8.2		68.4		2.2		73.7		79.8	79.8	78.9		NR	
% CO_2	2.6		28.1		1.4		22.7		19.8	19.8	13.8		NR	
% O_2	19.4		0		16.7		0.0		0.3	0.3	1.5		NR	
% Balance Gas	69.8		3.5		79.7		3.6		0.4	0.4	5.8		NR	
Gas Temperature(^oF)	36		38		24		36		54	54	48		NR	
Valve Turns Open	NR	-0.25	0	0.25	0	NC	0	0.25	NR	NR	0.25	0.375	0	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	4/9/2010		4/22/2010		5/27/2010		6/28/2010		7/21/2010		8/16/2010		9/15/2010	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	NR		-2.6		-2.6		-6.5		-3.5		-3.5		-3.7	
Well Side Pressure (in H_2O)	NR	NR	0.0	0.0	0.02	-0.5	0.00	-0.2	-0.20	NR	-3.50	NC	-3.40	NC
Orifice Plate DP (in H_2O)	NR	NR	0.01	0.00	0.01	0.02	0.01	0.01	0.00	NR	0.06	NC	0.035	NC
% CH_4	62.2		1.8		77.4		73.5		67.8		31.7		19.8	
% CO_2	4.3		2.0		20.4		25.6		31.8		17.6		18.3	
% O_2	0.8		18.4		0.1		0.0		0.4		9.3		5.7	
% Balance Gas	32.7		77.8		2.1		0.9		0.0		41.4		56.2	
Gas Temperature(^oF)	NR		64		82		88		98		90		87	
Valve Turns Open	0	0.125	0.125	0	0	NC	0	0.25	0.25	0.5	0.5	NC	0.5	NC
Liquid Level (ft BTOC)	NR		NR		NR		NR		NR		NR		NR	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	10/15/2010		11/16/2010		12/3/2010		1/14/2011		2/17/2011		3/22/2011		4/29/2011	
	I	P	I	P	I	P	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-3.9		-3.9		-2.9		-1.9		-6.7		-4.3		-4.2	
Well Side Pressure (in H_2O)	-3.30	-1.6	-0.60	-0.3	0.20	-0.3	-0.30	NC	-6.70	NC	-4.30	NC	0.30	-4.1
Orifice Plate DP (in H_2O)	0.010	0.01	0.01	0.01	0.19	0.01	0.021	NC	0.060	NC	0.070	NC	0.006	0.00
% CH_4	10.0		31.7		27.3		58.6		46.8		51.5		81.5	
% CO_2	11.2		21.8		13.7		17.9		13.1		16.6		17.7	
% O_2	11.1		5.6		10.3		4.3		7.1		6.8		0.0	
% Balance Gas	67.7		40.9		48.7		19.2		33.0		25.1		0.8	
Gas Temperature(^oF)	58		58		42		20		50		42		68	
Valve Turns Open	1	0.75	0.5	NR	NR	NR	1/8	1/2	1/2	3/8	3/8	1/2	1/2	3/4
Liquid Level (ft BTOC)	NR		NR		NM		8.97		8.79		8.14		8.03	
Comments														

Notes:
NA = not available
NR = not recorded
NC = no change
[1] Based on initial reading.
[2] Number of turns open out of 10

UAV-2 Summary
Mallard North Landfill
Hanover Park, Illinois

Date	6/1/2011		6/23/2011		7/20/2011		8/17/2011	
	I	P	I	P	I	P	I	P
Header Side Pressure[1] (in H_2O)	-9.1		-8.4		-2.6		-3.4	
Well Side Pressure (in H_2O)	-9.10	NC	-1.2	NC	-2.5	NC	0.0	NC
Orifice Plate DP (in H_2O)	0.090	NC	0.003	NC	0.814	NC	0.003	NC
% CH_4	71.3		0.1		23.1		61.4	
% CO_2	14.9		0.4		14.9		31.4	
% O_2	0.6		19.0		6.8		0.0	
% Balance Gas	13.2		80.5		55.2		7.2	
Gas Temperature(^oF)	60		69		100		91	
Valve Turns Open	3/4	NC	3/4	CLOSED	3/4	1/4	1	1/2
Liquid Level (ft BTOC)	8.63		8.63		8.82		9.04	
Comments								

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NA = not available
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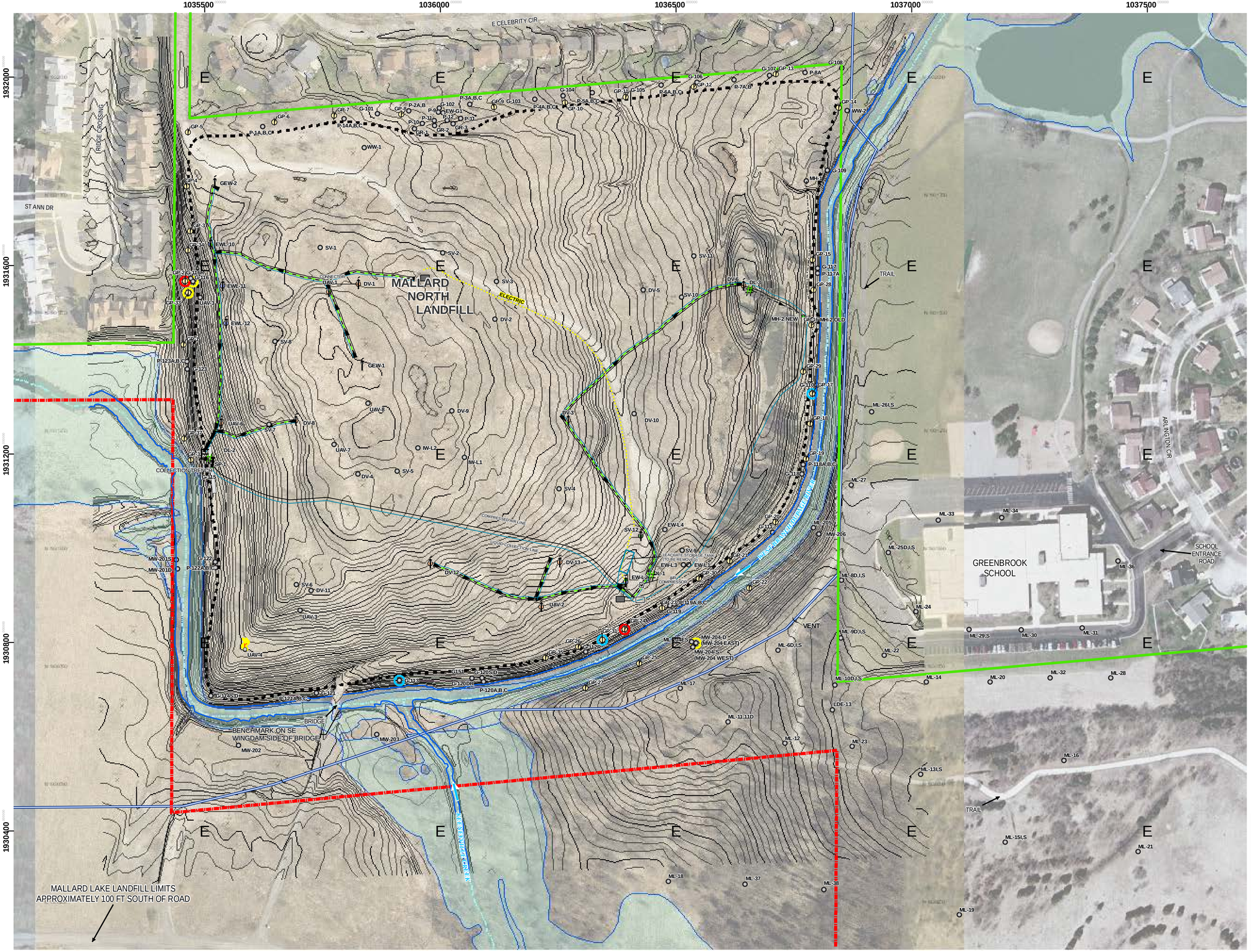
[2] Number of turns open out of 10



LEGEND

- APPROXIMATE LANDFILL LIMITS
- REPORTED LEACHATE COLLECTION TRENCH (APPROXIMATE LOCATION)
- FEMA 100-YR FLOOD PLAIN
- APPROXIMATE RIVER & STREAM CENTERLINES
- 780 — TOPOGRAPHIC CONTOUR (CONTOUR INTERVAL IS ONE FOOT)
- EXISTING 16" FORCE MAIN
- FORCE MAIN VENT
- GAS PROBE LOCATION (RMT 2009)
- % METHANE > 50%
- % METHANE BETWEEN 2.5 AND 50%
- % METHANE < 2.5%
- DRIPLEG
- BLOWER/FLARE STATION
- COMPRESSED AIR LINE
- LEACHATE COLLECTION LINE
- LFG EXTRACTION WELL (MONITORING LOCATION)
- LEACHATE EXTRACTION WELL (MONITORING LOCATION)
- PREVIOUSLY EXISTING WELL, PIPE, OR PROBE
- DUAL LEACHATE/GAS EXTRACTION WELL
- MALLARD LAKE LANDFILL PROPERTY LINE
- FPDDC PRESERVE BOUNDARY

NOTES:

1. BASE AERIAL IMAGE (SHOWN WEST OF 1037100' EASTING IN MAP COORDINATES) AND CONTOURS GENERATED BY THE BASE MAPPING CO. LTD. FOR FOREST PRESERVE DISTRICT OF DUPAGE COUNTY, APRIL 2009 (FLIGHT DATE 04/10/2009).
2. BASE AERIAL IMAGE (SHOWN EAST OF 1037100' EASTING IN MAP COORDINATES) FROM USGS URBAN IMAGERY DATASET, CHICAGO, IL, MARCH 2005.
3. ROADS DATA FROM ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE.
4. FEMA FLOOD PLAIN INFORMATION PROVIDED BY THE DUPAGE COUNTY, ILLINOIS GIS DEPARTMENT.
5. LANDFILL LIMITS AND SURFACE WATER FEATURES ESTIMATED BY AERIAL PHOTOGRAPH.
6. SAMPLE LOCATION DATA FROM MARTINEZ CORPORATION.
7. MAP PROJECTION & COORDINATE SYSTEM IS ILLINOIS STATE PLANE EAST NAD83.
8. APPROXIMATE HISTORICAL WELL AND PROBE LOCATIONS FROM DUPAGE COUNTY FOREST PRESERVE DISTRICT AND BFI. 2009 PROBE LOCATIONS FROM DIFFERENTIALLY CORRECTED GPS DATA COLLECTED BY RMT, JUNE 2009.
9. REPORTED LEACHATE COLLECTION TRENCH LOCATION IS SHOWN APPROXIMATELY BASED ON DRAWING NO. 1 CONTAINED IN REPORT TITLED "FEASIBILITY STUDY REPORT, MALLARD NORTH LANDFILL, HANOVER PARK, ILLINOIS", DATED NOVEMBER 1995 AND PREPARED BY EMCON.
10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 07/18/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
(JULY 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931July2011
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: JULY 26, 2011	07/26/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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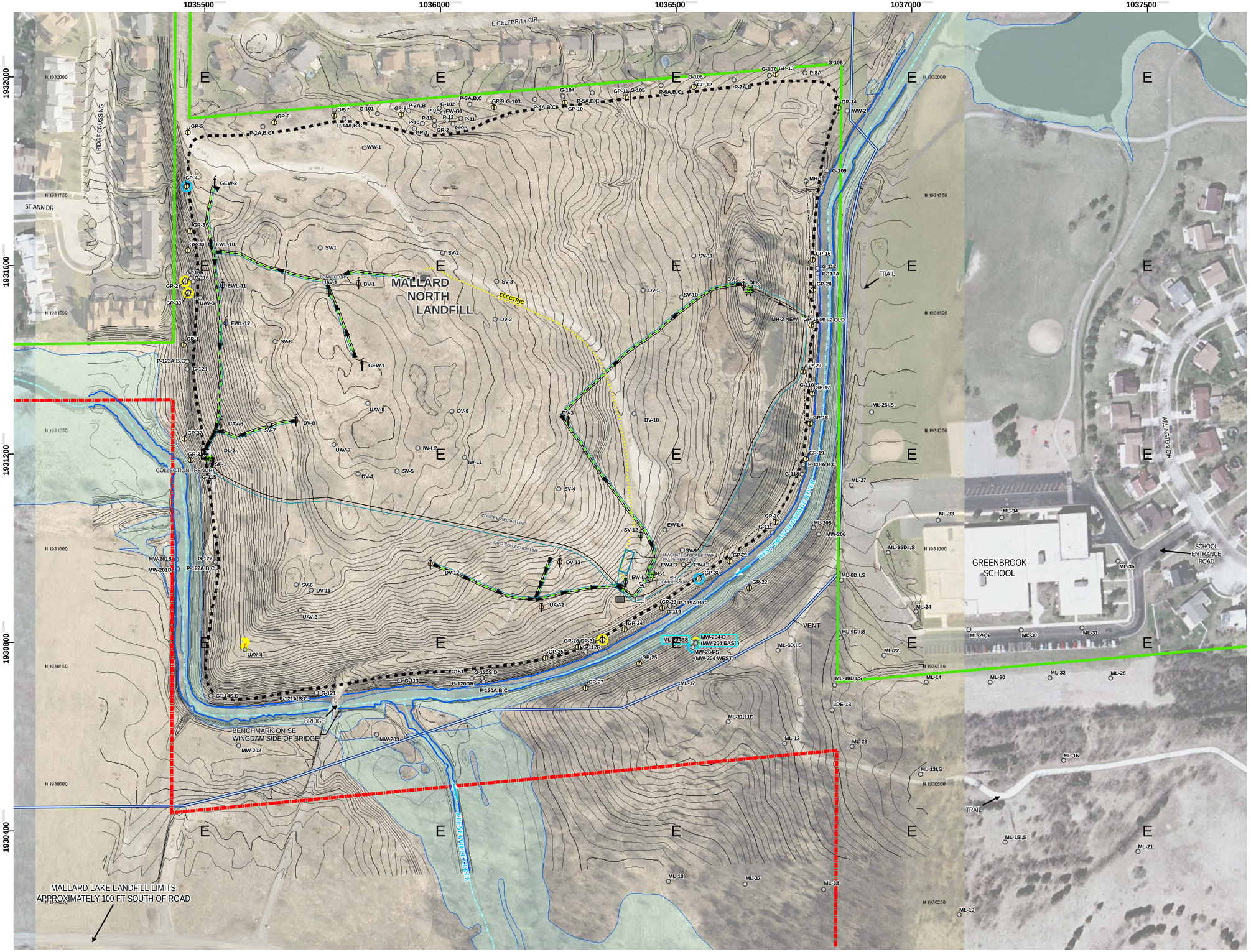

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10. MALLARD NORTH GAS PROBE READINGS WERE TAKEN BY FPDDC ON 08/15/11.

0 100 200 FEET

PROJECT:
MALLARD NORTH LANDFILL
FOREST PRESERVE DISTRICT OF DUPAGE COUNTY

SHEET TITLE:
METHANE DETECTIONS
AUGUST 2011 GAS MONITORING ROUND)

DRAWN BY: DWB	SCALE:	PROJ. NO.	
CHECKED BY: DLZ	AS NOTED	FILE NO.	MallardNorth931August2011
APPROVED BY:	DATE PRINTED:	**FIGURE 1**	
DATE: AUGUST 25, 2011	08/25/11		

FOREST PRESERVE DISTRICT DU PAGE COUNTY

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