

Report of Progress, March 31, 2009

Pursuant to Administrative Settlement Agreement and Order on Consent for Removal Action

Docket No. V-W-08-C-897

Countywide Recycling and Disposal Facility
East Sparta, Stark County, Ohio
Respondent: Republic Services of Ohio II, LLC (Republic)

Paragraph 15.a and b Enhanced Gas Extraction and Temperature Monitoring [NOTE: THIS WORK ITEM IS SUPERSEDED BY AN ISOLATION BREAK EXCAVATION].

The next to last deck (Deck 7) was completed on March 3, 2009, leaving less than 10,000 cubic yards (out of a total 387,000 cubic yards) of material left to remove. Between March 4 and March 27, effort was focused on the installation of drainage and gas collection features. On March 30, waste excavation resumed with Deck 8 and installation of the toe drain at the bottom of the Isolation Break.

A drawing indicating the limit of work and progress is contained in Attachment A-1. It is expected that the excavation phase of the Isolation Break will continue through mid-April. Then, the bottom road will be constructed and gas collection wells installed before the temporary FML cap can be placed.

To date, no reaction-impacted waste has been encountered. About 120 cubic yards of baghouse dust which had been segregated into roll-off boxes was disposed in the 88-acre "bowl" area (see Attachment A-1 for location of disposal) after a laboratory bench study showed the material to have very little reactivity. A table showing daily construction progress and parameters is included in the Isolation Break Excavation Summary provided in Attachment A-2.

In situ temperature monitoring of the FBMP thermocouple monitors was continued throughout the month. Results are presented in Attachment A-3. FBMP-1R had been the only one that exhibited significant trends; however it stabilized somewhat in March.

Paragraph 15.c and f Capping and Stabilization.

A map depicting the current status of capping is included in Attachment B.

The area referred to as the "Deep Trench" was successfully completed in March. Soil and waste material which was removed from this trench was disposed in the 88-acre "bowl area."

The bowl area will likely be capped in April 2009.

Composite capping in the Cells 1-3 area is still on hold until U.S. EPA, Ohio EPA, and Countywide resolve details for a composite cap cross section.

Paragraph 15.e Air Monitoring and Sampling.

In accordance with the Isolation Break Excavation work plan, air monitoring was conducted during excavation activities. Each tier is discussed below with commentary on the results.

Tier 1 – Worker Monitoring. This utilizes PID (for total VOCs), 4-gas meter (for methane, carbon monoxide, oxygen, and hydrogen sulfide), ammonia meter, and benzene Dräger tubes. A summary of PID results can be found on the Isolation Break Excavation Summary in Attachment A-2. No PID readings approached worker levels of concern and no ammonia or benzene was detected.

Tier 2 – Construction Zone Monitoring. During mass waste excavation, monitoring is conducted about 300 feet downwind of the excavation using a PID and, every third active excavation day, an 8-hour SUMMA canister (analyzed for volatile organics). A summary of PID results can be found on the Isolation Break Excavation Summary in Attachment A-2. No PID readings approached worker or community levels of concern. A table containing results of the SUMMA canister analyses is provided in Attachment C-1.

Tier 3 – “Stage C” Fixed Continuous Monitoring. Consists of the five continuous air monitors equipped with PIDs and automatically triggered 15-minute SUMMA canister collection. Results of monitoring for February 24, 2009 to March 27, 2009 are provided in Attachment C-2.

Tier 4 – Community Monitoring. This is comprised of the four off-site community air stations that have been monitored every six days for the past 23 months, and has now been temporarily increased to include sampling every three days during Isolation Break work. The table provided in Attachment C-1 contains results for the SUMMA canister analyses.

Tier 5 – Odor Monitoring. At least eight odor monitoring circuits are made around the public roads encircling the facility, resulting in about 184 readings per day. A Nasal Ranger reading of “4” is considered “distinct.” During excavation, almost all of the off-site detections of 4 or greater were attributable to the excavation activity. A summary of results, indicated as the number of occurrences at a level 4 or greater, can be found on the Isolation Break Excavation Summary in Attachment A-2.

Paragraph 15.g Aerial Infrared Imaging.

February 2009 and March 2009 aerial infrared images are provided in Attachment D along with a diagram to outline the approximate coverage of the images. Both images were taken in the pre-dawn hours. The ambient air temperature during the February 2009 image was 19° F and during the March 2009 image was 42° F. Comparison of these images generally shows the same subcap warm areas attributed to subcap leachate outbreaks and transmittal of gas through subcap cracking with no large aerial changes or trends.

ATTACHMENT A-1

ISOLATION BREAK EXCAVATION PROGRESS

ATTACHMENT A-2

ISOLATION BREAK EXCAVATION SUMMARY TABLE

Countywide RDF
Isolation Break Excavation Summary

Date	Day	Deck #	High Waste Temp (°F)	Aluminum Waste Encountered	Reaction Impacted Waste Encountered	Breathing/Work Zone (Tier 1) VOC Data (ppb) High/Avg.	300' Downwind (Tier 2) VOC Data (ppb) High (1 min. avg.)/Avg.	Nasal Ranger Daily Readings ≥4
12/8/2008	Monday	1	80	No	No	600/200	58/2.5	0
12/9/2008	Tuesday	1	107	No	No	500/100	128/1	1
12/10/2008	Wednesday	1	109	No	No	900/500	35/0.5	3
12/11/2008	Thursday	1	123	No	No	2,800/1,600	2/0	4
12/12/2008	Friday	1	108	No	No	1,400/850	166/9	3
12/13/2008	Saturday							
12/14/2008	Sunday							
12/15/2008	Monday	1	110	No	No	800/200	191/9	2
12/16/2008	Tuesday	1	113	No	No	800/100	177/9	6
12/17/2008	Wednesday	1/2	120	No	No	500/82	2/0	3
12/18/2008	Thursday	2	128	No	No	900/141	65/0	2
12/19/200	Friday	2	118	No	No	0/0	361/50	4
12/20/2008	Saturday	2	125	No	No	900/361	372/60	0
12/21/2008	Sunday							
12/22/2008	Monday							
12/23/2008	Tuesday							
12/24/2008	Wednesday							
12/25/2008	Thursday							
12/26/2008	Friday							
12/27/2008	Saturday							
12/28/2008	Sunday							
12/29/2008	Monday							
12/30/2008	Tuesday							
12/31/2008	Wednesday							
1/1/2009	Thursday							
1/2/2009	Friday							
1/3/2009	Saturday							
1/4/2009	Sunday							
1/5/2009	Monday	2	128	No	No	1,600/317	74/2	0
1/6/2009	Tuesday	2	106	No	No	300/100	554/128	3
1/7/2009	Wednesday							
1/8/2009	Thursday	2	109	No	No	5,600/615	306/19	4
1/9/2009	Friday	2	102	No	No	800/395	216/5	3
1/10/2009	Saturday							

Countywide RDF
Isolation Break Excavation Summary

1/11/2009	Sunday							
1/12/2009	Monday	3	100	No	No	600/65	17/0	1
1/13/2009	Tuesday	3	115	No	No	5,000/835	162/15	4
1/14/2009	Wednesday	3	120	No	No	300/50	122/4	2
1/15/2009	Thursday	3	115	No	No	5,100/755	43/0	3
1/16/2009	Friday	3	106	No	No	900/400	103/16	4
1/17/2009	Saturday							
1/18/2009	Sunday							
1/19/2009	Monday	3	118	No	No	5,800/1,061	322/27	3
1/20/2009	Tuesday	3	117	No	No	900/435	472/48	0
1/21/2009	Wednesday	3/4	113	No	No	800/235	189/57	3
1/22/2009	Thursday	4	136	No	No	600/350	100/2	5
1/23/2009	Friday	4	135	No	No	5,600/880	714/84	3
1/24/2009	Saturday							
1/25/2009	Sunday							
1/26/2009	Monday	4	128	No	No	800/369	649/122	5
1/27/2009	Tuesday	4	132	No	No	800/447	728/119	3
1/28/2009	Wednesday							
1/29/2009	Thursday	4	124	No	No	800/281	11/0	3
1/30/2009	Friday	4	120	No	No	800/424	362/81	3
1/31/2009	Saturday							
2/1/2009	Sunday							
2/2/2009	Monday	4/5	122	No	No	800/370	415/22	2
2/3/2009	Tuesday	5	128	No	No	3,600/665	62/1	2
2/4/2009	Wednesday	5	110	No	No	900/460	223/45	5
2/5/2009	Thursday	5	116	No	No	500/170	150/2	5
2/6/2009	Friday	5	128	Yes	No	1,800/520	403/76	2
2/7/2009	Saturday							
2/8/2009	Sunday							
2/9/2009	Monday	5	122	No	No	100/5	83/7	4
2/10/2009	Tuesday							
2/11/2009	Wednesday							
2/12/2009	Thursday							
2/13/2009	Friday							
2/14/2009	Saturday							
2/15/2009	Sunday							
2/16/2009	Monday	5/6	114	No	No	5,600/660	196/5	2
2/17/2009	Tuesday	5/6	115	Yes	No	200/25	731/76	3
2/18/2009	Wednesday							
2/19/2009	Thursday							
2/20/2009	Friday	5/6	114	Yes	No	700/230	215/43	0

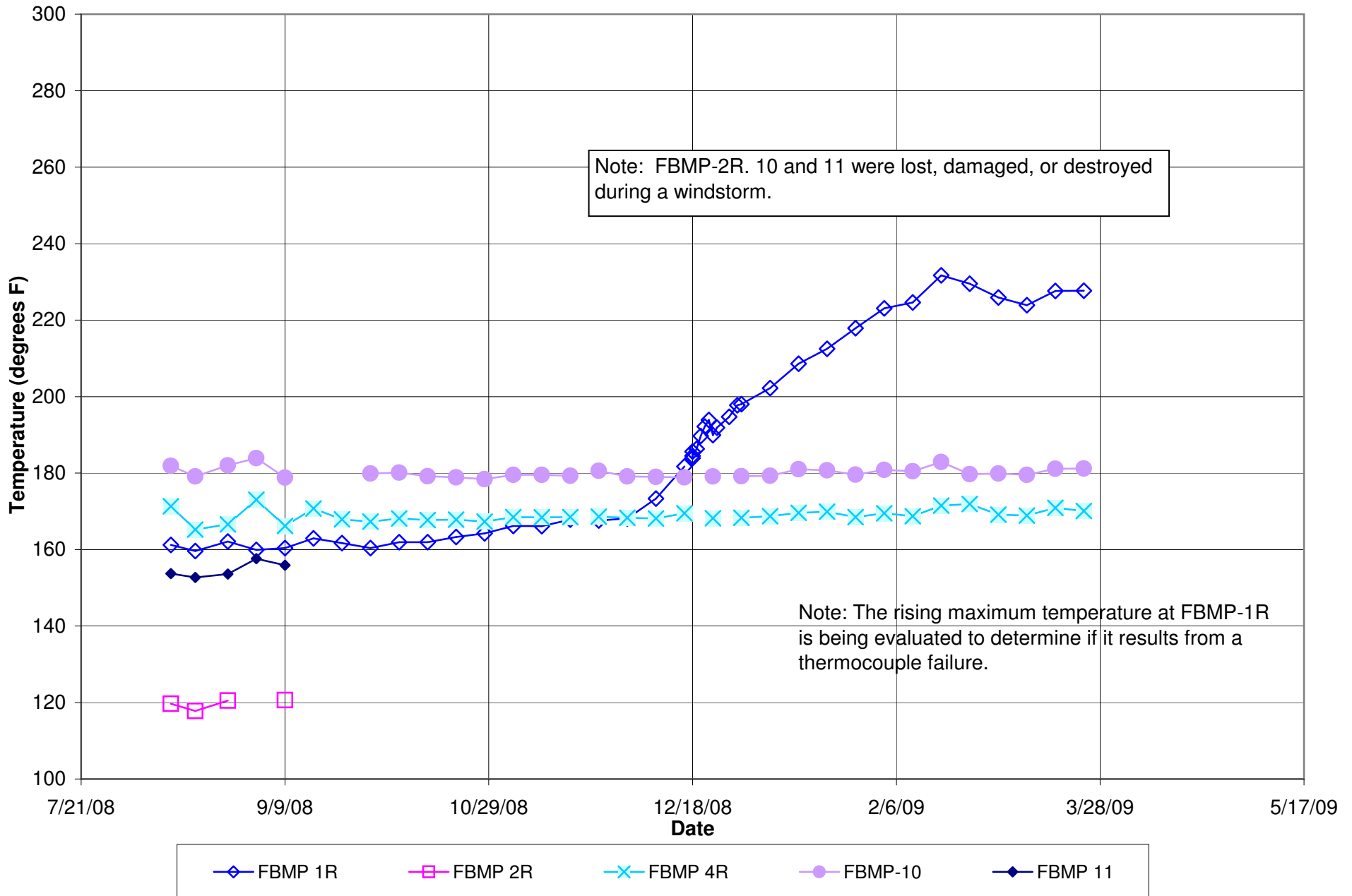
Countywide RDF
Isolation Break Excavation Summary

2/21/2009	Saturday							
2/22/2009	Sunday							
2/23/2009	Monday	6	110	No	No	900/406	225/60	3
2/24/2009	Tuesday	6/7	129	Yes	No	300/35	105/8	1
2/25/2009	Wednesday	6/7	114	No	No	700/83	534/81	4
2/26/2009	Thursday							
2/27/2009	Friday							
2/28/2009	Saturday							
3/1/2009	Sunday							
3/2/2009	Monday	7	105	No	No	300/47	27/1	2
3/3/2009	Tuesday	7	89	No	No	400/80	11/0	0
3/4/2009	Wednesday	Note: 3/4/2009 through 3/29/2009 - Installed leachate and gas collection piping system on south slope of Isolation Break						
3/5/2009	Thursday							
3/6/2009	Friday							
3/7/2009	Saturday							
3/8/2009	Sunday	Note: 3/4/2009 through 3/29/2009 - Installed leachate and gas collection piping system on south slope of Isolation Break						
3/9/2009	Monday							
3/10/2009	Tuesday							
3/11/2009	Wednesday							
3/12/2009	Thursday							
3/13/2009	Friday							
3/14/2009	Saturday							
3/15/2009	Sunday	Note: 3/4/2009 through 3/29/2009 - Installed leachate and gas collection piping system on south slope of Isolation Break						
3/16/2009	Monday							
3/17/2009	Tuesday							
3/18/2009	Wednesday							
3/19/2009	Thursday							
3/20/2009	Friday							
3/21/2009	Saturday							
3/22/2009	Sunday	Note: 3/4/2009 through 3/29/2009 - Installed leachate and gas collection piping system on south slope of Isolation Break						
3/23/2009	Monday							
3/24/2009	Tuesday							
3/25/2009	Wednesday							
3/26/2009	Thursday							
3/27/2009	Friday							
3/28/2009	Saturday							
3/29/2009	Sunday	Note: 3/4/2009 through 3/29/2009 - Installed leachate and gas collection piping system on south slope of Isolation Break						
3/30/2009	Monday	8	97	No	No	0/0	Sep-00	0
3/31/2009	Tuesday							

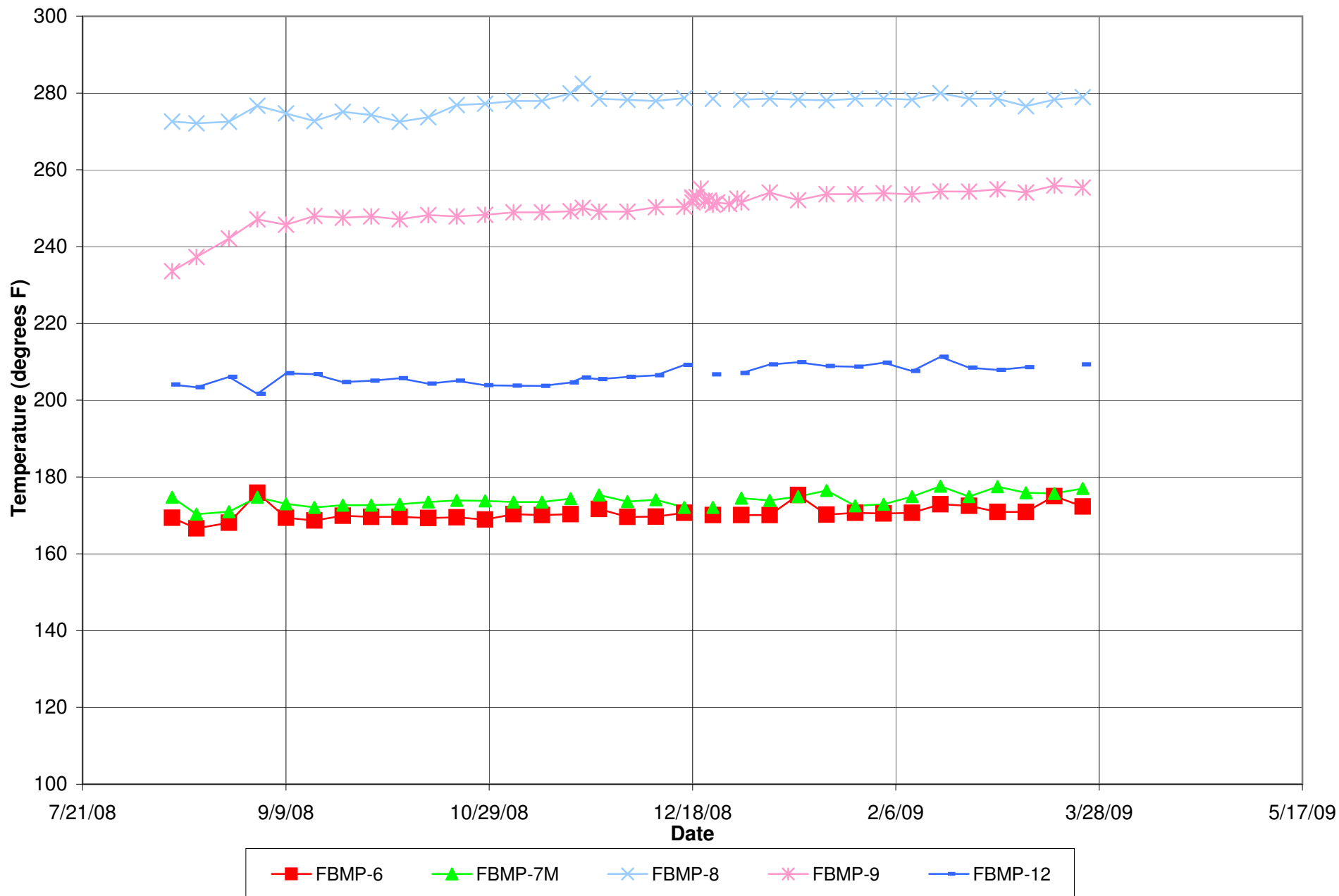
ATTACHMENT A-3

FBMP TEMPERATURE PROBE GRAPHS

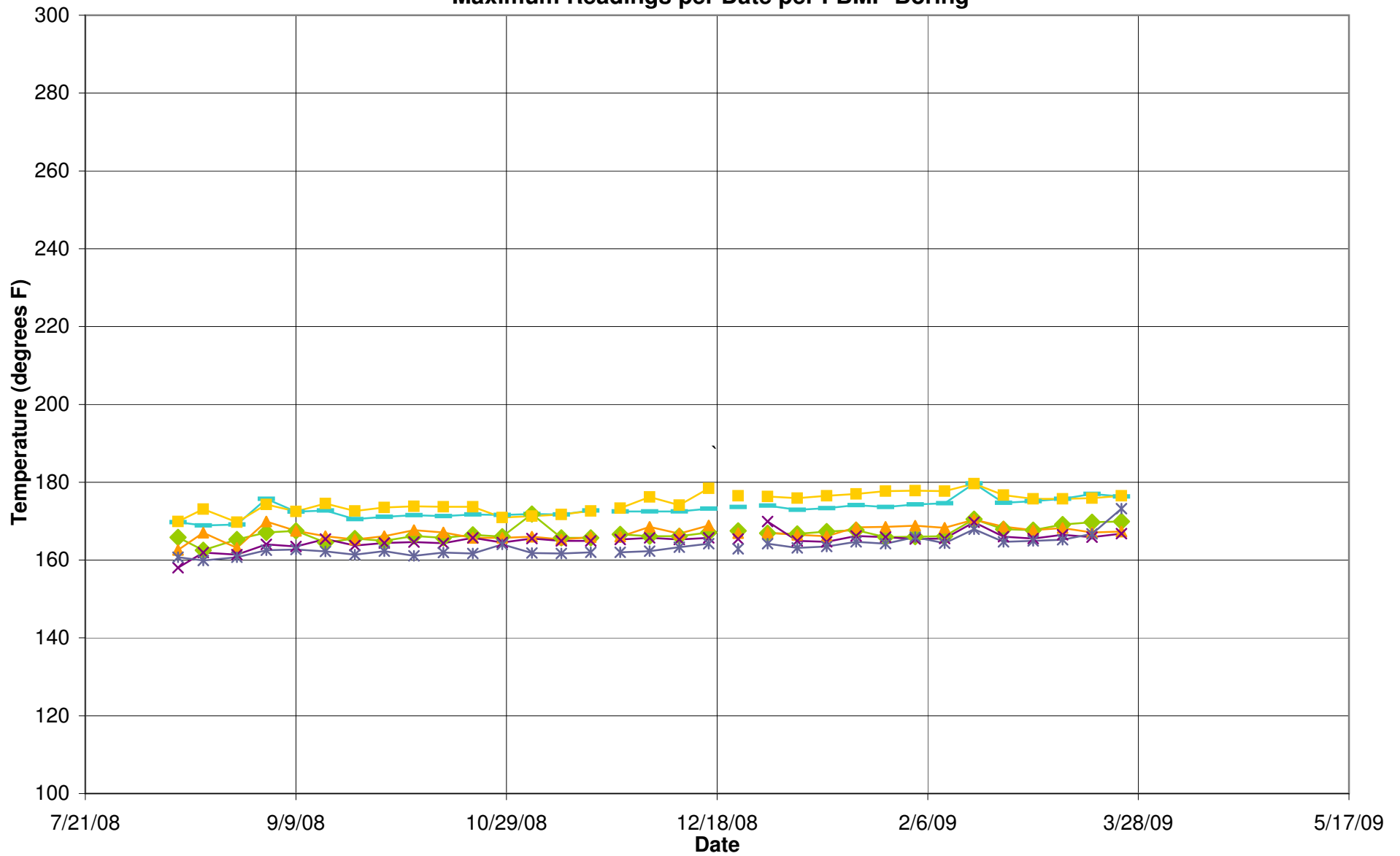
In-situ Temperatures - FBMPs within 150 ft of the Isolation Break Excavation
Maximum Readings per Date per FBMP Boring



In-situ Temperatures - FBMPs beyond 150 ft from Isolation Break Excavation
Maximum Readings per Date per FBMP Boring

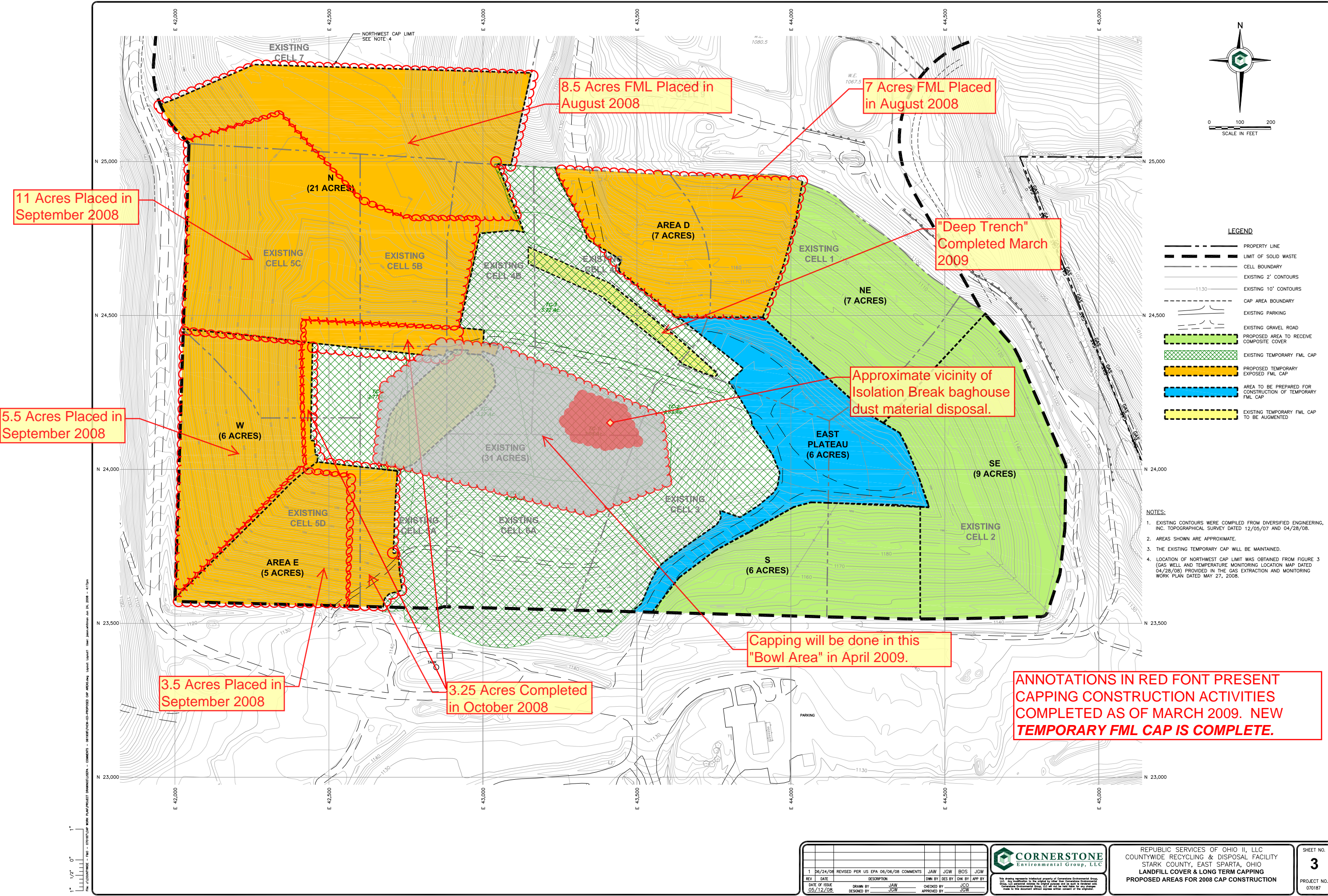


In-situ Temperatures - West Slope FBMPs
Maximum Readings per Date per FBMP Boring



ATTACHMENT B

CAPPING AND STABILIZATION PROGRESS



11 Acres Placed in September 2008

5.5 Acres Placed in September 2008

3.5 Acres Placed in September 2008

3.25 Acres Completed in October 2008

8.5 Acres FML Placed in August 2008

7 Acres FML Placed in August 2008

"Deep Trench" Completed March 2009

Approximate vicinity of Isolation Break baghouse dust material disposal.

Capping will be done in this "Bowl Area" in April 2009.

ANNOTATIONS IN RED FONT PRESENT CAPPING CONSTRUCTION ACTIVITIES COMPLETED AS OF MARCH 2009. NEW TEMPORARY FML CAP IS COMPLETE.



- LEGEND**
- PROPERTY LINE
 - LIMIT OF SOLID WASTE
 - CELL BOUNDARY
 - EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - CAP AREA BOUNDARY
 - EXISTING PARKING
 - EXISTING GRAVEL ROAD
 - PROPOSED AREA TO RECEIVE COMPOSITE COVER
 - EXISTING TEMPORARY FML CAP
 - PROPOSED TEMPORARY EXPOSED FML CAP
 - AREA TO BE PREPARED FOR CONSTRUCTION OF TEMPORARY FML CAP
 - EXISTING TEMPORARY FML CAP TO BE AUGMENTED

- NOTES:**
- EXISTING CONTOURS WERE COMPILED FROM DIVERSIFIED ENGINEERING, INC. TOPOGRAPHICAL SURVEY DATED 12/05/07 AND 04/28/08.
 - AREAS SHOWN ARE APPROXIMATE.
 - THE EXISTING TEMPORARY CAP WILL BE MAINTAINED.
 - LOCATION OF NORTHWEST CAP LIMIT WAS OBTAINED FROM FIGURE 3 (GAS WELL AND TEMPERATURE MONITORING LOCATION MAP DATED 04/28/08) PROVIDED IN THE GAS EXTRACTION AND MONITORING WORK PLAN DATED MAY 27, 2008.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	06/24/08	REVISED PER US EPA 06/06/08 COMMENTS	JAW	JGW	BOS	JGW
2	05/12/08	DATE OF ISSUE	JAW	JGW	JCO	JGW



REPUBLIC SERVICES OF OHIO II, LLC
COUNTYWIDE RECYCLING & DISPOSAL FACILITY
STARK COUNTY, EAST SPARTA, OHIO
LANDFILL COVER & LONG TERM CAPPING
PROPOSED AREAS FOR 2008 CAP CONSTRUCTION

SHEET NO.
3
PROJECT NO.
070187

ATTACHMENT C-1

TIER 2 AND TIER 4 VOC SUMMA CANISTER ANALYTICAL RESULTS

Table 1. Summary of TO-15 Results from SUMMA Samples Collected Downwind from Isolation Break

	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Analyte	Downwind 12/9/08	Downwind 12/12/08	Downwind 12/15/08	Downwind 12/18/08	Downwind 1/05/09	Downwind 1/08/09	Downwind 1/14/09	Downwind 1/20/09	Downwind 1/23/09	Downwind 1/26/09	Downwind 1/29/09	Downwind 2/04/09	Downwind 2/16/09	Downwind 2/25/09	Downwind 3/03/09	Avg
trans-1,3-Dichloropropene																
1,2-Dichloro-1,1,2,2-tetrafluoroethane																
Acetone	5.1	6.9	7.5	5.1	2.8	13	5.8	14	18	3.6	8.9	5.6	5.6	6.9	2.0	7.39
Ethylbenzene	0.46	1.0	0.1		0.13	1.2	0.46	0.68	0.15	0.090	0.670	0.210	0.31	0.24		0.44
Trichlorofluoromethane	0.25	0.22	0.23	0.24	0.18	0.21	0.20	0.29	0.22	0.21	0.21	0.23	0.21	0.22	0.27	0.23
n-Heptane	0.64	0.30	0.15		0.16	0.45	0.31	0.56	0.54	0.16	0.31	0.15	0.25	0.21	0.12	0.31
Hexachlorobutadiene																
n-Hexane	0.22	0.17	0.12	0.14	0.17		0.20	0.40	0.54	0.31	0.17	0.17	0.15	0.19	0.16	0.22
2,2,4-Trimethylpentane	0.08	0.064			0.077	0.099	0.10	0.14	0.16	0.044	0.062	0.054	0.057	0.059		0.08
tert-Butyl alcohol	0.13	0.16	0.11	0.12	0.073	0.35	0.15	0.48	0.40	0.059	0.260	0.061	0.13	0.097	0.048	0.18
Methylene chloride	2.8	0.49	0.2	0.34	0.27	0.25	0.25	2.4	0.78	0.19	0.21	0.52	0.21	0.42	0.13	0.63
Benzene	0.39	0.50	0.21	0.32	0.30	0.89	0.52	0.84	0.94	2.0	0.44	0.26	0.32	0.66	0.23	0.59
Styrene	0.12	1.0				0.1					0.070					0.33
1,1,2,2-Tetrachloroethane			0.23	0.22												0.23
Tetrachloroethene	0.14	0.066				0.069		0.065	0.13						1.3	0.09
Tetrahydrofuran	0.47	0.57		0.22		0.90	0.34	0.83	0.93	0.97	0.47	0.16	0.23	0.31		0.53
Toluene	2.9	2.4	0.63	0.19	0.86	3.9	1.3	3.3	1.8	0.65	2.1	0.85	1.3	0.78	0.20	1.54
1,2,4-Trichlorobenzene					0.085											0.09
1,1,1-Trichloroethane		0.073														0.07
Trichloroethene	0.054	0.040	0.230	1.5					0.084						0.19	0.38
1,1,2-Trichloro-1,2,2-trifluoroethane	0.072	0.071	0.082	0.075	0.066	0.064	0.074	0.072	0.069	0.068	0.071	0.070	0.069	0.066	0.075	0.07
1,2,4-Trimethylbenzene	0.17	0.38			0.085	0.54	0.18	0.19			0.35	0.076	0.19	0.16		0.23
1,3,5-Trimethylbenzene		0.14				0.21	0.099	0.076			0.15		0.079			0.13
Vinyl chloride									0.11							0.11
o-Xylene	0.3	0.5	0.078		0.11	0.73	0.29	0.30			0.45	0.14	0.21	0.18		0.30
m-Xylene & p-Xylene	1.1	1.8	0.24		0.36	3.0	1.1	1.3	0.22	0.13	1.7	0.49	0.78	0.58		0.98
2-Butanone (MEK)	2.7	2.8	0.88	1.4	1.2	6.3	3.2	9.2	6.2	1.0	3.5	1.6	2.0	1.5	0.43	2.93
4-Methyl-2-pentanone (MIBK)	0.16	0.16	0.14		0.058	0.31	0.11	0.27	0.13		0.21	0.049	0.13	0.093		0.15
Bromomethane																
4-Ethyltoluene	0.077	0.15	0.076			0.23	0.094	0.079			0.14					0.12
Carbon disulfide	0.044	0.045	0.097	0.077		0.033	0.063	0.10	0.08		0.055					0.07
Carbon tetrachloride	0.093	0.069	0.099	0.11	0.082	0.065	0.10	0.094	0.076	0.066	0.069	0.069	0.067	0.078	0.066	0.08
Chlorobenzene																
Chloroethane			0.044						0.036							0.04
Chloroform	0.045			0.039												0.04
Chloromethane	0.53	0.57	0.73	0.53	0.40	0.47	0.60	0.60	0.63	0.72	0.51	0.61	0.62	0.58	0.64	0.58
2-Chlorotoluene						0.25										0.25
Cyclohexane	0.14								0.44		0.067	0.53		0.065	0.072	0.22
1,2-Dichlorobenzene																
1,3-Dichlorobenzene																
1,4-Dichlorobenzene						0.088	0.066				0.084					0.08
Dichlorodifluoromethane	0.65	0.50	0.52	0.54	0.40	0.46	0.45	0.61	0.63	0.53	0.54		0.52	0.53	0.54	0.53
1,1-Dichloroethane									0.05							0.05
1,2-Dichloroethane									0.069							0.07
cis-1,2-Dichloroethene				0.11												0.11
Sum of TO-15 Compounds	19.84	21.14	12.72	11.27	7.87	34.21	16.06	36.88	33.42	10.80	21.77	11.90	13.43	13.92	6.47	18.11

Table 2. Summary of VOC Information from TO-15 Analyses (Community and 300' Downwind)

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Table 3. Summary of TO-15 TIC Results from SUMMA Samples Collected Downwind from Isolation Break

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
TICs	Downwind 12/9/08	Downwind 12/12/08	Downwind 12/15/08	Downwind 12/18/08	Downwind 1/05/09	Downwind 1/08/09	Downwind 1/14/09	Downwind 1/20/09	Downwind 1/23/09	Downwind 1/26/09	Downwind 1/29/09	Downwind 2/04/09	Downwind 2/16/09	Downwind 2/25/09	Downwind 3/03/09	Avg
1-Propanol						6.9	2.7	8.7	12		4.5					6.96
1-Propene, 2-methyl- 2-butanol	3.2					5.1	3.4	8.2	14		5.6					6.58
4,7-dimethylundecane																
Acetaldehyde									7.6		3.7					5.65
Butane								2.7	3.0	3.0						2.90
Butane, 2-methyl butanol	2							4								3.15
Decane, 2,5,6-trimethyl- Eicosane																
ethanol	14	6.0		3.3	5.4	25.0	8.7	26	40		18	7.1	7.9	2.7		13.68
Heptane, 2,2-dimethyl- Isobutane																
isopropanol	3.4					6.1	3.5	8.4	14		6.1		2.8			6.33
Limonene																
Methyl Alcohol			2.7	2.6		3.3		6.2				3.2				3.60
Pentane										2.6						2.60
Propane		2.8						4.3		4.7					3.6	3.93
propanol	6.9													2.1		4.50
Propene									6.2		2.5					4.35
Trisulfide, dipropyl																
Undecane, 2,8-dimethyl- Unknown																
Unknown																
Sum of TICs	29.50	8.80	2.70	5.90	5.40	46.40	18.30	68.80	96.80	10.30	40.40	10.30	12.80	6.30	0.00	25.91
Sum of TICs and TO-15 Compounds	49.34	29.94	15.42	17.17	13.27	80.61	34.36	105.68	130.22	21.10	62.17	22.20	26.23	20.22	6.47	44.85

ATTACHMENT C-2

TIER 3 (Stage C) AIR MONITORING RESULTS

March 2009 Stage C Monthly Ambient Air Monitoring Report

Prepared for

Republic Services of Ohio II, LLC
3619 Gracemont Street, SW
East Sparta, OH. 44626
(330) 874-3855

Prepared by

Center for Toxicology and Environmental Health, L.L.C.
5120 North Shore Drive
North Little Rock, AR 72118

March 30, 2009



The Stage C ambient air monitoring program has continuously collected real-time Volatile Organic Compounds (VOC) and weather data 24 hours per day since October 2, 2008. Over 1,255,220 VOC readings have been collected at the perimeter of the landfill during this monitoring period.

Trigger Levels

On January 27, 2009, Center for Toxicology and Environmental Health (CTEH®), United States Environmental Protection Agency (USEPA) and Agency for Toxic Substances and Disease Registry (ATSDR) adjusted the trigger levels for the collection of SUMMA canister laboratory samples. A sustained VOC concentration at or above 0.50 ppm VOC was chosen as the trigger level for each station. Table 1.0 illustrates the trigger levels for each station.

Table 1.0
January 27, through March 27 Trigger Levels

Station	Trigger Level (ppm)
1	0.50
2	0.50
3	0.50
4	0.50
5	0.50

If a trigger level is exceeded for a five minute consecutive monitoring period, a 15 minute integrated SUMMA canister is automatically collected. Trigger levels will continue to be evaluated based on the results of the SUMMA canister data or VOC statistics.

Real-Time Results

During the February 24, 2009 through March 27, 2009 monitoring period, approximately 191,276 real-time VOC readings have been collected at the perimeter of the landfill. Of these readings, the sustained VOC concentration exceeded the established trigger levels 0 times. The mean VOC concentrations collected at the perimeter of the landfill ranged from 0.02 ppm to 0.09 ppm. Table 2.0 summarizes the real-time data collected from February 24, 2009 through March 27, 2009.

Table 2.0 February 24, through March 27, Real Time Data Summary

Station	Analyte	Total VOC Readings Recorded	Trigger Level	Triggering events	Average Concentration
1	VOC	30,832	0.50	0	0.02 ppm
2	VOC	43,732	0.50	0	0.08 ppm
3	VOC	34,724	0.50	0	0.04 ppm
4	VOC	39,653	0.50	0	0.09 ppm
5	VOC	42,335	0.50	0	0.05 ppm

A graphical representation of 24 hour average Real-time concentrations can be viewed in Attachment A.

Summa Results

No SUMMA samples were collected during this monitoring period (Attachment B). Of the previously available sample results, no VOCs, including benzene, were detected at levels that exceeded the ATSDR's acute or chronic Minimal Risk Levels (MRLs). These data to date indicate that landfill emissions from the site under current conditions do not pose a risk to human health in the short or long term.

Attachment A

Incorrect date format (2009/02/24) or (2009/03/37)

Custom Date Report

Start Date

End Date

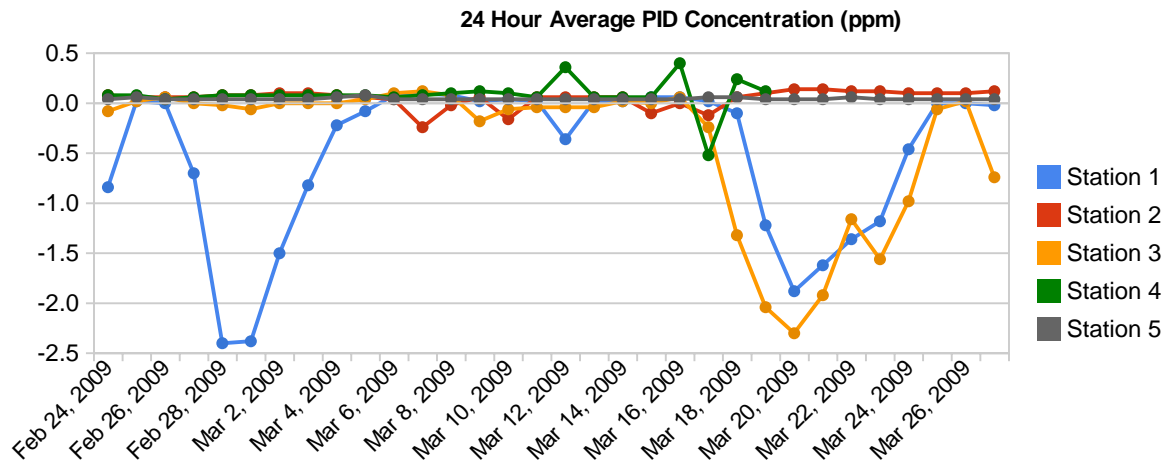
2009/02/24

Calendar

2009/03/27

Calendar

Save



<u>Day</u>	<u>Station 1 (PID)</u>	<u>Station 2 (PID)</u>	<u>Station 3 (PID)</u>	<u>Station 4 (PID)</u>	<u>Station 5 (PID)</u>
2009-02-24	-0.83	0.08	-0.07	0.09	0.05
2009-02-25	0.02	0.06	0.01	0.07	0.06
2009-02-26	-0.00	0.06	0.05	0.05	0.05
2009-02-27	-0.70	0.06	-0.01	0.06	0.04
2009-02-28	-2.40	0.07	-0.02	0.08	0.04
2009-03-01	-2.38	0.08	-0.07	0.08	0.04
2009-03-02	-1.50	0.10	0.01	0.09	0.05
2009-03-03	-0.82	0.09	-0.00	0.07	0.05
2009-03-04	-0.23	0.08	-0.01	0.07	0.06
2009-03-05	-0.08	0.06	0.03	0.08	0.09
2009-03-06	0.09	0.05	0.10	0.07	0.05
2009-03-07	0.09	-0.25	0.12	0.08	0.05
2009-03-08	0.07	-0.01	0.08	0.11	0.05
2009-03-09	0.02	0.06	-0.18	0.11	0.04
2009-03-10	0.04	-0.15	-0.05	0.10	0.05
2009-03-11	0.03	0.05	-0.03	0.05	0.04
2009-03-12	-0.37	0.07	-0.05	0.36	0.04
2009-03-13	0.02	0.07	-0.03	0.05	0.05

2009-03-14	0.01	0.06	0.02	0.07	0.05
2009-03-15	0.06	-0.10	-0.01	0.06	0.04
2009-03-16	0.07	-0.01	0.06	0.40	0.05
2009-03-17	0.02	-0.11	-0.25	-0.52	0.07
2009-03-18	-0.11	0.07	-1.33	0.25	0.05
2009-03-19	-1.21	0.10	-2.05	0.12	0.05
2009-03-20	-1.88	0.14	-2.30		0.05
2009-03-21	-1.62	0.13	-1.93		0.05
2009-03-22	-1.37	0.12	-1.16		0.06
2009-03-23	-1.18	0.12	-1.55		0.05
2009-03-24	-0.47	0.10	-0.98		0.05
2009-03-25	-0.00	0.09	-0.05		0.05
2009-03-26	-0.00	0.10	0.02		0.05
2009-03-27	-0.03	0.12	-0.74		0.05

Attachment B

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH1108-1-SC001	11/8/2008	Station 1	0.50 ppm	11/12/2008 22:52	134	NO	ESOH1108-1-SC001	0.58	None	
ESOH1108-2-SC002	11/8/2008	Station 2	0.18 ppm	11/10/2008 4:38	266	YES	ESOH1101-2-SC002	-0.50	Hexafluoropropylene	7.8
ESOH1108-3-SC003	11/8/2008	Station 3	Sample Fault-Calibration gas triggered the Summa collection system							
ESOH1108-5-SC004	11/8/2008	Station 5	0.17 ppm	12/20/2008 3:53	12	NO	ESOH1108-5-SC004	22.52*	Ethane, 1,1 difluoro; Ethylene Oxide; Isopropyl Alcohol; Propane; 1,1,1,3,3,3,-hexafluoro-2-triflu; Propene, hexafluoro	7.8
ESOH1110-2-SC005	11/10/2008	Station 2	0.18 ppm	11/10/2008 20:15	338	YES	ESOH1110-2-SC005	0.17	unknown	-0.2
ESOH1111-2-SC006	11/11/2008	Station 2	Sample Fault Calibration gas triggered the Summa collection system							
ESOH1111-4-SC007	11/11/2008	Station 4	0.10 ppm	11/23/2008 14:06	227	NO	ESOH1111-4-SC007	0.09	Isopropyl alcohol; Propene, Hexafluoro-; Unknown	2.3
ESOH1113-1-SC008	11/13/2008	Station 1	0.50 ppm	11/13/2008 21:02	181	NO	ESOH1113-1-SC008	0.60	Ethyl alcohol; Propene, hexafluoro; Unknown	10.8
ESOH1114-1-SC009	11/11/2008	Station 1	0.50 ppm	11/24/2008 15:13	179	NO	ESOH1114-1-SC009	0.53	Methyl alcohol.; Propene, hexafluoro	4.6
ESOH1119-3-SC010	11/19/2008	Station 3	Sample Fault- Leaking SUMMA Cannister							
ESOH1123-3-SC011	11/23/2008	Station 3	0.13 ppm	11/29/2008 3:06	290	Downwind of Working phase	ESOH1123-3-SC011	0.04	Butane; Butane, 2 methyl-; Disulfide, dimethyl; Ethane, 1-chloro 1,1-difluoro-; Ethyl alcohol; Isobutane; Pentane; Pentane, 2-methyl-; Propane; Propene, hexafluoro-	-1.6
ESOH1124-4-SC012	11/24/2008	Station 4	0.10 ppm	11/24/2008 14:23	226	NO	ESOH1124-4-SC012	0.10	None	4.1
ESOH1124-4-SC013	11/24/2008	Station 4	Sample Fault-Calibration gas triggered the Summa collection system							
ESOH1124-1-SC014	11/24/2008	Station 1	Sample Fault							

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH1126-4-SC015	11/26/2008	Station 4	0.10 ppm	11/29/2008 11:51	192	NO	ESOH1126-4-SC015	0.10	Ethyl alcohol;Methyl Alcohol; Propene, hexafluoro-	2.7
ESOH1129-3-SC016	11/29/2008	Station 3	Sample Fault							
ESOH1129-4-SC017	11/24/2008	Station 4	Sample Fault							
ESOH1202-4-SC018	12/2/2008	Station 4	0.10 ppm	12/3/2008 8:28	195	NO	ESOH1202-4-SC018	0.10	None	-2.0
ESOH1203-4-SC019	12/3/2008	Sample Fault due to PID malfunction								
ESOH1205-4-SC020	12/5/2008	Station 4	Sample Fault							
ESOH1208-4-SC021	12/8/2008	Station 4	0.10 ppm	12/21/2008 5:52	292	NO	ESOH1208-4-SC021	0.26	Acetaldehyde; Butane, 2-methyl-; Pentane; Propene, hexafluoro	-1.3
ESOH1218-3-SC022	12/18/2008	Station 3	Sample Fault- Leaking SUMMA Cannister							
ESOH1220-5-SC023	12/20/2008	Station 5	Sample Fault- Leaking SUMMA Cannister							
ESOH1222-4-SC024	12/22/2008	Station 4	0.10 ppm	1/6/2009 0:02	110	Yes	ESOH1222-4-SC024	0.06	Butane; Butane, 2-methyl-; Dimethyl ether; Ethyl alcohol; Hexane,3-methyl-; Hydroxylamine, O-methyl; Pentane; Pentane, 2-methyl-; Propene, hexafluoro-, 1-propene, 2-methyl-	-3.6
ESOH1230-5-SC025	12/30/2008	Station 5	0.17 ppm	1/8/2009 10:59	243	Yes	ESOH1230-5-SC025	0.16	Butanoic acid, ethyl ester; Ethane, 1,1 -difluoro-; Ethyl alcohol; Isopropyl Alcohol; Methyl Alcohol; Propene, hexafluoro-; 1-Propanol; 2-Butanol, (R-)	-7.0
ESOH0106-4-SC026	1/6/2009	Station 4	0.10 ppm	1/7/2008 20:11	258	No	ESOH0106-4-SC026	0.10	Butane; Butane, 2-methyl-; Ethane, 1,1-difluoro-; Pentafluoropropionamide; Pentane	-2.2
ESOH0107-2-SC027	1/7/2009	Station 2	0.18 ppm	2/9/2009 2:23	223	No		0.92*		-1.6
ESOH0108-4-SC028	1/8/2009	Station 4	0.10 ppm	Current Sample						
ESOH0108-5-SC029	1/8/2009	Station 5	0.17 ppm	1/19/2009 0:32	215	Yes	ESOH0108-5-SC029	0.26	Ethyl alcohol; Furan; Propene	-11.70

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH0108-3-SC030	1/8/2009	Station 3	0.13 ppm	Current Sample						
ESOH0119-5-SC031	1/19/2009	Station 5	0.13 ppm	1/19/2009 13:22	267	Yes	ESOH0119-5-SC031	0.17	Ethyl alcohol; Isopropyl Alcohol; Methyl Alcohol; 1-Butanol; 1-Propanol; 2-Butanol;	-9.30
ESOH0119-5-SC032	1/19/2009	Station 5	0.13 ppm	1/26/2009 9:21	220	Yes	ESOH0119-5-SC032	0.18	Ethyl alcohol; Propene, hexafluoro;	-12.6
ESOH0119-1-SC033	1/19/2009	Station 1	0.50 ppm	Current Sample						
ESOH0119-5-SC034	1/19/2009	Station 5	0.50 ppm	2/16/2009 7:02	10	No		0.78		-4.6
ESOH0209-2-SC035	2/9/2009	Station 2	0.50 ppm	2/10/2009 6:25	211	No	ESOH0209-2-SC035	1.41*	Propene, hexafluoro-	8.4
ESOH0210-2-SC036	2/10/2009	Station 2	0.50 ppm	Current Sample						
ESOH0216-5-SC037	2/16/2009	Station 5	0.50 ppm	2/18/2009 6:12	168	Yes	ESOH0216-5-SC037	0.56	Acetaldehyde; Propene	2.1
ESOH0218-5-SC038	2/18/2009	Station 5	0.50 ppm	Current Sample						

Current Sample- Sample that is at the station and ready to be collected

Pending- Sample has been collected awaiting results from the laboratory

Average PID Reading During Sample- Average PID concentration during the SUMMA can sample collection

* Potential RAEGuard PID error (Drift) noted

Station 4 Trigger Change to 0.15 ppm on January 13, 2009

Stations 1 through 5 trigger levels have been changed to 0.50 ppm on January 27, 2009

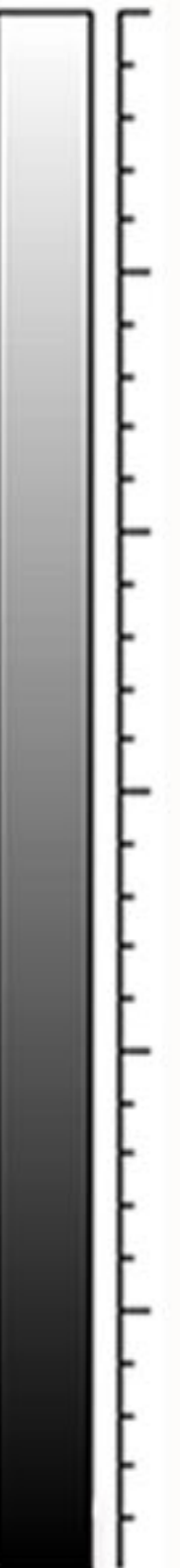
ATTACHMENT D

AERIAL INFRARED IMAGES

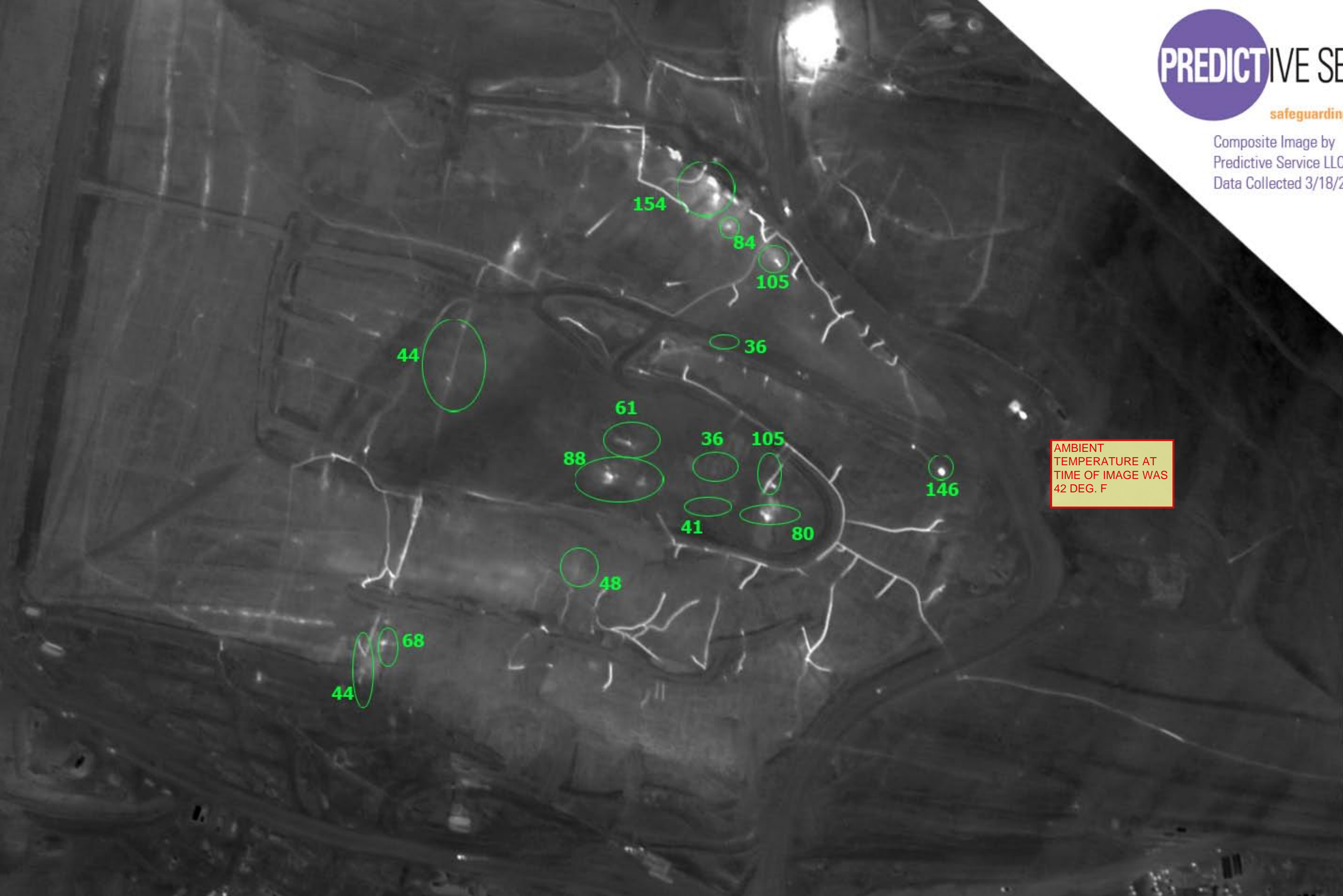
Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 2/25/2009

THIS AREA
COVERED BY
SOIL IN JAN. AND
FEB. 2009

AMBIENT
TEMPERATURE
AT TIME OF
IMAGE WAS 19
DEG. F.



Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 3/18/2009



AMBIENT
TEMPERATURE AT
TIME OF IMAGE WAS
42 DEG. F

