

Report of Progress, November 28, 2008

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Paragraph 15.a and b Enhanced Gas Extraction and Temperature Monitoring [NOTE: THIS WORK ITEM IS SUPERSEDED BY AN ISOLATION BREAK EXCAVATION].

On November 19, 2008, the U.S. EPA approved an Isolation Break Excavation Work Plan which was submitted by Countywide on November 14, 2008. The Isolation Break Excavation will supersede the previous requirement for enhanced gas extraction.

As of November 26, 2008, preparation activities for construction of the Isolation break Excavation included: installation of six (6) perimeter gas extraction wells for odor and emission control as shown in Attachment A-1, fabrication of another odor control trailer, and installation of some litter control components. Excavation activities are scheduled to begin in early December 2008 and be completed in late Spring 2009.

Temperature monitoring (on all but four monitoring locations) will be continued throughout the construction of the Isolation Break Excavation. Throughout November, readings were obtained from the FBMP temperature probes. Results are presented in Attachment A-2. No significant increasing or decreasing temperature trends are apparent with the possible exception of FBMP-1R, -5R and -8 which appear to have increased by a three to five degrees F. in November.

Paragraph 15.c and f Capping and Stabilization.

A map depicting the current status of capping is included in Attachment B. During November, construction continued on surface water and leachate management features associated with the temporary cap but the temporary cap is complete.

In early December, the "Operations and Maintenance Plan for Temporary Cap System" will be submitted and soon thereafter a joint Countywide-U.S. EPA-Ohio EPA walkover inspection will be conducted to determine what other areas may need augmentation. Capping augmentation (current plans indicated with yellow shading in Attachment B) will be started in December 2008.

Composite capping is still on hold until USEPA, OEPA, and Countywide resolve details for a composite cap cross section.

Paragraph 15.e Air Monitoring and Sampling.

Stage B – Interim Fixed Continuous Monitoring. This monitoring was performed concurrent with Stage C monitoring until November 10, 2008 and then discontinued because the Stage C monitoring had been performing reliably for several weeks. No results will be presented for the Stage B monitoring in November as full continuous monitoring coverage was provided by the Stage C monitoring (see discussion below).

Stage C – Final Fixed Continuous Monitoring. On November 4, 2008, Countywide and U.S. EPA agreed on “trigger” values to be implemented for automatic collection of SUMMA canisters at the Stage C monitoring stations. By November 7, the automatic collection system was fully-functioning. Since then, 7 SUMMA canisters have been collected by the automated system.

A summary of results from the five stations is included in Attachment C.

Paragraph 15.g Aerial Infrared Imaging.

October 2008 and November 2008 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 October image was 43° F and during the November image was 22° F. Comparison of these images generally shows the same subcap warm areas attributed to subcap leachate outbreaks and transmittal of gas through subcap cracking. Most changes appear to reflect correlation to the ambient air temperatures, with no large aerial changes or trends.

A local area (indicated on the November image in Attachment D) did increase notably. This area is known to be a zone of a pressurized subcap leachate outbreak. This is in the general vicinity of FBMP-8 which has increased in temperature recently as well. These data may suggest increased reaction activity in the vicinity. However, the proposed Isolation Break Excavation is about 300 feet north and northwest of the outbreak and FBMP-8, so no impact is anticipated for the excavation project.

ATTACHMENT A-1

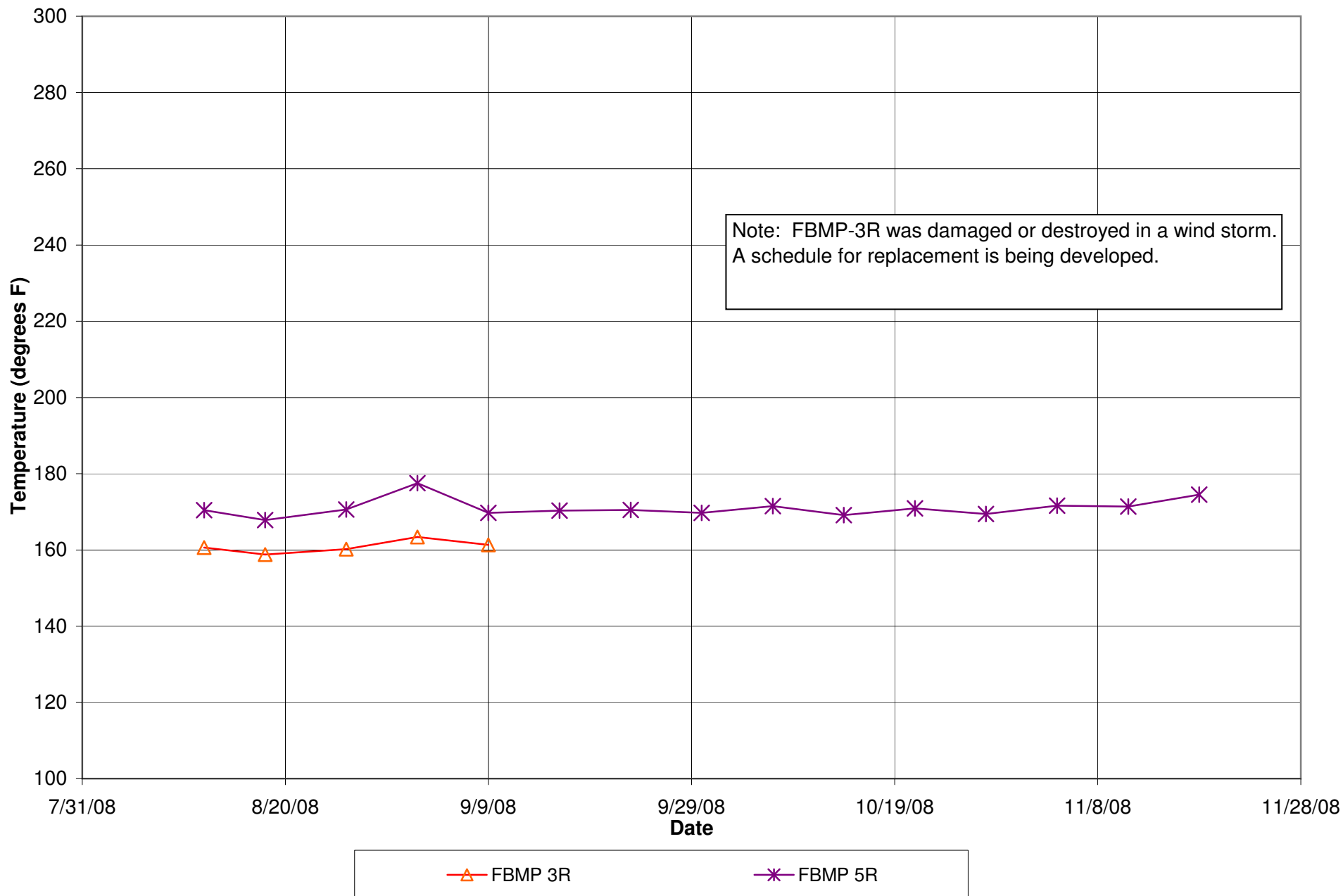
ISOLATION BREAK EXCAVATION PROGRESS

ATTACHMENT A-2

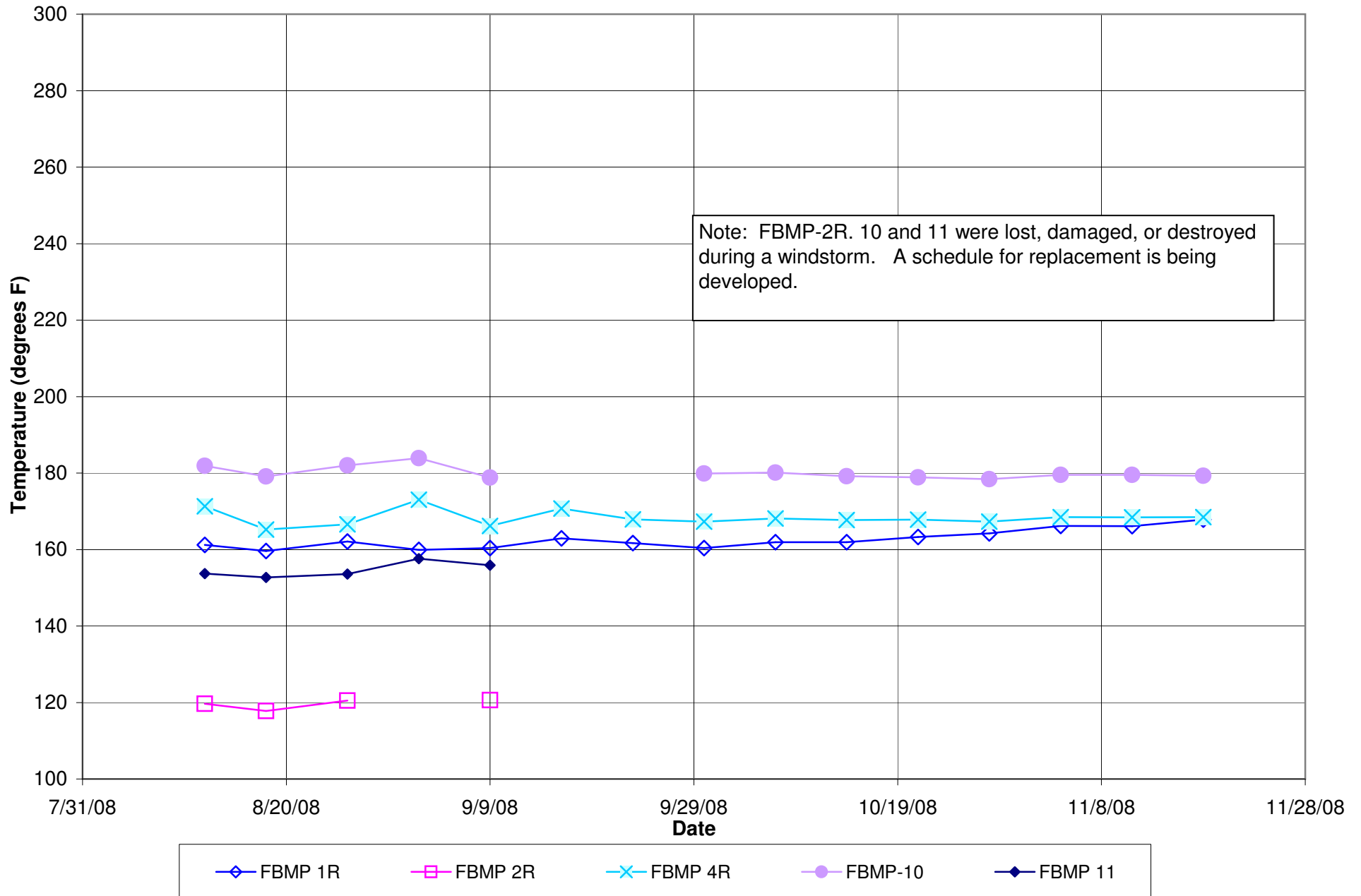
FBMP TEMPERATURE PROBE GRAPHS

In-situ Temperatures - FBMPs within the Isolation Break Excavation

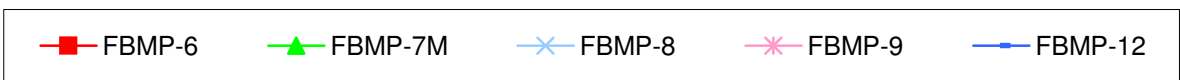
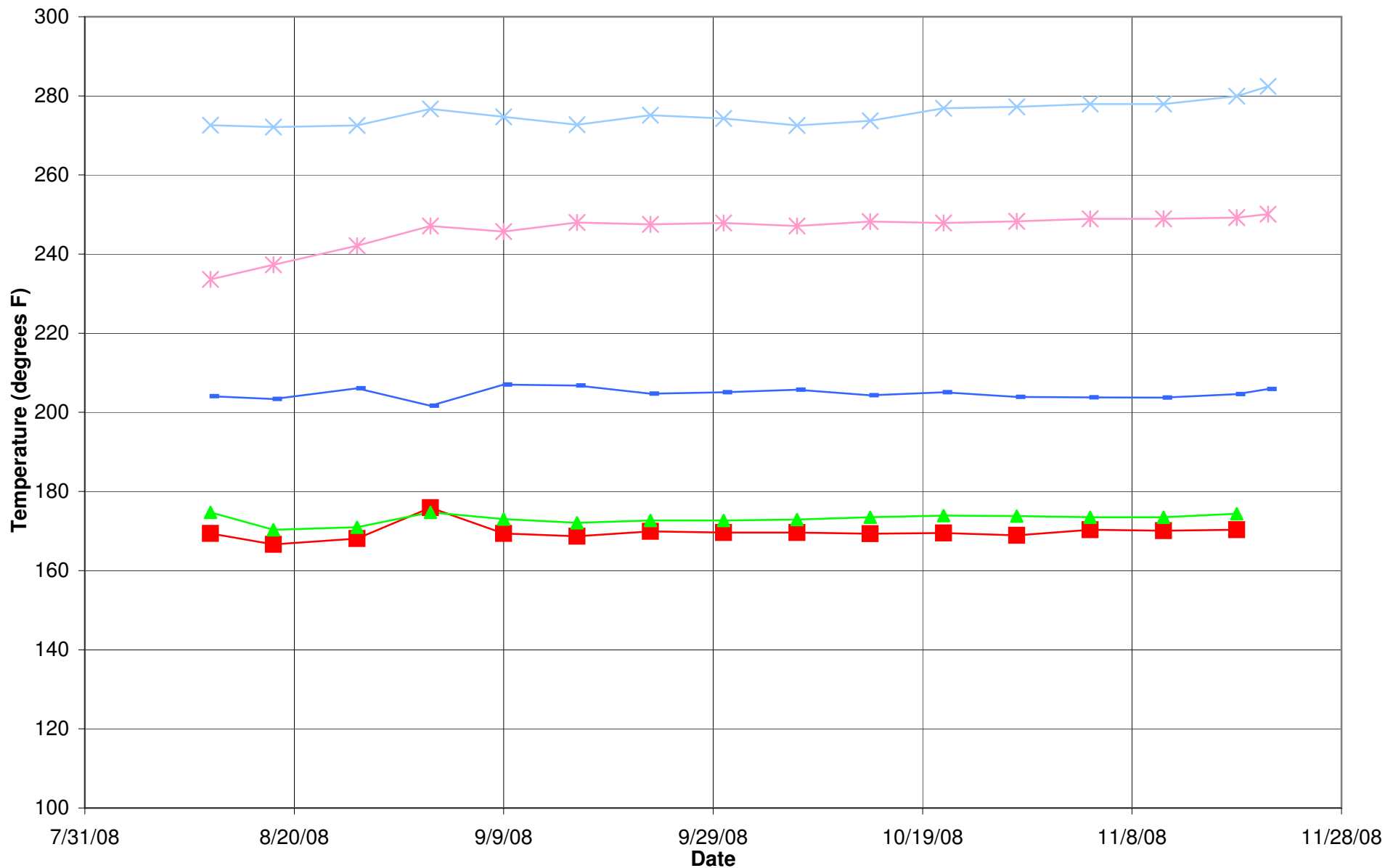
Maximum Readings per Date per FBMP Boring



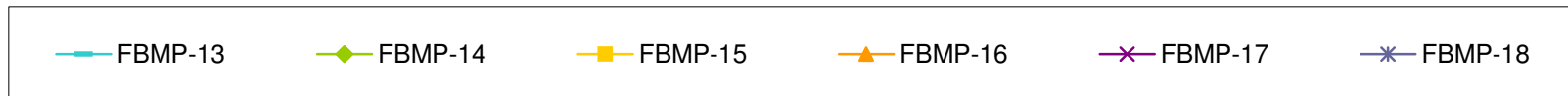
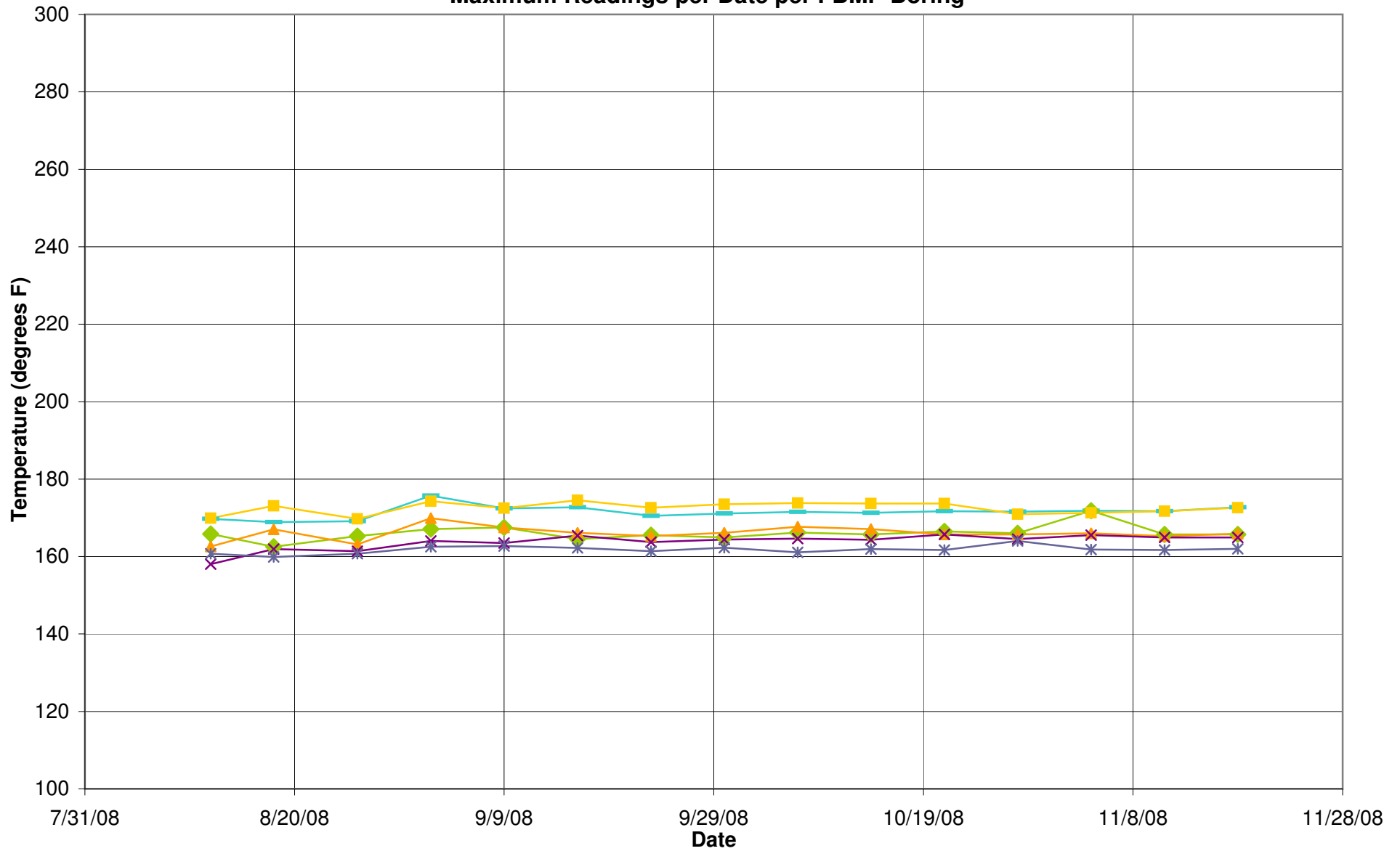
In-situ Temperatures - FBMPs within 150 ft of the Isolation Break Excavation
Maximum Readings per Date per FBMP Boring



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

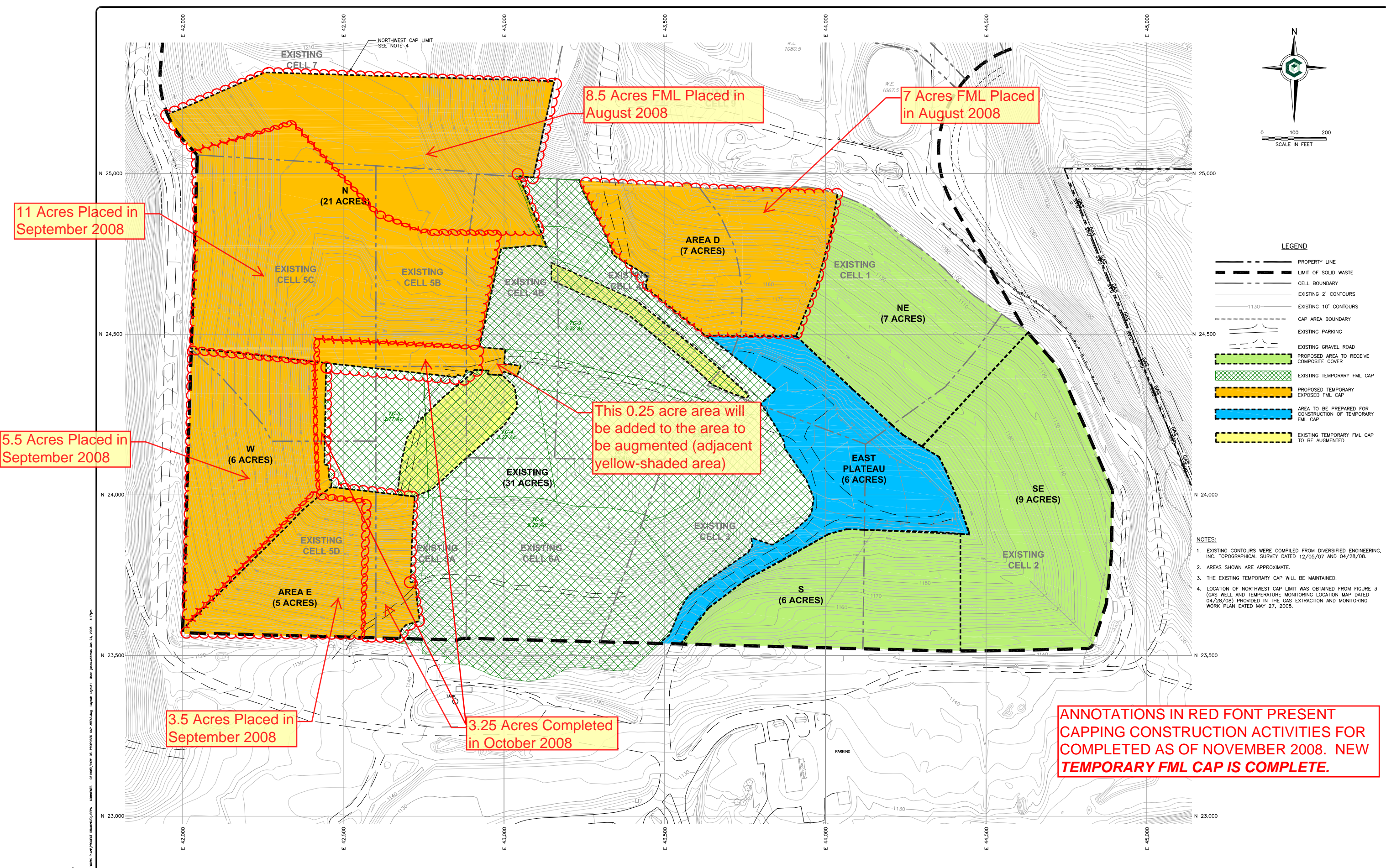


In-situ Temperatures - West Slope FBMPs
Maximum Readings per Date per FBMP Boring



ATTACHMENT B

CAPPING AND STABILIZATION PROGRESS



5.5 Acres Placed in
September 2008

7 Acres FML Placed
in August 2008

This 0.25 acre area will be added to the area to be augmented (adjacent yellow-shaded area)

**3.25 Acres Completed
in October 2008**

ANNOTATIONS IN RED FONT PRESENT CAPPING CONSTRUCTION ACTIVITIES FOR COMPLETED AS OF NOVEMBER 2008. NEW **TEMPORARY FML CAP IS COMPLETE.**



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SHEET NO.
3
PROJECT NO.
070187

ATTACHMENT C

AIR MONITORING OF REMEDIAL CONSTRUCTION ACTIVITIES



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 300,000 VOC readings have been collected at the perimeter of the landfill during this monitoring period.

Trigger Levels

On November 4, 2008, the Center for Toxicology and Environmental Health (CTEH®), United States Environmental Protection Agency (USEPA) and Agency for Toxic Substances and Disease Registry (ATSDR) developed trigger levels for the collection of SUMMA canister laboratory samples. The trigger levels were derived by performing statistical analysis of the stage C data collected from the previous 4 weeks. The 99.5 percentile VOC concentration specific for each station was chosen as the trigger level for that station. Table 1.0 illustrates the trigger levels for each station.

Table 1.0
November 4, 2008 Selected Trigger Levels

Station	Trigger Level (ppm)
1	0.50
2	0.18
3	0.13
4	0.16
5	0.17

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 be continue to be re evaluated monthly or as needed based on VOC concentrations collected at each station. November 2008 data are currently being reviewed for possible modification to the trigger levels.

Real-Time Results

During the November monitoring period, approximately 167,615 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 seven times. The mean VOC concentrations collected at the perimeter of the landfill ranged from 0.03 ppm to 0.07 ppm. Table 2.0 Summarizes the Real-time data collected from November 1, 2008 through November 23, 2008.

Table 2.0 November 1-23 Real Time Data Summary

Station	Analyte	Total VOC Readings Recorded	Trigger Level	Triggering events	Mean Concentration
1	VOC	32,695	0.50	3	0.06 ppm
2	VOC	34,911	0.18	2	0.07 ppm
3	VOC	30,611	0.13	0	0.03 ppm
4	VOC	34,814	0.16	2	0.05 ppm
5	VOC	34,584	0.17	0	0.05 ppm

Summa Results

A total of seven SUMMA samples have been collected since November 8, 2008. Of these 7 samples, station-specific weather data indicate that only 2 of the samples were downwind of the reaction area when the samples were collected. (Attachment A). SUMMA samples were analyzed for VOCs using GC/MS by EPA TO-15 plus TICs. Of the two samples collected downwind, no VOCs, including benzene, were detected at levels that exceeded the ATSDR's acute or chronic Minimal Risk Levels (MRLs). All samples indicated VOC levels that are consistent with background levels of VOCs in suburban environments or that are typical of air in analytical laboratories. 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.

November 2008
Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Sample Location	Trigger Level	Trigger Date/Time	Wind Direction Station	Downwind of Reaction Area	Results	Comments
ESOH1108-1-SC001	11/8/2008	Station 1	0.50 ppm	11/12/2008 22:52	134	NO	ESOH1108-1-SC001	
ESOH1108-2-SC002	11/8/2008	Station 2	0.18 ppm	11/10/2008 4:38	266	YES	ESOH1101-2-SC002	
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	Current Sample				
ESOH1110-2-SC005	11/10/2008	Station 2	0.18 ppm	11/10/2008 20:15	338	YES	ESOH1110-2-SC005	
ESOH1111-2-SC006	11/11/2008	Station 2	0.18 ppm	Current Sample				
ESOH1111-4-SC007	11/11/2008	Station 4	0.16 ppm	11/23/2008 14:06	227	NO	Pending	
ESOH1113-1-SC008	11/13/2008	Station 1	0.50 ppm	11/13/2008 21:02	181	NO	ESOH1113-1-SC008	
ESOH1114-1-SC009	11/11/2008	Station 1	0.50 ppm	11/24/2008 15:13	179	NO	Pending	
ESOH1119-3-SC010	11/19/2008	Station 3	Sample Fault- Leaking SUMMA Cannister					
ESOH1123-3-SC011	11/23/2008	Station 3	0.13 ppm	Current Sample				
ESOH1124-4-SC012	11/24/2008	Station 4	0.16 ppm	11/24/2008 14:23	226	NO	Pending	
ESOH1124-4-SC013	11/24/2008	Station 4	0.16 ppm	Current Sample				
ESOH1124-1-SC014	11/24/2008	Station 1	0.50 ppm	Current Sample				

Current Sample- Sample canister that is at the station and ready to be triggered and then collected
Pending- Sample has been collected awaiting results from the laboratory

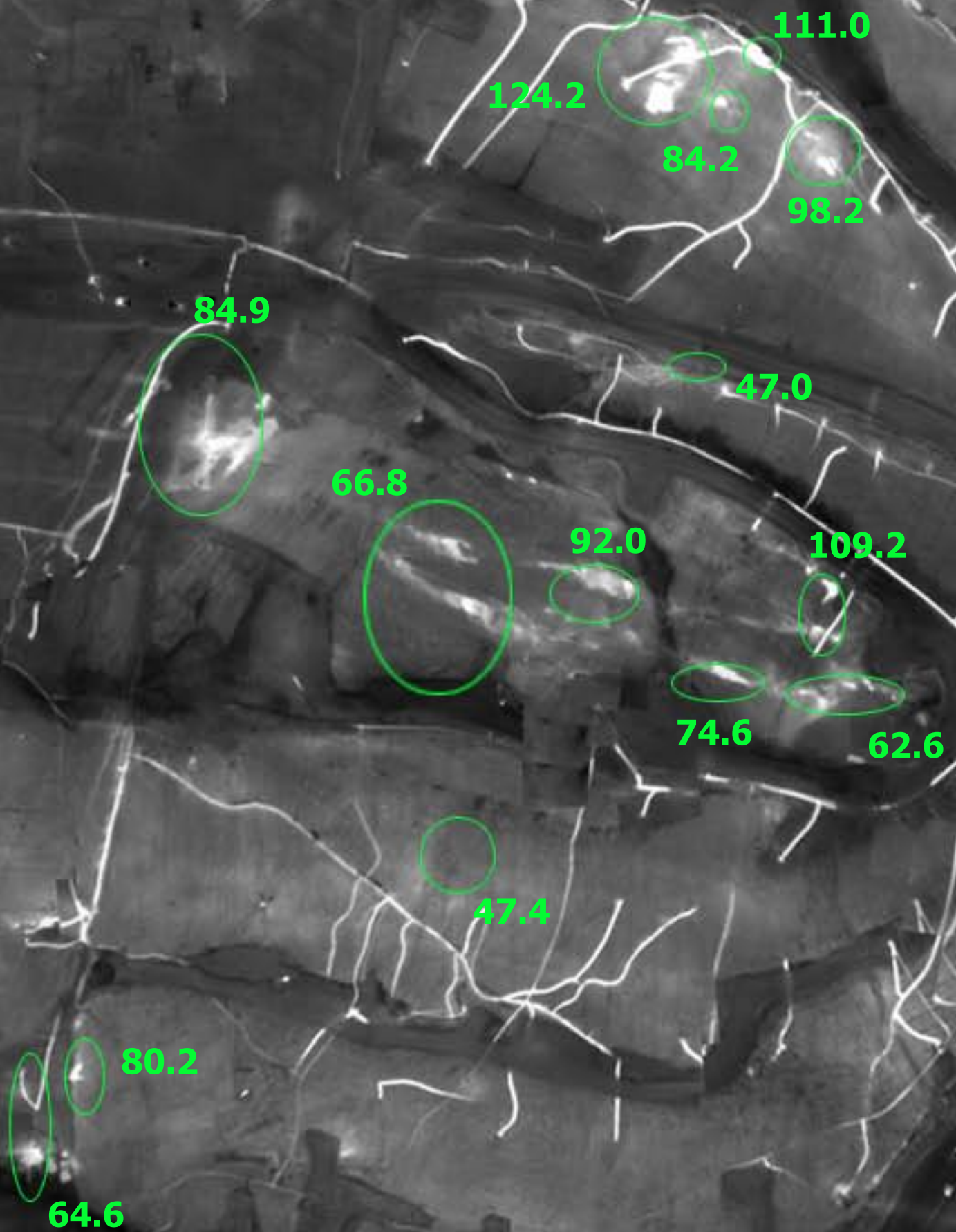
ATTACHMENT D

AERIAL INFRARED IMAGES

Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 10/24/2008

FLARE 4

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



Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 11/22/2008

APPARENT LOCAL INCREASE IN
TEMPERATURE OVER OCTOBER

FLARE 10

FORMER
LOCATION OF
W-57R2

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

