Countywide Recycling & Disposal Facility, Remediation Unit

Monthly Progress Report
Of
Operations, Monitoring & Maintenance Activities

JANUARY 2010

Prepared By:

Countywide Recycling & Disposal Facility, Remediation Unit
3619 Gracemont Street S.W.,
East Sparta, Ohio

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Introduction

This document provides a monthly report of monitoring and other activities conducted in January 2010. These activities are required by the Operations, Monitoring, and Maintenance (OM&M) Plan, developed for the facility and adopted by the Ohio Environmental Protection Agency (OEPA) on September 30, 2009. The primary objectives of the monitoring portion of this plan are as follows:

1. Monitor status/progression of the reaction.
2. Monitor characteristics of leachate and gas.
3. Track settlement and slope movement/stability of waste mass and perimeter berms.
4. Monitor exposure conditions for engineered components.
5. Determine when conditions are suitable for composite capping.
6. Assess conditions requiring notification, repair, further evaluation or corrective action.
7. Provide a summary of monitoring and data collection, relevant activities conducted since the prior report, trigger events, and conditions which may require additional non-routine activities or investigation.

It should be noted that the OM&M Plan requires inspections, routine maintenance, etc., which are activities that are not presented in this submission. These activities are documented as required, and records are retained in the OM&M Managers office.

1. Monthly Summary Narrative

During the month of January, all monthly, weekly, and daily tasks were completed. Some quarterly inspections tasks were also completed. No new triggers were noted during the month of January.

Several “non-routine” construction/maintenance tasks were conducted in January. These activities are discussed in detail in Section 3 of this report.

2. New Construction

No new construction is currently planned. The final tie-ins to the new leachate collection system have been completed, and abandonment and decommissioning of the now obsolete leachate structures is continuing.

3. Major Non-Routine Maintenance, Repairs or Events

Routine maintenance and repairs of the temporary cap, leachate, and gas systems were completed as necessary.

Areas of significant stretching of the temporary cap were observed on the south edge and west edge of the bowl. This stretching was related to settlement and contraction of the HDPE material due to cold weather. To address this issue and prevent damage to the cap and/or wells, the temporary cap was cut laterally in these areas to allow it to “relax”. It was then recapped using a narrow strip of FML.

During the above mentioned activities on the west edge of the bowl, some fairly significant cracking was observed beneath the temporary cap in the area. The cracking is relatively normal to this area of the bowl, as the west edge of the bowl recedes. An excavator was used to fill the cracks and voids with soil material, and the area was recapped.

The Fire Break Monitoring Points (FBMPs) were abandoned during January. Approval to perform this task was granted during the November 2009 Team Countywide Meeting. These monitoring points are not part of the OM&M monitoring regime, and were causing odors due to the difficulty in sealing the penetration through the cap. The above-cap electrical box and conduit were removed; however the probe itself and the wiring were left in place beneath the cap to allow for future monitoring if necessary.

The east leachate underground storage tanks were abandoned as part of the leachate enhancement project. Details concerning abandonment will be included in the Certification report for this project.

As stated in prior reports, Republic received permission to dispose of the waste generated during the leachate expansion project on the 88 acres. The placement of this waste was intended to establish additional grade in Cell 1 to enhance surface water drainage. This work was completed in January in accordance with the December 14, 2009 Republic letter request and the 22, 2009 approval letter from the OEPA. Details of this activity will be transmitted in a separate certification letter.

4. New Trigger Events

A review of the data collected in January 2010 indicates that movement at settlement pins IP C7, IP S5, and IP U4 exceeded the trigger rates of 0.05 feet per day for horizontal movement once during January. A review of the vector plots and the rate of movement table indicate that:

- C-7 moved in a non downslope direction. Pin C-7 is read with GPS type equipment and is subject to lower accuracy of movement. The rate of movement in the subsequent two weeks was far lower than the trigger level.
- Pin S-5 continued to settle a significant amount but did not move in a direction consistent with the downslope pins on the S Line.
- U-4 slowed considerable to .0091 ft per day following the exceedance on 1/19/2010

Minor upward movements have occurred, relative to the original survey pin elevation at as many as 32 locations (max) during the period. These are called out on the attached tables (Attachment 4) and on the vector plot of displacement since October 6, 2009. The number of positive upward movement reduced to 7 during the January 26, 2010 monitoring event. No trend of upward displacement has been established, and it is Republics opinion that the upward movements are slight (less than 1 inch) at the end of the period and are related to frost heave, survey equipment changes and difficulty setting up over the exact pin locations. This phenomenon as it relates to these triggers was discussed at the January Team Countywide Meeting. Republic does not believe further investigation of these triggers is necessary.

An area not previously experiencing greater than 2% settlement was observed on the eastern portion of cell 2 during the January monitoring period. Following the recommendations of the OM&M Plan, weekly topographic surveys will be conducted in this area to evaluate this settlement. However, it should be noted that this area has less than 60 feet of “waste column”, and has been discussed, this settlement is likely “exaggerated” due to waste thickness. Where waste is 60 feet thick or less, the expected accuracy of the GPS equipment (±0.1) will exceed the 2% annualized

settlement “trigger”. No obvious sign of settlement or distress is noted in this area, and the weekly surveys will be evaluated to determine if there is true settlement in this area.

After review of the January 2010 data, it should be noted that between the December and January sampling events, the data reflects a greater than 25% increase carbon monoxide (CO) levels at north header sampling branches designated as HBN01 and HBN02, as well as south header sampling branch HBS02. There was a decrease reflected in CO observed at the south header branch sample designated as HBS01. This data is presented below:

Sample Point ID	2009 October (ppm)	2009 Oct Total	2009 November (ppm)	Nov Total	2009 December (ppm)	Dec Total	2010 January (ppm)	2010 Jan Total	**Dec 2009 to Jan 2010**
HBN01	250.1		587.2		431.4		583.8		35%
HBN02	61.01	311.1	247.3	834.5	189.9	621.3	487	1070.8	156%
HBS01	179.2		123.3		180.6		150.4		-17%
HBS02	412.3	591.5	353.7	477	434.7	615.3	594.4	744.8	37%

Republic reviewed the December and January wellfield, flare, and extractions system data operating records to identify if the increase was attributed to a change in applied vacuum distribution or if it was truly an increase in production of CO in the wellfield. The following summarizes the results of this evaluation.

A review of flows at the north and south flares indicates that there was an approximate 18% decrease in flow during the January 6th sampling event as compared to the December 1st sampling event. This decrease is attributable to weather related issues with condensate sump CS-1 (pump discharge frozen) located on the south slope of Cell 3, condensate sump CS-5 (pump frozen, located at the west end of the isolation break), as well as an issue with the condensate traps in Cell 1. These issues resulted in an overall decrease in collection efficiency in the portion of the wellfield located in Cells 1 and 2, as well as a portion of Cell 3. The wells located in this area have historically exhibited lower CO. As such, the reduction in gas extraction from these “good” (low CO producing) wells resulted in a more concentrated sample at the header branches. Additionally, the blocked header issues that resulted from the sump issues could actually cause a “deadhead” in vacuum, resulting in an increase in vacuum on the south slope of the 88 acres where CO concentrations have typically been the highest.

Republic believes that the above described phenomenon, rather than an actual increase in CO production, resulted in the increase at header branches HBN01 and HBS02. Through this process of review, Republic also believes that header sample HBN02 may be receiving some landfill gas from cells 7 and 8 based upon its location. This is supported by the 156% increase at that location in conjunction with the pump failure at CS-5. Because CS-5 was “watered-in”, there was reduced flow from Cells 7 and 8 through that header location, again resulting in the increase in CO at that location and potentially causing elevated vacuum on the remainder of the 88 acres. Based upon this assumption, Republic has moved that sampling location to obtain a sample that is less influenced by Cells 7 and 8 to be more indicative of the 88 acre gas.

Based upon this review, Republic does not believe that the increase in CO is indicative of an increase in production, but rather a change in collection efficiency related to wellfield dynamics during the two sampling periods. It should be understood that the complexity of the landfill gas

collection system is compounded by the operation of two flares on such a small area. While this is completely necessary, the counter-current gas flows and complicated vacuum dynamics that this situation creates will make it extremely difficult to see consistent results in the header branch sampling. This is especially the case when any one of the components is operating subpar, which completely changes the dynamics of the gas system. When a part or multiple parts of this system is changed or its effectiveness reduced temporarily, that change is compounded throughout the wellfield.

Finally, there were two sump locations which exceeded the trigger for temperature during the January Monitoring. The trigger is exceeded when a location exhibits a temperature of greater than 150°F in a location where it had not been exceeded in the previous event. The data, along with the rechecks of these readings following troubleshooting, is presented below:

Location	1/29/10	2/15/10
Sump Riser 3	172.7	99.2
Sump Riser 5AB	187.1	161.5

Following the initial readings, the thermocouples were inspected and troubleshooting was conducted to evaluate the integrity of the thermocouples and the validity of the data. The thermocouples at these two locations had been removed and reinstalled prior to this initial reading as part of the leachate system rehabilitation project. The February 15 rechecks of the readings indicate that the January 29 reading at Riser Sump 3 was anomalous and should be disregarded. This reading was likely an error caused by the disruption in that sump's thermocouples during the expansion work. The recheck at Sump Riser 5AB does indicate that the trigger was exceeded, but at a much lower level than the initial reading indicated. Due to ongoing issues with the thermocouple, this was the first reading that was available from that location during the last few events. However, this temperature is not so high as to cause an immediate concern; rather it is indicative of the risers location relative to the most active part of the reaction. Temperatures of similar levels have been observed at other locations without any obvious concern. Republic does not believe that further evaluation relative to these triggers is necessary.

5. Investigation Results from Previous Trigger Events

During the December operating period, greater than 2% settlement was observed between monthly monitoring events in some areas. The following observations were made with respect to this settlement:

- Results near the toe of waste slope may be "exaggerated" due to waste thickness. Where waste is 60 feet thick or less, the expected accuracy of the GPS equipment (±0.1) will exceed the 2% annualized settlement "trigger".
- The contraction and expansion of liner due to temperature changes may be resulting in the surveyor's inability to consistently contact ground surface with survey equipment. This is likely resulting in the data that shows isolated areas of 10% settlement or greater.
- The December maps shows the "settlement front" extending from the north to the south through the receding slope of the bowl with fairly uniform settlement. It appears to be similar to settlement that has been observed in the past, and does not suggest stability concerns.
- In short, the settlement depicted is as we would expect, and when viewed holistically with the rest of the data, does not represent a concern from a stability or integrity standpoint.

In order to further evaluate the suspicion that GPS accuracy and “noise” during single events were exaggerating settlement, a second incremental settlement map was generated. This map used a settlement rate derived from the average of settlement rates from the prior four months. This average was then annualized to project total settlement in a year. As can be seen from this map, much of the “noise” is eliminated. Republic believes that this map better represents true projected settlement at the facility, and that more weight should be given to this particular map as it relates to investigation and decision making.

Also during the month of December, the pin monitoring data suggested that during the third week of the month settlement pin IP-S4 had moved 0.3’ south, 1’ east and had increased in elevation approximately 0.1’ since the monitoring the prior week. These numbers exceed the trigger for deflection and elevation change as listed in Volume 1, Table 10. Pins IP-S5 and IP-S3 (located immediately north and south of IP-S4) had raised elevation approximately 0.1’, but reflected no significant X-Y change. This row of pins is generally in line with the receding slope on the west edge of the bowl. Republic does not see any visual signs of acute settlement or bulging in this area, nor any other indicators of an immediate threat.

Republic implemented a localized surveying grid to provide more specific monitoring of this area. Each day, as weather would allow, this area was surveyed to gather acute topographical information. Based upon a review of the data gathered from this monitoring, the pin data, settlement data, or enhanced topo data does not suggest any indication of instability. In a letter dated February 5, 2010, the OEPA concurred that there was no evidence of instability, and that this daily topographic survey in the area could be discontinued.

6. Trend Graphs and Drawings

The graphs, tables, and figures are included in the attachments to this report. Due to the vast number of these and the detail that they provide, a full written summary is not provided in this document. The Team Countywide Meeting will be the vehicle utilized to discuss this data in depth.

7. Review of Potential Need to Extend Temporary FML Cap

Currently, the Remediation Unit consists of approximately 18 acres which do not have a temporary cap. Volume 1, Section 7.1 of the OM&M Plan details conditions which would initiate an assessment which could require installation of temporary cap in this area. Such conditions include;

- Uncontrollable odor or fugitive emissions,
- Unusual settlement (Incremental settlement greater than 2% per year),
- Atypical or uncontrollable leachate outbreaks,
- Methane/carbon dioxide ratio less than 1.0,
- Maximum wellhead temperatures greater than 150°F,
- Maximum carbon dioxide greater than 100 ppmv.

At this time, the conditions observed in this area supplemented by the data collected during monitoring and inspections do not indicate the need for expansion of the temporary cap.

8. Petitions to Perform Work

The monitoring and inspections conducted during the operating period do not indicate the need for additional work which would require approval. As such, there are no petitions to perform such work at this time.

9. Proposed OM&M Plan Revisions

There have been several discrepancies identified in the OM&M Plan, either frequencies that conflict between different parts of the plan or clarifications that were necessary. In each of these cases, the OM&M manager clarified the discrepancies with representatives of the OEPA, and these clarifications have been documented. Additionally, there have several revisions agreed to by Team Countywide as they relate to data presentation. These revisions were incorporated into the OM&M Plan, which will be distributed in February.

10. Odor Summary/Complaints

During the month of December, there were two odor complaints reported to Countywide. Countywide responded to each of these complaints. The odor was traced to venting from the new leachate tank. The following activities were conducted to mitigate this odor source:

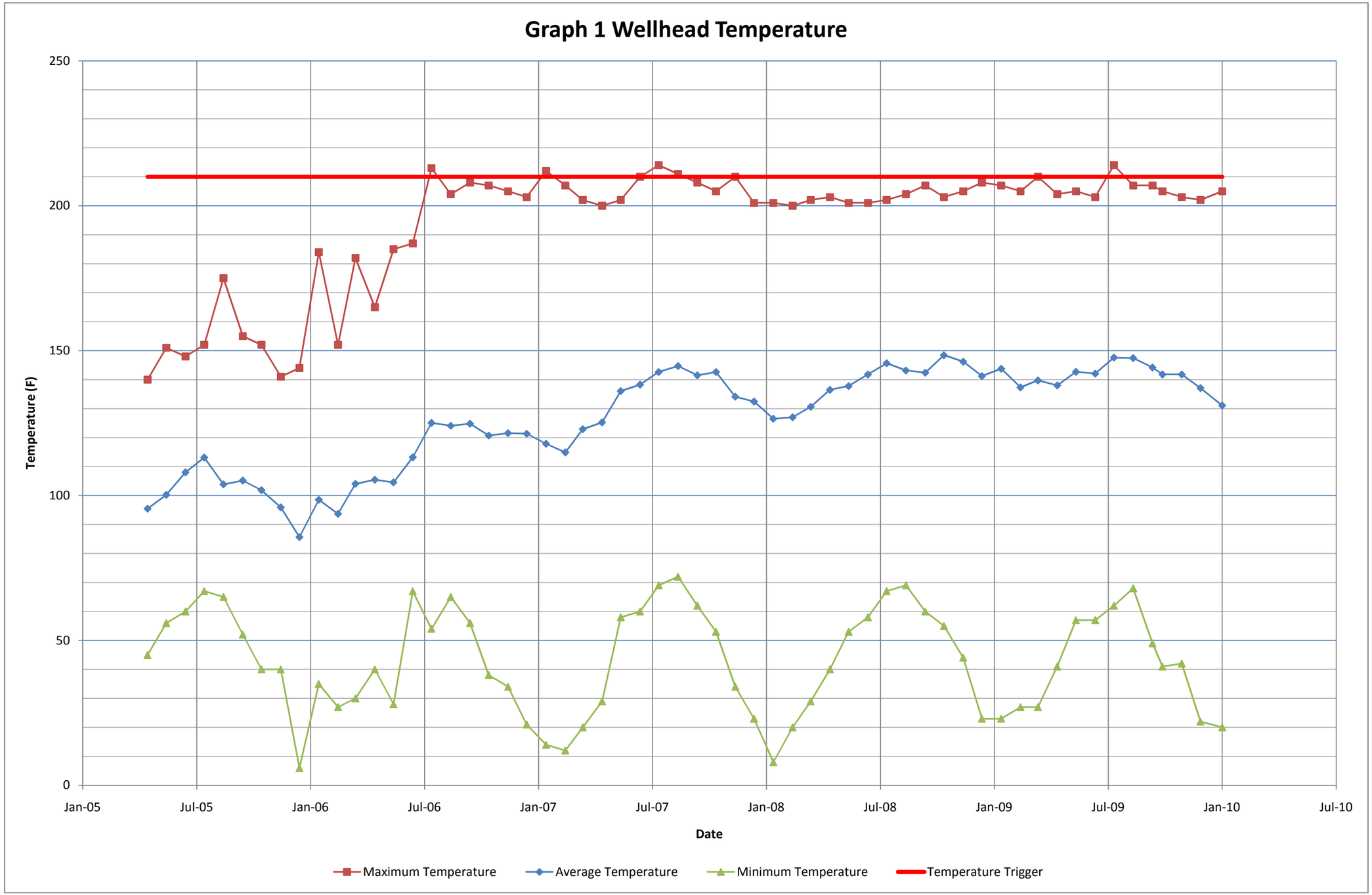
- Installed Deodorizer system on tanks
- Utilized deodorizer in sumps and load-outs
- Installed leachate gravity lines which feed lift stations under vacuum to reduce gas migration through system to tanks
- Adjusted floor level of load-out catch basins to reduce liquid held in basins and adjusted float levels in load-out sump to reduce liquid held in sump
- Piped overflow from tanks through carbon vessels for odor filtration
- Fabricated a special vent for odor filtration
- Efforts undertaken to make the tanks as airtight as possible to force odor through the filtered vent.

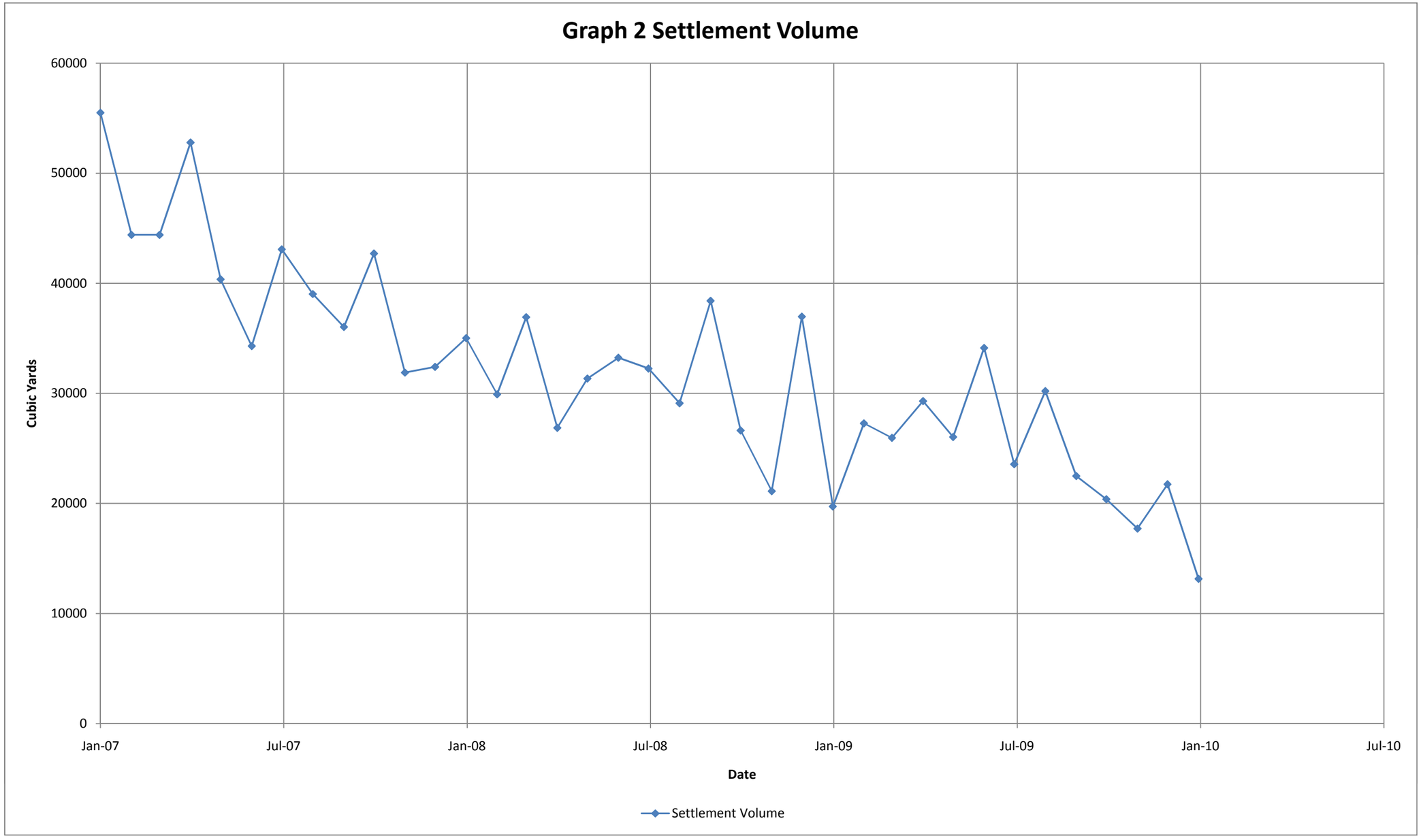
2/17/09

Michael Darnell Date
OM&M Manager

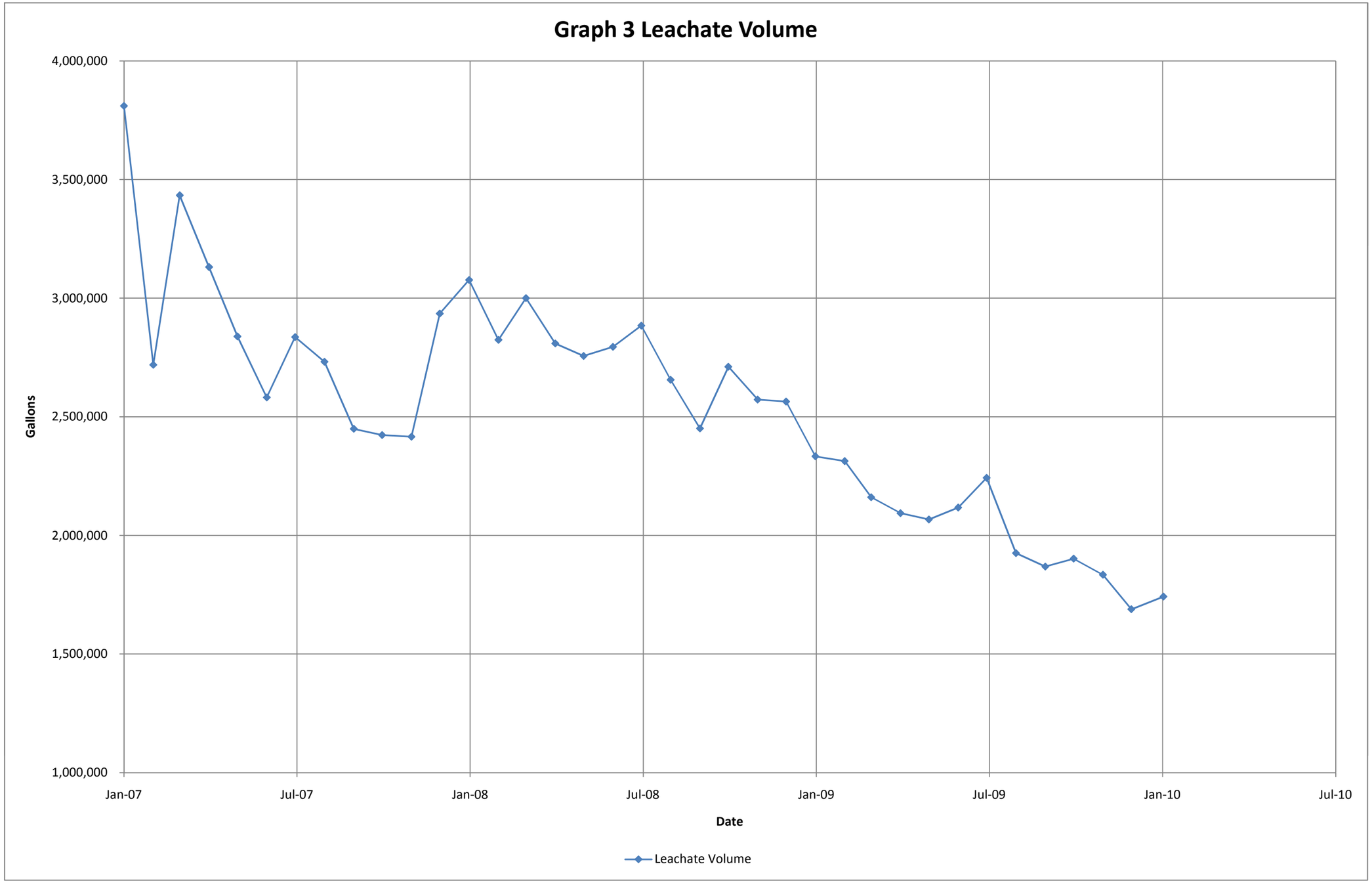
Attachment 1

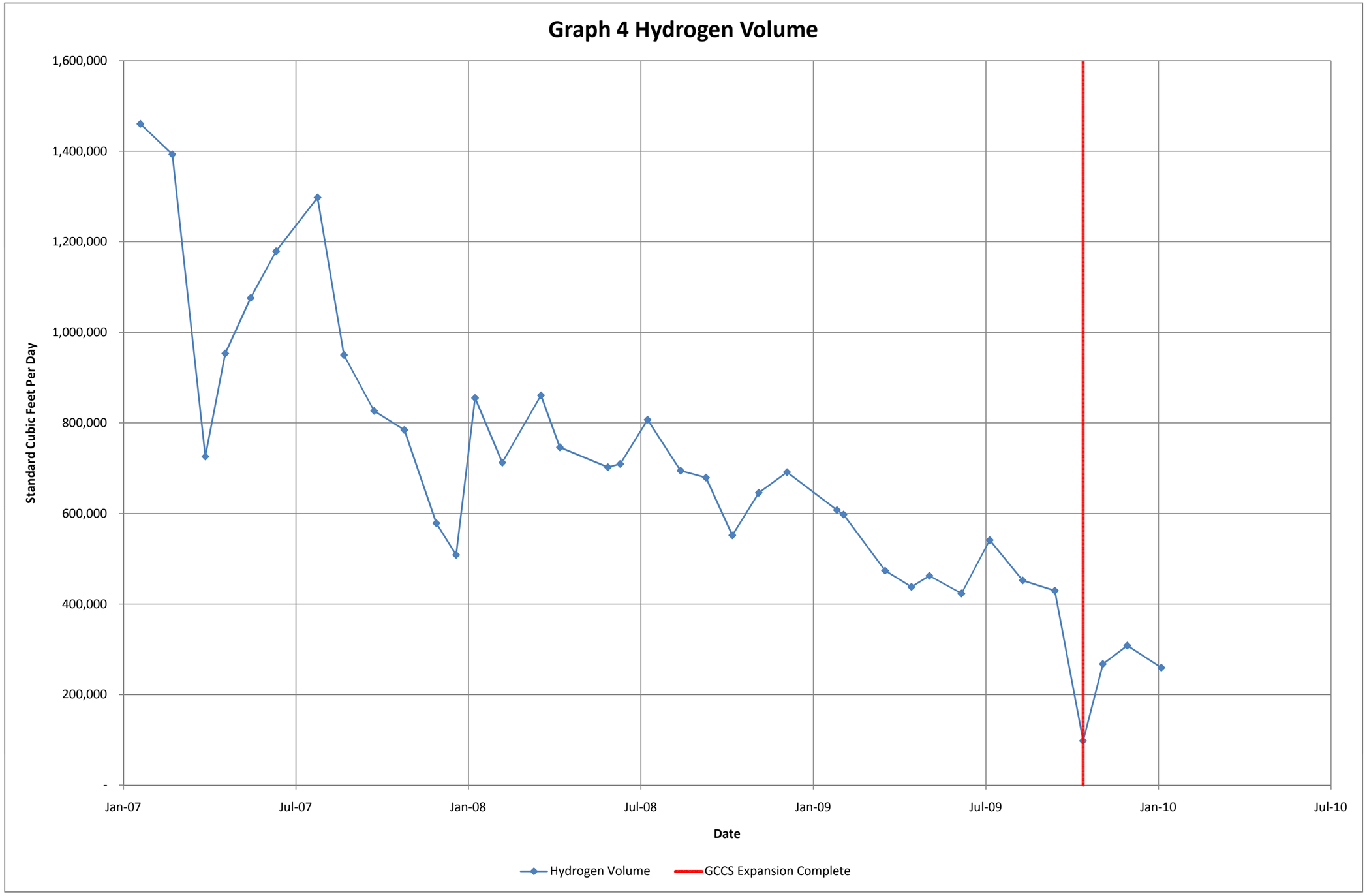
Graphs

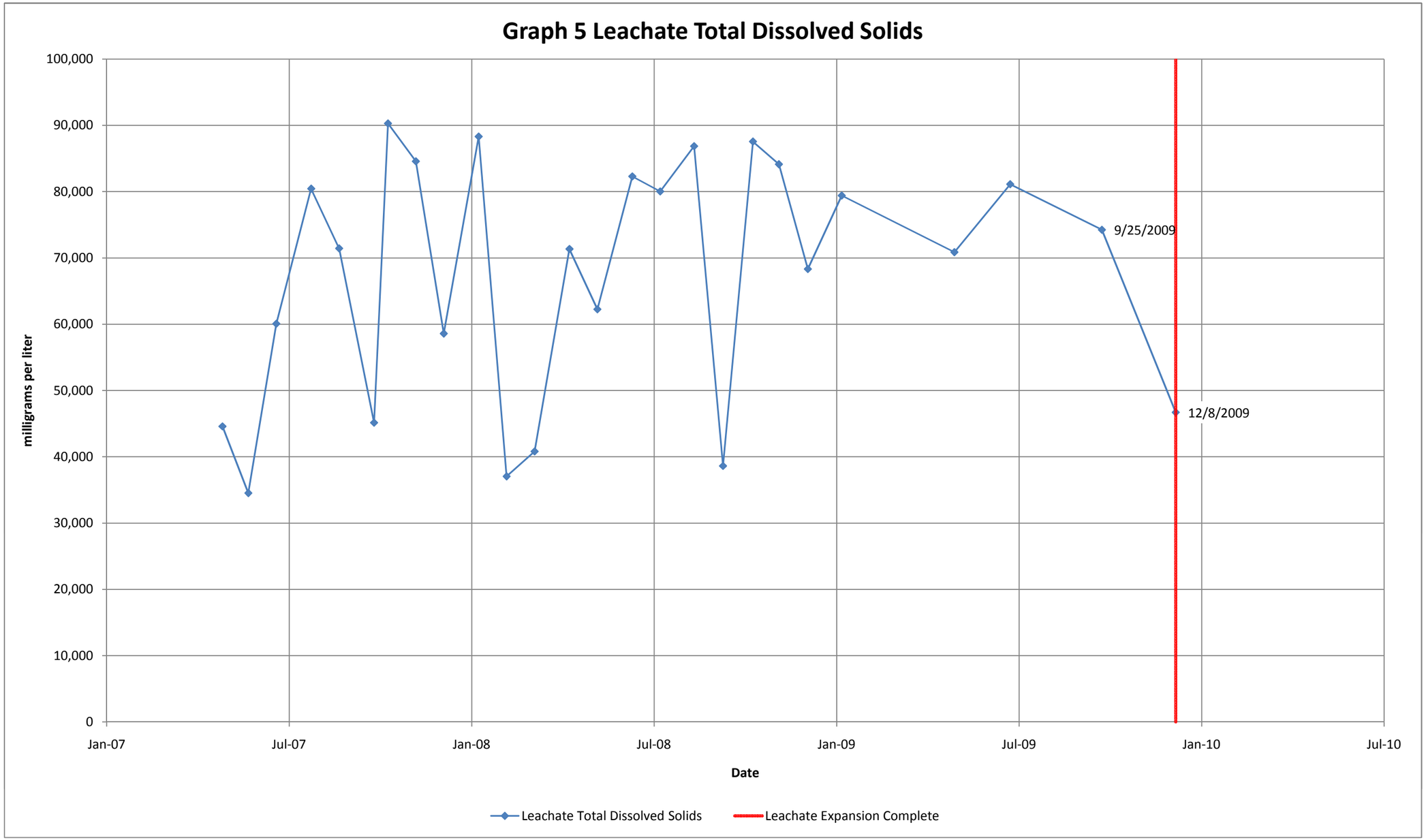

Graph 1 Wellhead Temperature
250
200
150
100
50
0
Temperature (F)
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Maximum Temperature
Average Temperature
Minimum Temperature
Temperature Trigger



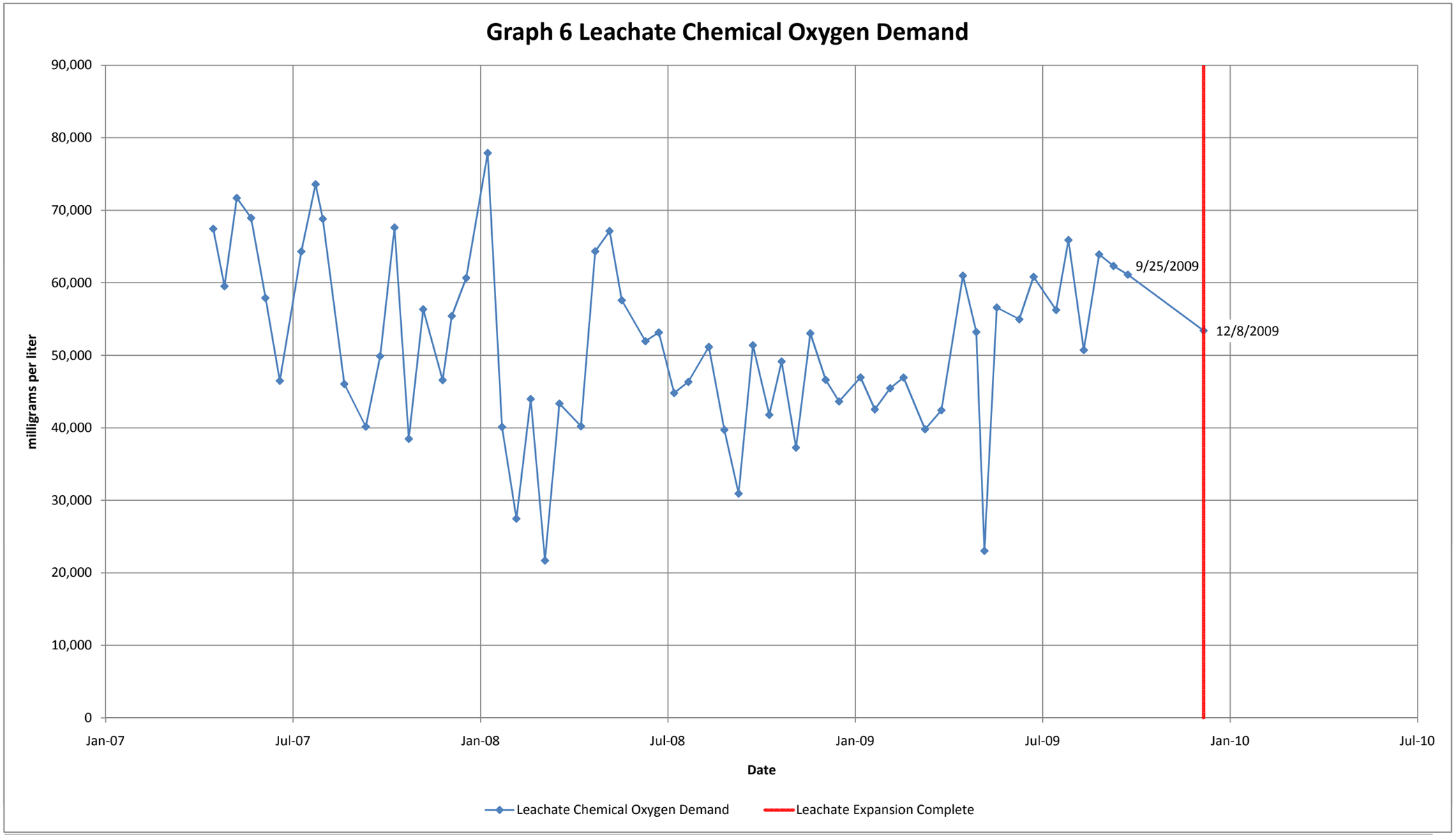
1. Information presented prior to October 2009 was compiled from data prepared and presented by SCS Engineers for Counytwide Recycling and Disposal Facilty.
2. Data presented on monthly basis.
3. Settlement volume reported prior to the 4th quarter of 2009 is for a limited area of the 88-acre reaction area.


Graph 3 Leachate Volume
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
Gallons
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Leachate Volume


Graph 4 Hydrogen Volume
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
-
Standard Cubic Feet Per Day
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Hydrogen Volume
GCCS Expansion Complete



1. Information presented prior to October 2009 was compiled from data prepared and presented by AECOM for Counytwide Recycling and Disposal Facilty.
2. Data shown prior to October 2009 are flow-weighted averages of datea from the East, North and South leachate collection tanks. Data from December 2009 is from combined Tank East 500.
3. Data shown prior to Ocotber 2009 comprises data from the leachate collection system only, and excludes certain leachate toe drains, sumps and gas collection wells.



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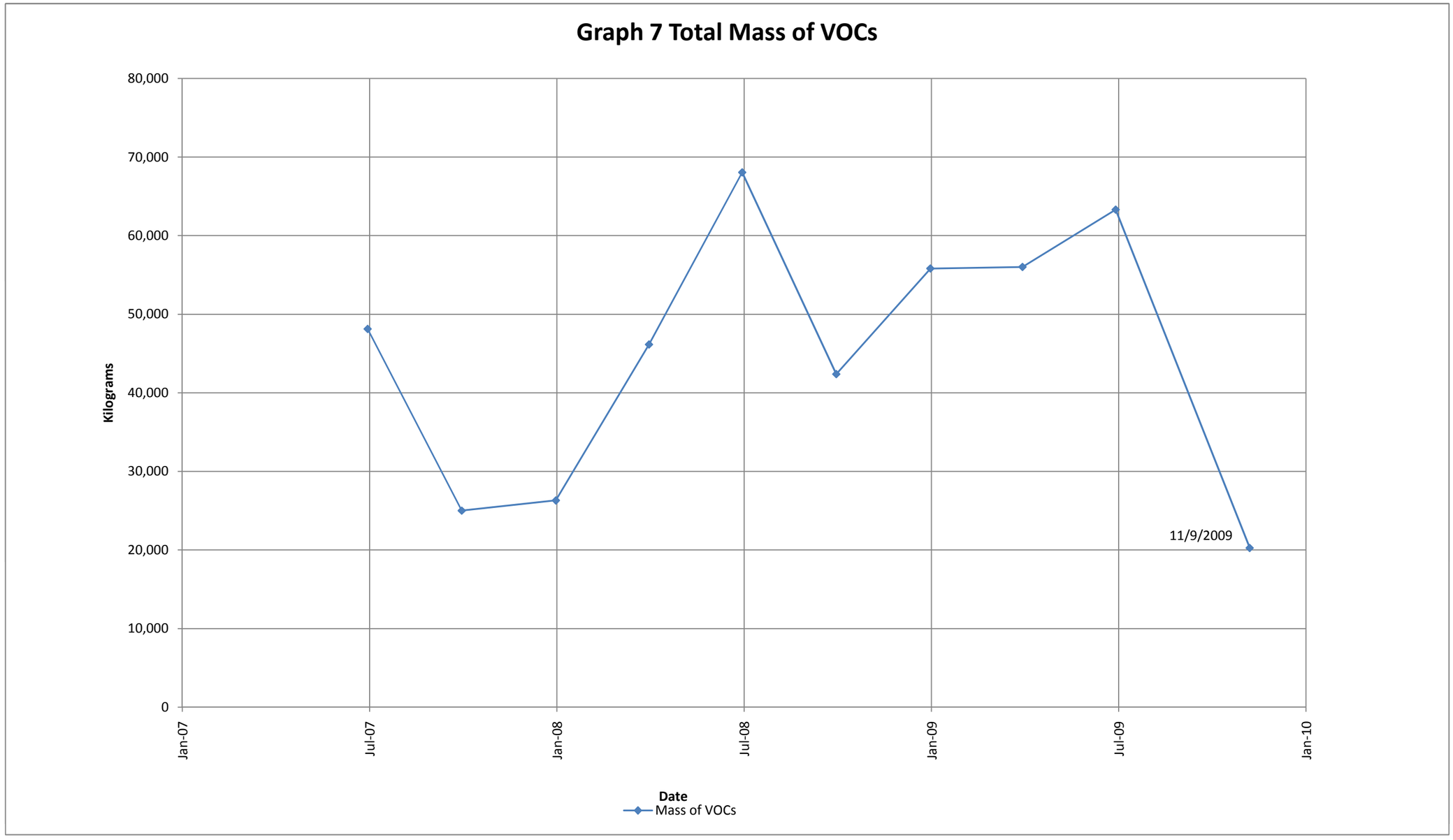
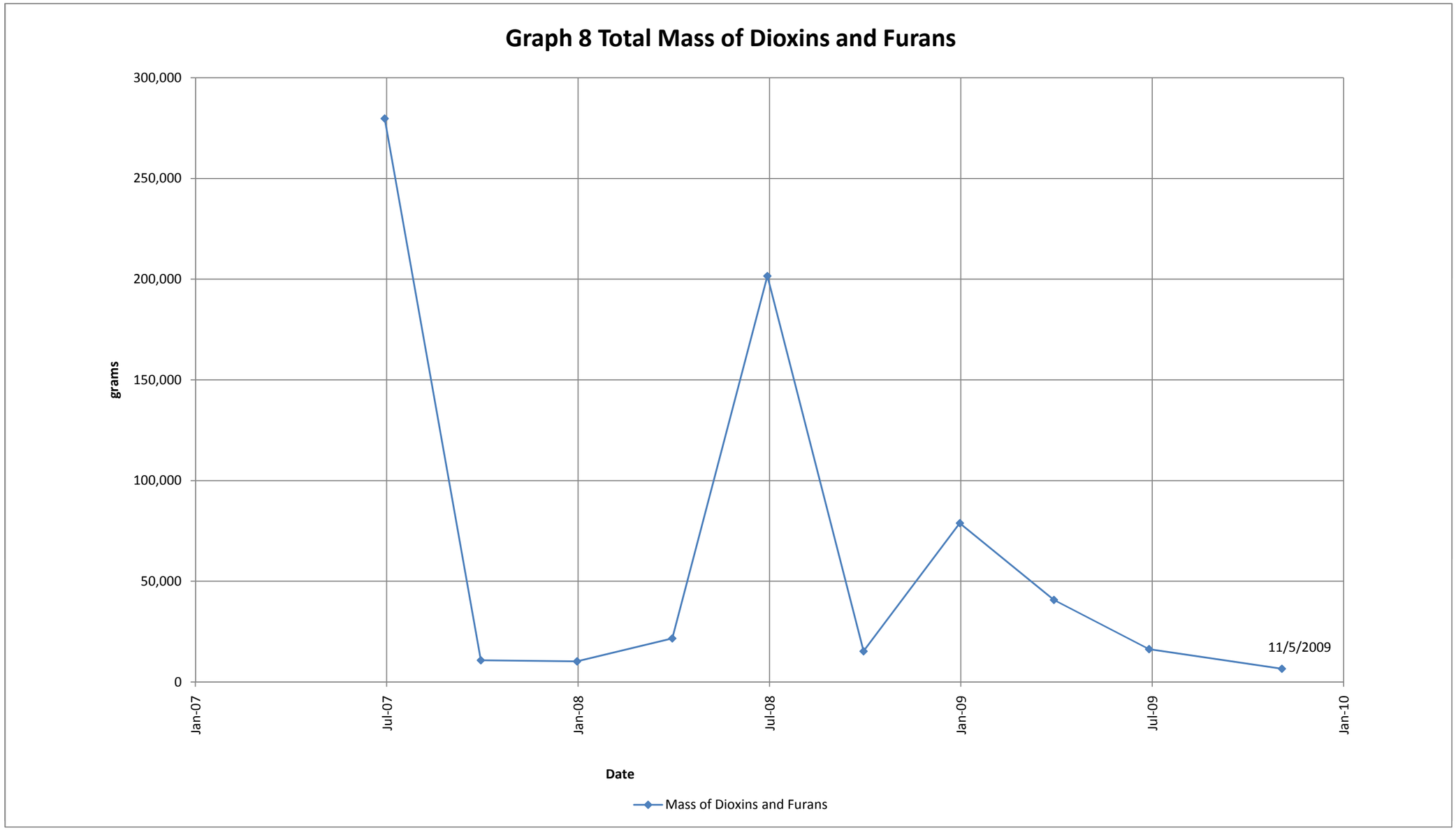
4. Data labels beginng in October 2009 indicate dat of quarterly analytical sampling of flares.
5. First Quarter 2010 data not yet collected.



1. Information presented prior to October 2009 was compiled from data prepared and presented by SCS Engineers for Counytwide Recycling and Disposal Facilty.
2. Data presentation frequency is quarterly.
3. Flare 4 was not sampled for air quality beginning in September 2009.
4. Beginning in fourth quarter 2009, mass based on data collected only from Flares 7 and 10.
5. Data labels beginng in October 2009 indicate dat of quarterly analytical sampling of flares.
6. First Quarter 2010 data not yet collected.



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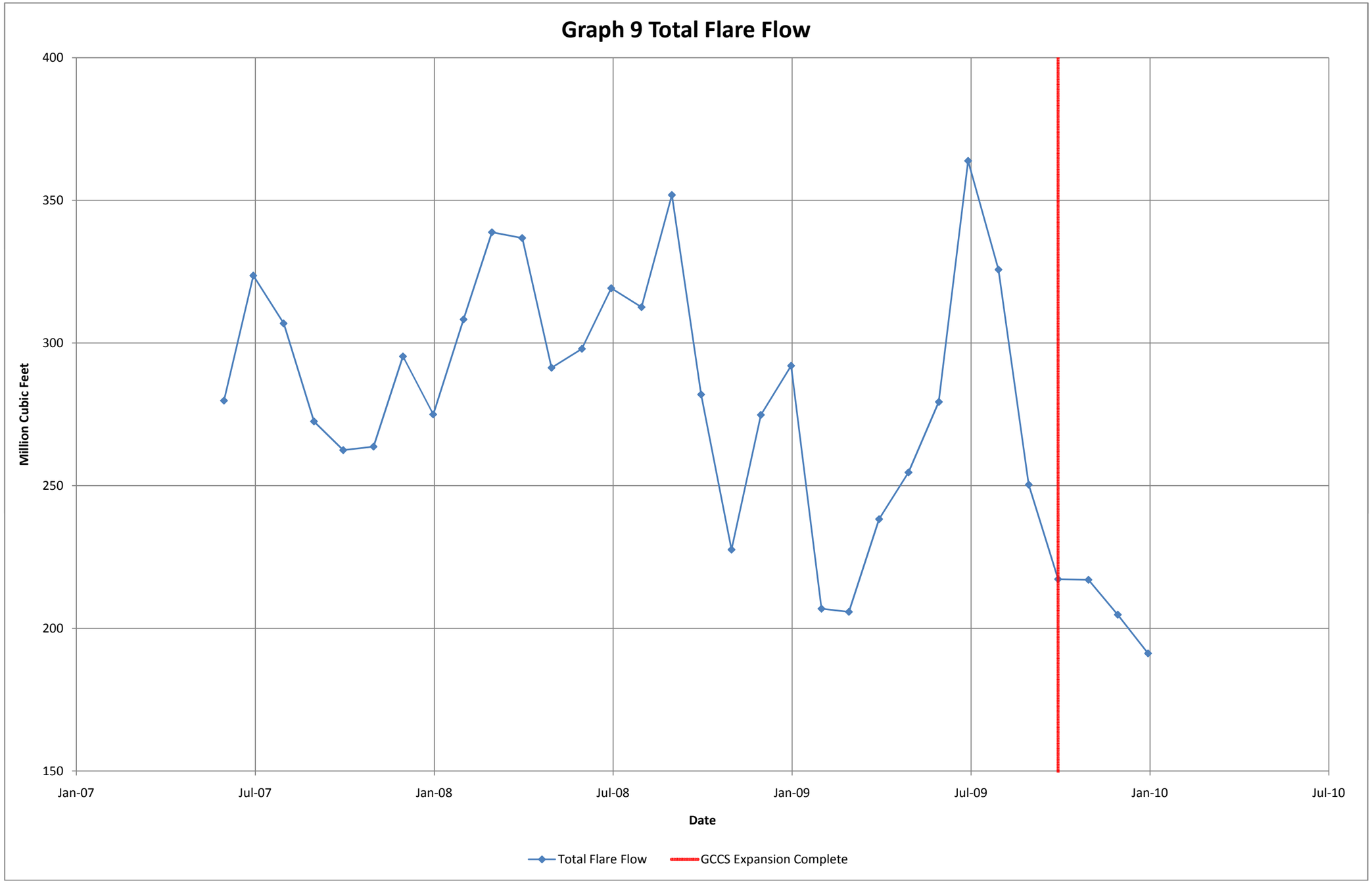
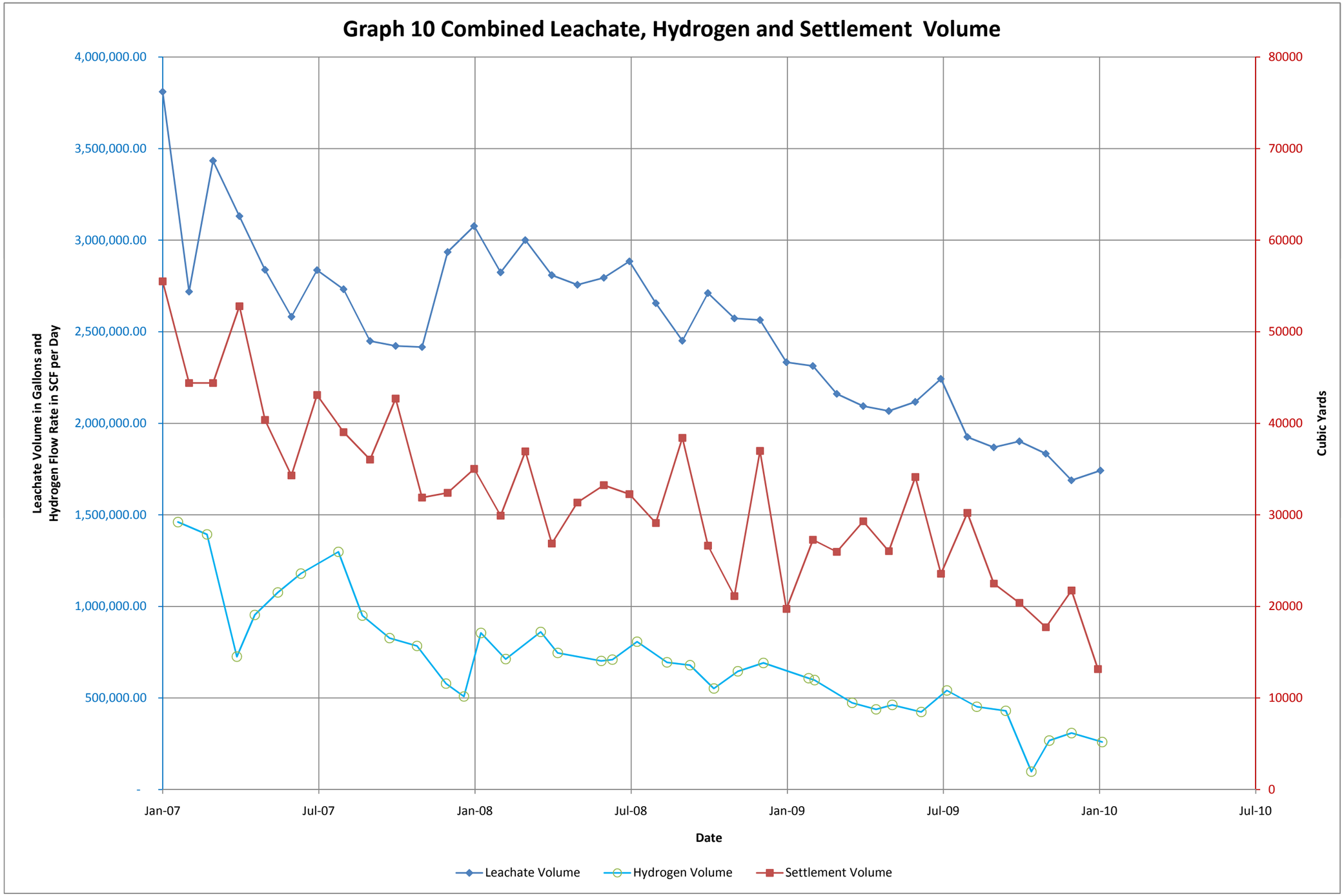
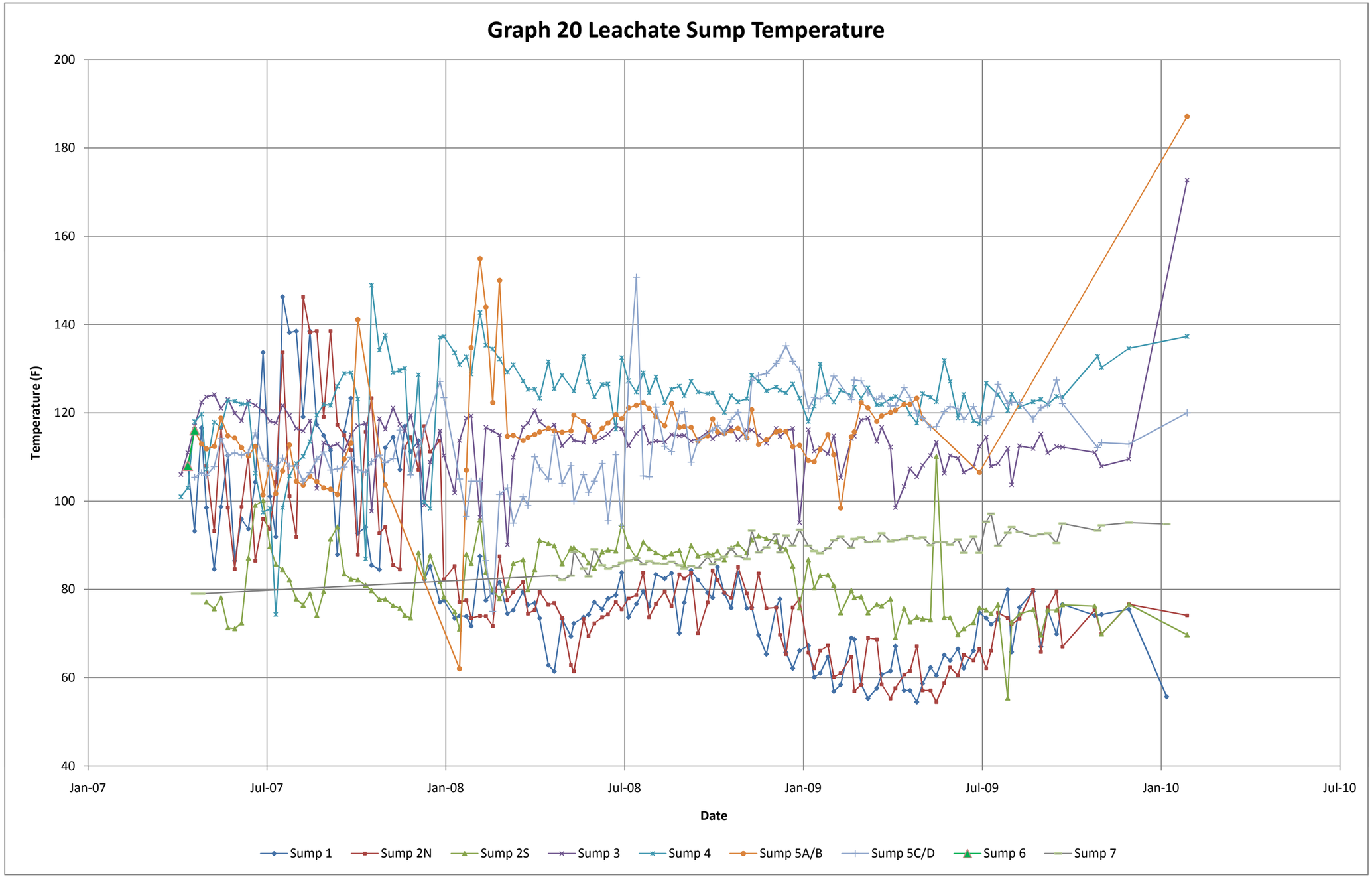
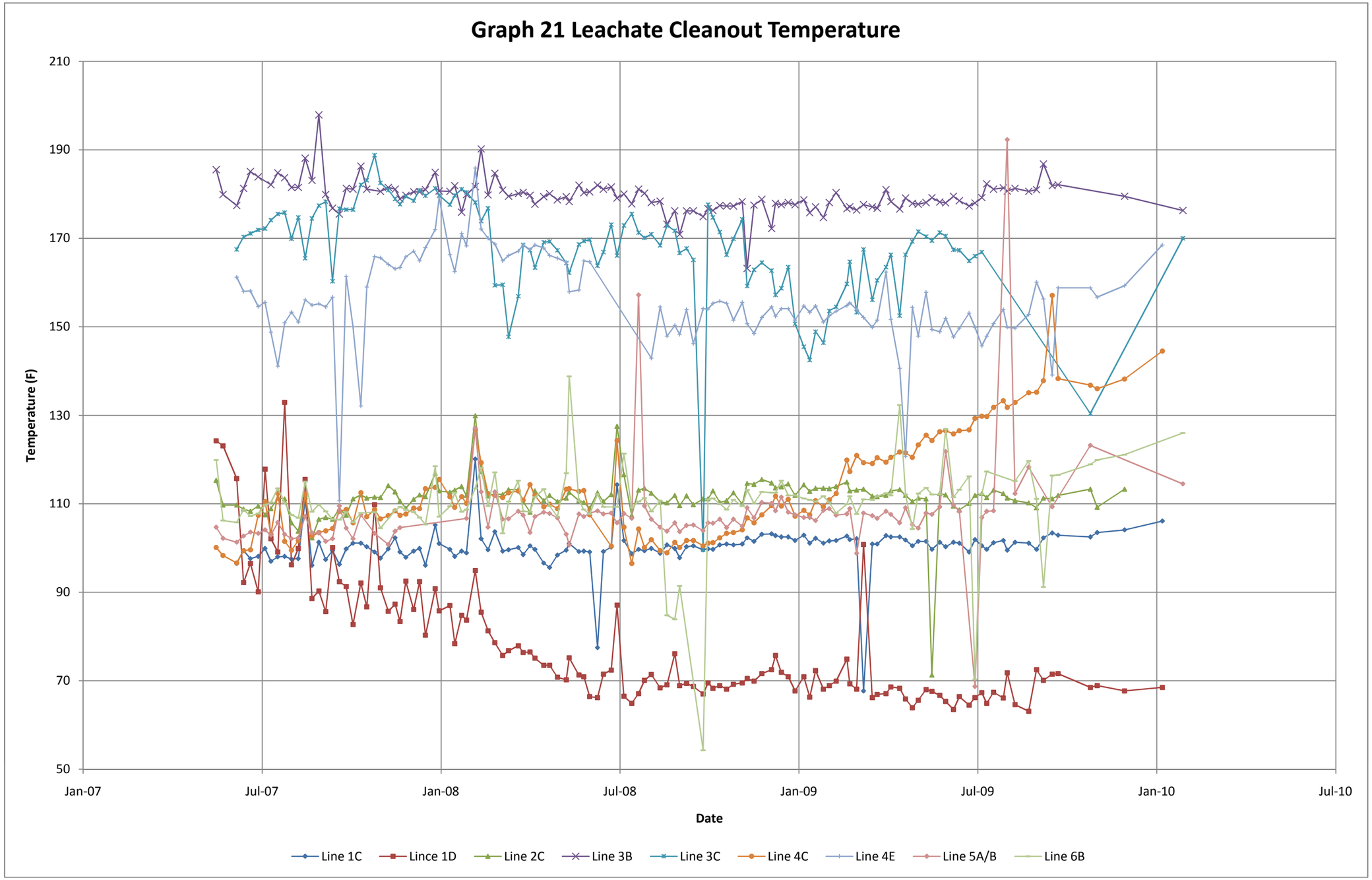

Graph 9 Total Flare Flow
400
350
300
250
200
150
Million Cubic Feet
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Total Flare Flow
GCCS Expansion Complete


Graph 10 Combined Leachate, Hydrogen and Settlement Volume
Leachate Volume in Gallons and Hydrogen Flow Rate in SCF per Day
Cubic Yards
4,000,000.00
3,500,000.00
3,000,000.00
2,500,000.00
2,000,000.00
1,500,000.00
1,000,000.00
500,000.00
-
80000
70000
60000
50000
40000
30000
20000
10000
0
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Leachate Volume
Hydrogen Volume
Settlement Volume

Graphs 11 -19

Included in Attachment 4 - Pin Movement Evaluation


Graph 20 Leachate Sump Temperature
Temperature (F)
200
180
160
140
120
100
80
60
40
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Sump 1
Sump 2N
Sump 2S
Sump 3
Sump 4
Sump 5A/B
Sump 5C/D
Sump 6
Sump 7


Graph 21 Leachate Cleanout Temperature
Temperature (F)
210
190
170
150
130
110
90
70
50
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Date
Line 1C
Lince 1D
Line 2C
Line 3B
Line 3C
Line 4C
Line 4E
Line 5A/B
Line 6B

Attachment 2

Tables

Table 1. Leachate Constituent Summary

Parameter Name		Value	Qualifier	Units	Detection Limit	Units
Volatile Organic Compounds						
1,1,1,2-Tetrachloroethane	<	1000	U	ug/L	1000	ug/L
1,1,1-Trichloroethane	<	1000	U	ug/L	1000	ug/L
1,1,2,2-Tetrachloroethane	<	1000	U	ug/L	1000	ug/L
1,1,2-Trichloroethane	<	1000	U	ug/L	1000	ug/L
1,1-Dichloroethane	<	1000	U	ug/L	1000	ug/L
1,1-Dichloroethylene	<	1000	U	ug/L	1000	ug/L
1,2,3-Trichloropropane	<	1000	U	ug/L	1000	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	<	2000	U	ug/L	2000	ug/L
1,2-Dibromoethane (EDB)	<	1000	U	ug/L	1000	ug/L
1,2-Dichloroethane	<	1000	U	ug/L	1000	ug/L
1,2-Dichloropropane	<	1000	U	ug/L	1000	ug/L
2-Hexanone	<	10000	U	ug/L	10000	ug/L
4-Methyl-2-pentanone		1200	J	ug/L	10000	ug/L
Acetone		45000		ug/L	10000	ug/L
Acrylonitrile	<	20000	U	ug/L	20000	ug/L
Benzene		400	J	ug/L	1000	ug/L
Bromochloromethane	<	1000	U	ug/L	1000	ug/L
Bromodichloromethane	<	1000	U	ug/L	1000	ug/L
Bromoform	<	1000	U	ug/L	1000	ug/L
Carbon disulfide	<	1000	U	ug/L	1000	ug/L
Carbon tetrachloride	<	1000	U	ug/L	1000	ug/L
Chlorobenzene	<	1000	U	ug/L	1000	ug/L
Chloroethane	<	1000	U	ug/L	1000	ug/L
Chloroform	<	1000	U	ug/L	1000	ug/L
cis-1,2-Dichloroethylene	<	1000	U	ug/L	1000	ug/L
cis-1,3-Dichloropropene	<	1000	U	ug/L	1000	ug/L
Dibromochloromethane	<	1000	U	ug/L	1000	ug/L
Ethylbenzene		280	J	ug/L	1000	ug/L
Methyl bromide	<	1000	U	ug/L	1000	ug/L
Methyl chloride	<	1000	U	ug/L	1000	ug/L
Methyl ethyl ketone		28000		ug/L	10000	ug/L
Methyl iodide	<	1000	U	ug/L	1000	ug/L
Methylene bromide	<	1000	U	ug/L	1000	ug/L
Methylene chloride	<	1000	U	ug/L	1000	ug/L
o-Dichlorobenzene	<	1000	U	ug/L	1000	ug/L
p-Dichlorobenzene		370	J	ug/L	1000	ug/L
Styrene	<	1000	U	ug/L	1000	ug/L
Tetrachloroethylene	<	1000	U	ug/L	1000	ug/L
Toluene		280	J	ug/L	1000	ug/L
trans-1,2-Dichloroethylene	<	1000	U	ug/L	1000	ug/L
trans-1,3-Dichloropropene	<	1000	U	ug/L	1000	ug/L
trans-1,4-Dichloro-2-butene	<	1000	U	ug/L	1000	ug/L
Trichloroethylene	<	1000	U	ug/L	1000	ug/L
Trichlorofluoromethane	<	1000	U	ug/L	1000	ug/L
Vinyl acetate	<	2000	U	ug/L	2000	ug/L
Vinyl chloride	<	1000	U	ug/L	1000	ug/L
Xylenes (total)		1100	J	ug/L	2000	ug/L

Table 1. Leachate Constituent Summary

Parameter Name		Value	Qualifier	Units	Detection Limit	Units
Dioxins/Furans						
1,2,3,4,6,7,8-HpCDD		510	B	pg/L	500	pg/L
1,2,3,4,6,7,8-HpCDF		51	QJ	pg/L	500	pg/L
1,2,3,4,7,8,9-HpCDF	<	500	U	pg/L	500	pg/L
1,2,3,4,7,8-HxCDD	<	500	U	pg/L	500	pg/L
1,2,3,4,7,8-HxCDF	<	500	U	pg/L	500	pg/L
1,2,3,6,7,8-HxCDD	<	500	U	pg/L	500	pg/L
1,2,3,6,7,8-HxCDF	<	500	U	pg/L	500	pg/L
1,2,3,7,8,9-HxCDD	<	500	U	pg/L	500	pg/L
1,2,3,7,8,9-HxCDF	<	500	U	pg/L	500	pg/L
1,2,3,7,8-PeCDD	<	500	U	pg/L	500	pg/L
1,2,3,7,8-PeCDF	<	500	U	pg/L	500	pg/L
2,3,4,6,7,8-HxCDF	<	500	U	pg/L	500	pg/L
2,3,4,7,8-PeCDF	<	500	U	pg/L	500	pg/L
2,3,7,8-TCDD	<	100	U	pg/L	100	pg/L
2,3,7,8-TCDF	<	100	U	pg/L	100	pg/L
OCDD		4000	B	pg/L	1000	pg/L
OCDF		130	BJ	pg/L	1000	pg/L
Total HpCDD		960	B	pg/L	500	pg/L
Total HpCDF		51	QJ	pg/L	500	pg/L
Total HxCDD		130	QJ	pg/L	500	pg/L
Total HxCDF		39	QJ	pg/L	500	pg/L
Total PeCDD		270	QJ	pg/L	500	pg/L
Total PeCDF	<	500	U	pg/L	500	pg/L
Total TCDD	<	100	U	pg/L	100	pg/L
Total TCDF		88	QJ	pg/L	100	pg/L
Metals						
Aluminum	<	20000	UG	ug/L	20000	ug/L
Antimony	<	1000	UG	ug/L	1000	ug/L
Arsenic	<	500	UG	ug/L	500	ug/L
Barium		1370		ug/L	1000	ug/L
Beryllium	<	300	UG	ug/L	300	ug/L
Cadmium	<	200	UG	ug/L	200	ug/L
Calcium		2560000		ug/L	100000	ug/L
Chromium		680		ug/L	500	ug/L
Cobalt	<	500	UG	ug/L	500	ug/L
Copper	<	500	UG	ug/L	500	ug/L
Iron		705000		ug/L	10000	ug/L
Lead		428		ug/L	300	ug/L
Magnesium		844000		ug/L	100000	ug/L
Manganese		54000		ug/L	500	ug/L
Nickel	<	1000	UG	ug/L	1000	ug/L
Potassium		2600000		ug/L	100000	ug/L
Selenium	<	500	UG	ug/L	500	ug/L
Silver	<	300	UG	ug/L	300	ug/L
Sodium		5410000		ug/L	100000	ug/L
Thallium	<	1000	UG	ug/L	1000	ug/L
Vanadium	<	700	UG	ug/L	700	ug/L
Zinc		24600	J	ug/L	2000	ug/L

Table 1. Leachate Constituent Summary

Parameter Name		Value	Qualifier	Units	Detection Limit	Units
Field Parameters						
Specific Conductance		61000		umhos/cm	100	umhos/cm
Field pH		7		s.u.	0	s.u.
Field Temperature		51.1		F	0	F
General Chemistry						
Turbidity		360		NTU	50	NTU
Chloride		9150		mg/L	500	mg/L
Fluoride	<	500	UG	mg/L	500	mg/L
Sulfate		594		mg/L	500	mg/L
Nitrate-Nitrite	<	10	UG	mg/L	10	mg/L
Total Alkalinity		10400		mg/L	1000	mg/L
Total Dissolved Solids		46700		mg/L	1000	mg/L
Chemical Oxygen Demand (COD)		53400		mg/L	2000	mg/L

Notes:

1. Results shown are reported for sample collected from the East 500 Leachate Tank on December 8, 2009 and were submitted to Test America Laboratories for analysis.

2. Laboratory Qualifiers:

G The reporting limit is elevated due to matrix interference.
J Amount reported is less than reportable limit
a Spike analyte recovery is outside control limits
U Non detect
Q Estimated maximum concentration
B Method Blank Contamination
NC The recovery and/or RPD (relevant percent distance) were not calculated
MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

Table 2. Liquid Levels and Percent Perforations Exposed

Well ID	A2	B1R	B2R	C1R(2)	C2R	D1	D2R	E1	E2R	F1-M	F2	I1R	J1R	K1R	N1R	PW-A1R(2)	PW-14R(3)	PW-0041R(2)
Total Casing Lngth (ft)	68	36	78	48	123	57	123	70	123	60	68	121	122	56	122	61.5	43	73
Total Perforated Pipe Length (ft)	45	16	54	23	99	36	99	45	99	39	44	96	97	31	97	38	21	55
October, 2009																		
Date	10/27	10/9	10/29	10/9	10/29	10/27	10/29	10/27	10/27	10/27	10/27	10/27	10/27	10/27	10/29	10/9	10/9	10/9
Depth To Fluid (ft)	36.1	17.9	10.1	18.8	44.1	5.8	59.4	15.9	61.4	18.6	38.2	32.9	55	25.3	22.5	36.6	22.9	51.8
% Perforations Exposed	29%	0%	0%	0%	20%	0%	36%	0%	38%	0%	32%	8%	31%	1%	0%	34%	4%	61%
November, 2009																		
Date	11/22	11/22	N/A	11/22	11/16	11/22	11/15	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/16	11/22	11/22	11/18
Depth To Fluid (ft)	35.7	20.0	N/A	19.7	24.1	9.0	59.2	22.0	61.0	30.4	38.6	30.0	54.8	25.0	21.3	36.0	26.9	51.9
% Perforations Exposed	28%	0%	N/A	0%	0%	0%	36%	0%	37%	24%	33%	5%	31%	0%	0%	33%	23%	62%
December, 2009																		
Date	12/23	12/23	N/A	12/23	12/24	12/23	12/24	12/23	12/24	12/23	12/23	12/23	12/23	12/23	12/18	12/24	12/24	12/23
Depth To Fluid (ft)	35.2	20.2	N/A	19.0	23.9	10.5	59.2	22.0	61.2	30.2	38.7	30.2	54.1	24.8	32.4	35.8	26.9	51.4
% Perforations Exposed	27%	1%	N/A	0%	0%	0%	36%	0%	38%	24%	33%	5%	30%	0%	8%	32%	23%	61%
January, 2010																		
Date	1/26	1/22	N/A	1/22	1/26	1/22	1/26	1/22	1/26	1/22	1/26	1/22	1/26	1/26	1/26	1/22	1/22	1/26
Depth To Fluid (ft)	23.2	19.9	N/A	7.4	40.8	6.2	61.0	22.9	59.0	15.7	35.6	27.9	50.3	22.6	18.2	36.4	27.7	51.9
% Perforations Exposed	0%	0%	N/A	0%	17%	0%	37%	0%	35%	0%	26%	3%	26%	0%	0%	34%	27%	62%

Well ID	PW-43R(2)	PW-56R(2)	PW-57R	PW-61R(2)	PW-62R(2)	PW-101	PW-102	PW-103R	PW-104	PW-105	PW-106R	PW-107	PW-108R	PW-109	PW-110	PW-111	PW-112	PW-113
Total Casing Lngth (ft)	102	102	85	74	91	78	78	105	78	78	69	66	50	37	31	62	77	78
Total Perforated Pipe Length (ft)	84	84	67	48	73	60	60	81	60	60	45	45	26	19	13	44	59	60
October, 2009																		
Date	11/22	11/22	N/A	11/22	11/16	11/22	11/15	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/16	11/22	11/22	11/18
Depth To Fluid (ft)	35.7	20.0	N/A	19.7	24.1	9.0	59.2	22.0	61.0	30.4	38.6	30.0	54.8	25.0	21.3	36.0	26.9	51.9
% Perforations Exposed	28%	0%	N/A	0%	0%	0%	36%	0%	37%	24%	33%	5%	31%	0%	0%	33%	23%	62%
November, 2009																		
Date	11/22	11/16	11/16	11/16	11/16	11/22	11/22	11/15	11/16	11/16	11/22	11/22	11/16	11/18	11/18	11/18	11/17	11/18
Depth To Fluid (ft)	50.5	45.4	57.0	67.3	62.0	40.4	22.1	63.6	29.8	32.4	50.4	43.4	41.9	31.1	23.3	63.7	73.7	72.3
% Perforations Exposed	39%	33%	58%	86%	60%	37%	7%	49%	20%	24%	59%	50%	69%	69%	41%	100%	94%	91%
December, 2009																		
Date	12/24	12/11	12/11	12/23	12/11	12/23	12/24	12/24	12/24	12/11	12/24	12/23	12/11	12/23	12/23	12/23	12/23	12/23
Depth To Fluid (ft)	64.5	46.6	58.4	67.4	62.0	40.0	19.2	63.6	29.8	34.2	50.6	43.3	43.0	31.1	23.3	63.7	73.7	72.1
% Perforations Exposed	55%	34%	60%	86%	60%	37%	2%	49%	20%	27%	59%	50%	73%	69%	41%	100%	94%	90%
January, 2010																		
Date	1/22	1/26	1/26	1/26	1/26	1/22	1/22	1/22	1/26	1/26	1/26	1/21	1/26	1/21	1/21	1/21	1/21	1/21
Depth To Fluid (ft)	55.5	42.2	59.3	60.1	61.1	39.6	16.2	61.3	27.5	33.6	50.4	43.2	38.5	31.3	25.6	63.2	73.5	65.1
% Perforations Exposed	45%	29%	62%	71%	59%	36%	0%	46%	16%	26%	59%	49%	56%	70%	58%	100%	94%	79%

Table 2. Liquid Levels and Percent Perforations Exposed

Well ID	PW-114	PW-115R	PW-117R	PW-118R	PW-119R	PW-120	PW-121R(2)	PW-122R	PW-123	PW-124	PW-125	PW-127	PW-128	PW-129	PW-130	PW-131R	PW-132R	PW-138R
Total Casing Lngth (ft)	78	84	105	89	72	78	46	43.5	78	63	75	75	119.7	121	121	81	62	70
Total Perforated Pipe Length (ft)	60	60	80	64	50	60	31	25	60	45	60	60	103	103	103	58	40	46
October, 2009																		
Date	10/9	10/29	10/9	10/9	10/9	10/9	10/9	10/9	10/29	10/9	10/29	10/29	10/29	10/29	10/29	10/29	10/29	10/29
Depth To Fluid (ft)	65.7	70.6	35.4	66.6	54.8	34.4	31.9	37.2	21.8	49.6	45	22.6	62.8	64.5	70.1	30.5	30.9	33.4
% Perforations Exposed	80%	78%	13%	65%	66%	27%	55%	75%	6%	70%	50%	13%	45%	45%	51%	13%	22%	20%
November, 2009																		
Date	11/18	11/16	11/22	11/16	11/22	11/22	11/22	11/22	N/A	11/22	11/16	11/16	11/16	11/16	11/16	N/A	11/16	11/16
Depth To Fluid (ft)	66.0	70.7	32.7	66.7	55.2	34.1	32.6	37.3	N/A	28.4	44.1	24.3	51.7	64.4	85.5	N/A	30.7	33.5
% Perforations Exposed	80%	78%	10%	65%	66%	27%	57%	75%	N/A	23%	49%	16%	34%	45%	66%	N/A	22%	21%
December, 2009																		
Date	12/23	12/23	12/23	12/23	12/23	12/24	12/24	12/24	N/A	12/23	12/24	12/23	12/23	12/23	12/23	N/A	12/23	12/23
Depth To Fluid (ft)	65.6	70.5	32.5	65.9	55.0	34.2	32.7	37.1	N/A	28.1	44.0	22.1	53.1	64.1	84.2	N/A	31.2	32.4
% Perforations Exposed	79%	78%	9%	64%	66%	27%	57%	74%	N/A	22%	48%	12%	35%	45%	64%	N/A	23%	18%
January, 2010																		
Date	1/26	1/26	1/26	1/26	1/22	1/20	1/22	1/22	N/A	1/26	1/26	1/26	1/26	1/26	1/26	N/A	1/26	1/26
Depth To Fluid (ft)	66.0	70.3	32.3	66.5	55.6	32.7	32.1	37.2	N/A	27.7	43.5	25.3	53.0	63.7	83.9	N/A	30.5	32.0
% Perforations Exposed	80%	77%	9%	65%	67%	25%	55%	75%	N/A	22%	48%	17%	35%	44%	64%	N/A	21%	17%

Well ID	PW-141R	PW-142R	PW-144	PW-145	PW-146	PW-147R	PW-148	PW-149	PW-150	PW-151	PW-152	PW-153	PW-154	PW-155	PW-156	PW-157	PW-158R	PW-159
Total Casing Lngth (ft)	104	80	102	120	120	80	53	51	50	43	42	52	42	42	112	112	104	117
Total Perforated Pipe Length (ft)	80	58	82	100	100	58	33	31	30	23	22	32	22	22	89	89	80	97
October, 2009																		
Date	10/29	10/9	10/29	10/26	10/29	10/9	10/9	10/9	10/9	10/30	10/9	10/9	10/9	10/9	10/29	10/29	10/29	10/27
Depth To Fluid (ft)	49.3	69	37.9	57.1	46.1	18	23.8	50.1	28.5	28.5	32.9	44.9	41.3	34.9	64.3	57	53.9	55.7
% Perforations Exposed	32%	81%	22%	37%	26%	0%	12%	97%	28%	37%	59%	78%	97%	68%	46%	38%	37%	37%
November, 2009																		
Date	11/16	11/22	11/16	11/16	11/16	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/16	11/16	11/16	11/22
Depth To Fluid (ft)	49.0	36.5	36.0	56.7	49.5	22.3	23.1	49.8	29.3	27.9	33.1	44.9	41.3	34.6	88.7	56.6	51.1	55.5
% Perforations Exposed	31%	25%	20%	37%	30%	1%	9%	96%	31%	34%	60%	78%	97%	66%	74%	38%	34%	37%
December, 2009																		
Date	12/23	12/23	12/18	12/18	12/18	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/24	12/23	12/18	12/18	12/23
Depth To Fluid (ft)	52.1	36.4	64.5	59.9	58.1	41.7	25.3	35.9	28.6	27.5	33.2	44.8	41.3	34.5	89.5	56.9	54.0	55.9
% Perforations Exposed	35%	25%	54%	40%	38%	34%	16%	51%	29%	33%	60%	78%	97%	66%	75%	38%	38%	37%
January, 2010																		
Date	1/26	1/22	1/26	1/26	1/26	1/22	1/22	1/22	1/22	1/22	1/22	1/22	1/22	1/22	1/26	1/26	1/26	1/26
Depth To Fluid (ft)	51.1	70.0	53.0	54.9	56.2	46.6	22.2	29.7	29.7	30.4	33.5	44.8	41.3	34.3	82.1	56.4	49.2	53.8
% Perforations Exposed	34%	83%	40%	35%	36%	42%	7%	31%	32%	45%	61%	78%	97%	65%	66%	38%	32%	35%

Table 2. Liquid Levels and Percent Perforations Exposed

Well ID	PW-160	PW-161	PW-162	PW-163R	PW-164	PW-165	PW-166	PW-167R	PW-168(M)	PW-169	PW-170	PW-171	PW-172	PW-173	PW-174	PW-175	PW-176	PW-177
Total Casing Lngth (ft)	119	117	102	100	117	117	122	80	93	61	40	47	117	114	105	80	77	44
Total Perforated Pipe Length (ft)	97	95	80	75	97	97	95	58	68	15	18	22	92	90	80	58	55	24
October, 2009																		
Date	10/27	10/27	10/27	10/27	10/27	10/27	10/27	10/9	10/30	10/27	10/29	10/27	10/27	10/29	10/29	10/29	10/29	10/30
Depth To Fluid (ft)	46.9	51.6	54.2	47.2	49.2	55.8	44.9	15.8	73	55	26.7	25.5	43.2	70.8	23.6	24.8	39.6	38.8
% Perforations Exposed	26%	31%	40%	30%	30%	37%	19%	0%	71%	60%	26%	2%	20%	52%	0%	5%	32%	78%
November, 2009																		
Date	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/22	11/17	11/18	11/15	11/22	11/22	11/15	11/16	11/16	11/16	11/17
Depth To Fluid (ft)	68.7	51.3	53.7	47.0	49.0	56.0	52.0	17.3	73.5	55.3	25.5	25.5	43.4	58.1	25.7	43.3	48.5	38.6
% Perforations Exposed	48%	31%	40%	29%	30%	37%	26%	0%	71%	62%	19%	2%	20%	38%	1%	37%	48%	78%
December, 2009																		
Date	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/11	12/11	12/11
Depth To Fluid (ft)	69.1	51.1	54.0	47.1	47.5	55.4	55.2	22.9	73.7	55.2	25.9	25.5	43.9	58.1	25.7	43.8	44.2	38.4
% Perforations Exposed	49%	31%	40%	29%	28%	36%	30%	2%	72%	61%	22%	2%	21%	38%	1%	38%	40%	77%
January, 2010																		
Date	1/26	1/26	1/26	1/26	1/26	1/26	1/22	1/22	1/21	1/21	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/21
Depth To Fluid (ft)	66.8	51.3	54.3	44.2	45.2	49.9	25.9	24.3	74.1	54.0	25.5	25.8	43.8	48.5	21.5	24.9	41.9	38.2
% Perforations Exposed	46%	31%	40%	26%	26%	31%	0%	4%	72%	53%	19%	4%	20%	27%	0%	5%	36%	76%

Well ID	PW-178	PW-179	PW-180	PW-181	PW-182	PW-307	PW-358	PW-361	PW-362B	PW-363	PW-364	PW-366	PW-367	PW-368	PW-369	Q1R	S1R	T1R
Total Casing Lngth (ft)	34	61	93	85	42	64	62	104	78	82	82	39	53	47	38	54	125	125
Total Perforated Pipe Length (ft)	14	36	68	60	17	42	38	80	53	58	58	25	39	33	24	30	100	100
October, 2009																		
Date	10/30	10/26	10/9	10/27	10/9	10/27	10/29	10/27	10/26	10/29	10/29	10/26	10/26	10/26	10/26	10/29	10/26	10/29
Depth To Fluid (ft)	32.4	38.7	77.4	26.6	7.2	35.2	29.9	65.8	34.7	47.5	36	22.4	22.6	26.4	30.6	40	47.5	63.1
% Perforations Exposed	89%	38%	77%	3%	0%	31%	16%	52%	18%	41%	21%	34%	22%	38%	69%	53%	23%	38%
November, 2009																		
Date	11/17	11/17	11/18	11/22	11/22	11/22	11/15	11/22	11/22	11/15	11/15	11/22	11/22	11/22	11/22	11/16	11/16	11/16
Depth To Fluid (ft)	32.0	38.6	77.9	32.0	6.8	34.9	29.0	65.4	34.3	46.6	35.5	22.2	22.4	25.6	30.3	40.0	47.0	98.0
% Perforations Exposed	86%	38%	78%	12%	0%	31%	13%	52%	18%	39%	20%	33%	22%	35%	68%	53%	22%	73%
December, 2009																		
Date	12/11	12/11	12/23	12/23	12/24	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/18
Depth To Fluid (ft)	32.4	38.8	78.0	33.1	7.0	34.7	28.6	65.1	34.0	46.0	35.6	22.3	22.3	25.5	30.2	39.8	50.3	61.3
% Perforations Exposed	89%	38%	78%	14%	0%	30%	12%	51%	17%	38%	20%	33%	21%	35%	68%	53%	25%	36%
January, 2010																		
Date	1/21	1/21	1/26	1/22	1/22	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26	1/26
Depth To Fluid (ft)	32.0	38.5	77.7	23.6	11.2	33.4	28.0	64.2	32.8	43.1	33.7	21.9	21.1	24.0	28.8	37.7	49.8	59.9
% Perforations Exposed	86%	38%	78%	0%	0%	27%	11%	50%	15%	33%	17%	32%	18%	30%	62%	46%	25%	35%

Table 2. Liquid Levels and Percent Perforations Exposed

Well ID	U1R	W-1R	W1R(2)	W-2R(M)	W-3	W-4	W-5	W-7	W-8	W-9	W-10	W-11	W-12R	W-13R	W-31R	W-32R	W-33	W-34
Total Casing Lngth (ft)	113	46	72	85	33	37	35	38	34	36	103	119	43	43	92	54	52	81
Total Perforated Pipe Length (ft)	88	20	48	65	12	16	13	14	15	18	85	94	21	21	72	29	34	43
October, 2009																		
Date	10/27	10/29	10/29	10/30	10/30	10/26	10/26	10/26	10/26	10/26	10/26	10/26	10/30	10/30	10/30	10/30	10/26	10/26
Depth To Fluid (ft)	49.1	20	33.2	52.2	31	30.3	32.3	30.8	24.6	34.6	31.3	35.6	37.2	31.3	45	43.8	46.8	51.6
% Perforations Exposed	27%	0%	19%	50%	83%	58%	79%	49%	37%	92%	16%	11%	72%	44%	35%	65%	85%	32%
November, 2009																		
Date	11/22	11/16	11/16	11/17	11/17	11/17	11/17	11/18	11/18	11/18	11/18	11/18	11/22	11/22	11/17	11/17	11/17	11/17
Depth To Fluid (ft)	49.0	17.5	34.4	56.3	31.0	29.8	32.8	31.0	24.6	37.5	31.0	39.4	36.9	31.5	45.0	44.0	45.0	51.7
% Perforations Exposed	27%	0%	22%	56%	83%	55%	83%	50%	37%	100%	15%	15%	71%	45%	35%	66%	79%	32%
December, 2009																		
Date	12/23	12/23	12/24	12/11	12/11	12/11	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/23	12/11	12/11	12/11	12/23
Depth To Fluid (ft)	48.9	18.2	39.2	42.8	30.8	29.7	32.7	30.9	24.7	37.5	30.9	39.4	36.9	31.4	45.6	44.1	42.4	51.8
% Perforations Exposed	27%	0%	32%	35%	82%	54%	82%	49%	38%	100%	15%	15%	71%	45%	36%	66%	72%	32%
January, 2010																		
Date	1/26	1/26	1/26	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21	1/21
Depth To Fluid (ft)	46.1	19.0	34.2	42.5	31.0	29.5	32.7	30.9	24.6	37.4	31.1	39.5	37.0	31.5	45.1	40.4	42.7	52.0
% Perforations Exposed	24%	0%	21%	35%	83%	53%	82%	49%	37%	100%	15%	15%	71%	45%	35%	53%	73%	33%

Well ID	W-35	W-36	W-37	W-38	W-39	W-42R(2)	W-56R(3)	W-58R	W-59	W-60	W-68	W-69R
Total Casing Lngth (ft)	64	70	79	79	81	100	88	82	108	110	79	47
Total Perforated Pipe Length (ft)	46	35	62	57	62	75	64	58	71	79	44	21
October, 2009												
Date	10/26	10/26	10/26	10/26	10/30	10/9	10/29	10/30	10/26	10/30	10/26	10/30
Depth To Fluid (ft)	63.1	47.3	44.2	42.4	54.8	77.8	39.4	64	74.4	75.6	50.7	40.3
% Perforations Exposed	98%	35%	44%	36%	58%	70%	24%	69%	53%	56%	36%	68%
November, 2009												
Date	11/18	11/18	11/18	11/18	11/18	11/22	11/16	11/17	11/18	11/18	11/18	11/18
Depth To Fluid (ft)	63.3	47.7	39.2	42.3	55.4	77.8	29.5	64.0	74.6	75.8	50.9	40.3
% Perforations Exposed	98%	36%	36%	36%	59%	70%	9%	69%	53%	57%	36%	68%
December, 2009												
Date	12/23	12/23	12/23	12/23	12/23	12/23	12/11	12/23	12/23	12/23	12/23	12/23
Depth To Fluid (ft)	63.3	47.7	39.1	42.3	55.3	77.8	30.3	64.1	74.5	76.3	50.5	40.5
% Perforations Exposed	98%	36%	36%	36%	59%	70%	10%	69%	53%	57%	35%	69%
December, 2009												
Date	1/21	1/21	1/21	1/21	1/21	1/22	1/26	1/21	1/21	1/21	1/21	1/21
Depth To Fluid (ft)	63.2	47.7	39.1	42.1	55.1	55.4	30.3	63.0	75.6	75.9	51.2	40.2
% Perforations Exposed	98%	36%	36%	35%	58%	41%	10%	67%	54%	57%	37%	68%

Table 3. South Slope and West Berm Piezometer Readings

South Slope

Well ID	**SS-1**	**SS-1**	**SS-1**	**SS-3**	**SS-3**	**SS-3**	**SS-5**	**SS-5**	**SS-5**	**SS-7**	**SS-7**	**SS-7**
Depth Setting (ft)	18	23	28	17	22	25	14	19	24	12	17	22
October, 2009												
Date	N/A	N/A	26-Oct	26-Oct	26-Oct	26-Oct	26-Oct	N/A	N/A	26-Oct	26-Oct	26-Oct
Elevation	N/A	N/A	1149.82	1161.41	1152.50	1149.81	1165.57	N/A	N/A	1165.53	1160.49	1155.63
November, 2009												
Date	N/A	N/A	N/A	9-Nov	9-Nov	9-Nov	N/A	N/A	N/A	9-Nov	9-Nov	9-Nov
Elevation	N/A	N/A	N/A	1157.45	1152.98	1153.04	N/A	N/A	N/A	1165.60	1160.56	1155.72
December, 2009												
Date	N/A	N/A	21-Dec	21-Dec	21-Dec	21-Dec	21-Dec	N/A	N/A	21-Dec	21-Dec	21-Dec
Elevation	N/A	N/A	-999.00	1160.78	1152.71	1149.08	-999.00	N/A	N/A	1165.24	1160.20	1155.37
Janaury, 2010												
Date	N/A	N/A	6-Jan	6-Jan	6-Jan	6-Jan	6-Jan	N/A	N/A	6-Jan	6-Jan	6-Jan
Elevation	N/A	N/A	-999.00	1160.52	1151.99	1149.46	-999.00	N/A	N/A	1165.19	1160.12	1154.77

West Berm

Well ID	**WBPZ-1**	**WBPZ-1**	**WBPZ-2**	**WBPZ-2**	**WBPZ-3**	**WBPZ-3**
Depth Setting (ft)	150	175	150	190	135	160
Elevation for F.S. = 1.2	1102	1102	1120	1120	1116	1116
Elevation for F.S, = 1.5	1048	1048	1081	1081	1095	1095
October, 2009						
Date	14-Oct	14-Oct	14-Oct	14-Oct	14-Oct	14-Oct
Elevation	975.01	949.58	986.17	N/A	1010.86	987.60
November, 2009						
Date	12-Nov	12-Nov	12-Nov	12-Nov	12-Nov	12-Nov
Elevation	974.45	948.83	985.61	-999.00	1010.25	985.84
December, 2009						
Date	21-Dec	21-Dec	21-Dec	21-Dec	21-Dec	21-Dec
Elevation	974.67	948.79	985.55	-999.00	1010.15	985.75
January, 2010						
Date	6-Jan	6-Jan	6-Jan	6-Jan	6-Jan	6-Jan
Elevation	974.28	948.63	985.40	-999.00	1010.02	985.31

Note: Negative values for elevation indicate a suction condition.

Attachment 3

Figures

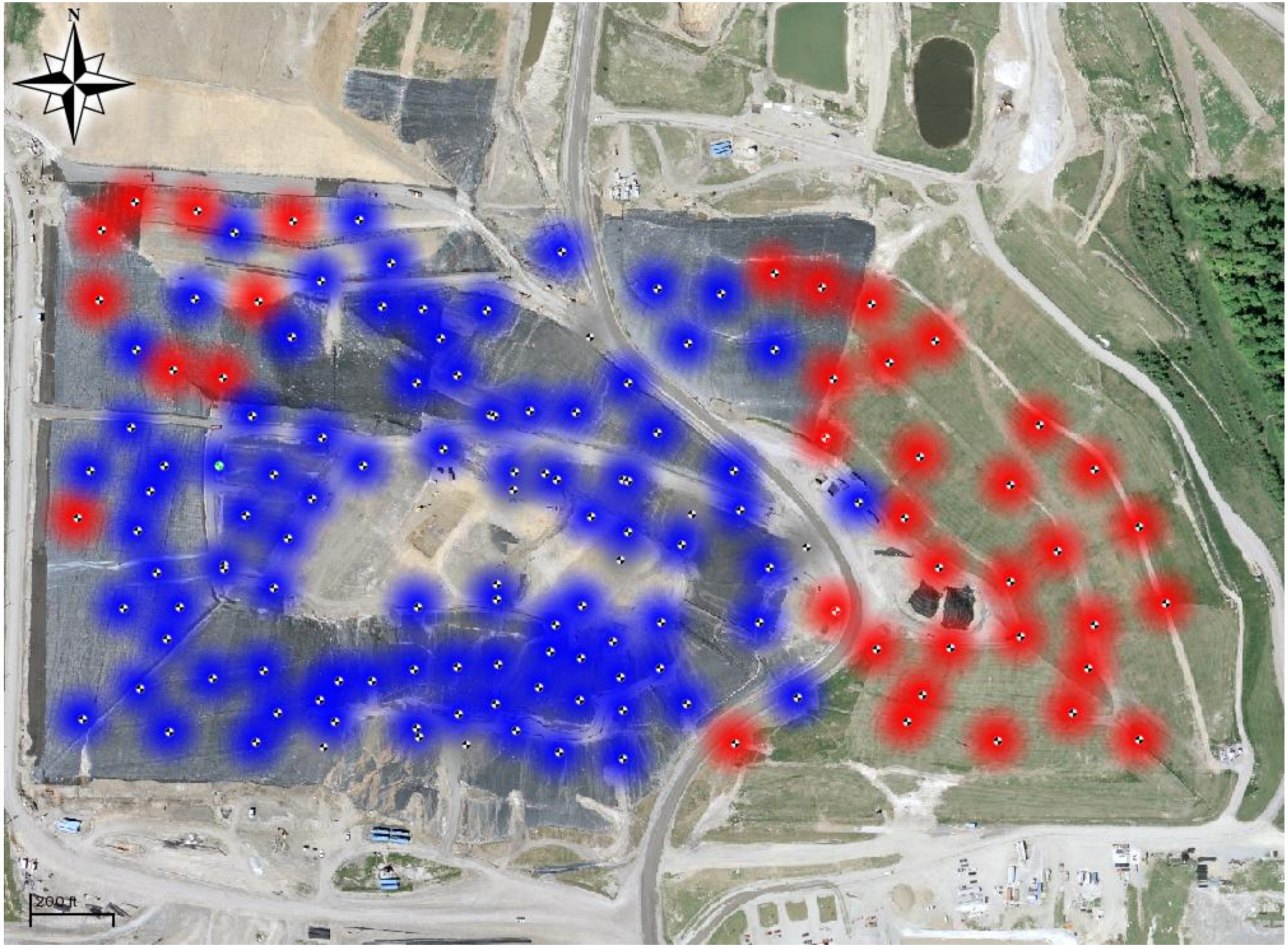


Figure 1
Average Methane to Carbon Dioxide Ratio

Countywide Recycling and Disposal Facility
3619 Gracemont St. S.W.
East Sparta, Ohio

Operation, Monitoring and Maintenance (OM&M) Plan
Monthly Report

Color Legend

< 1
> 1
No Data

Symbol Legend

Gas Well

(Red symbol denotes rise in value category from previous reporting period.)
(Green symbol denotes decrease in value category from previous reporting period.)

A radius influence of 100 feet is assumed at each device.

Reporting Period: Feb, 2010
Map Generated On: 02/11/2010

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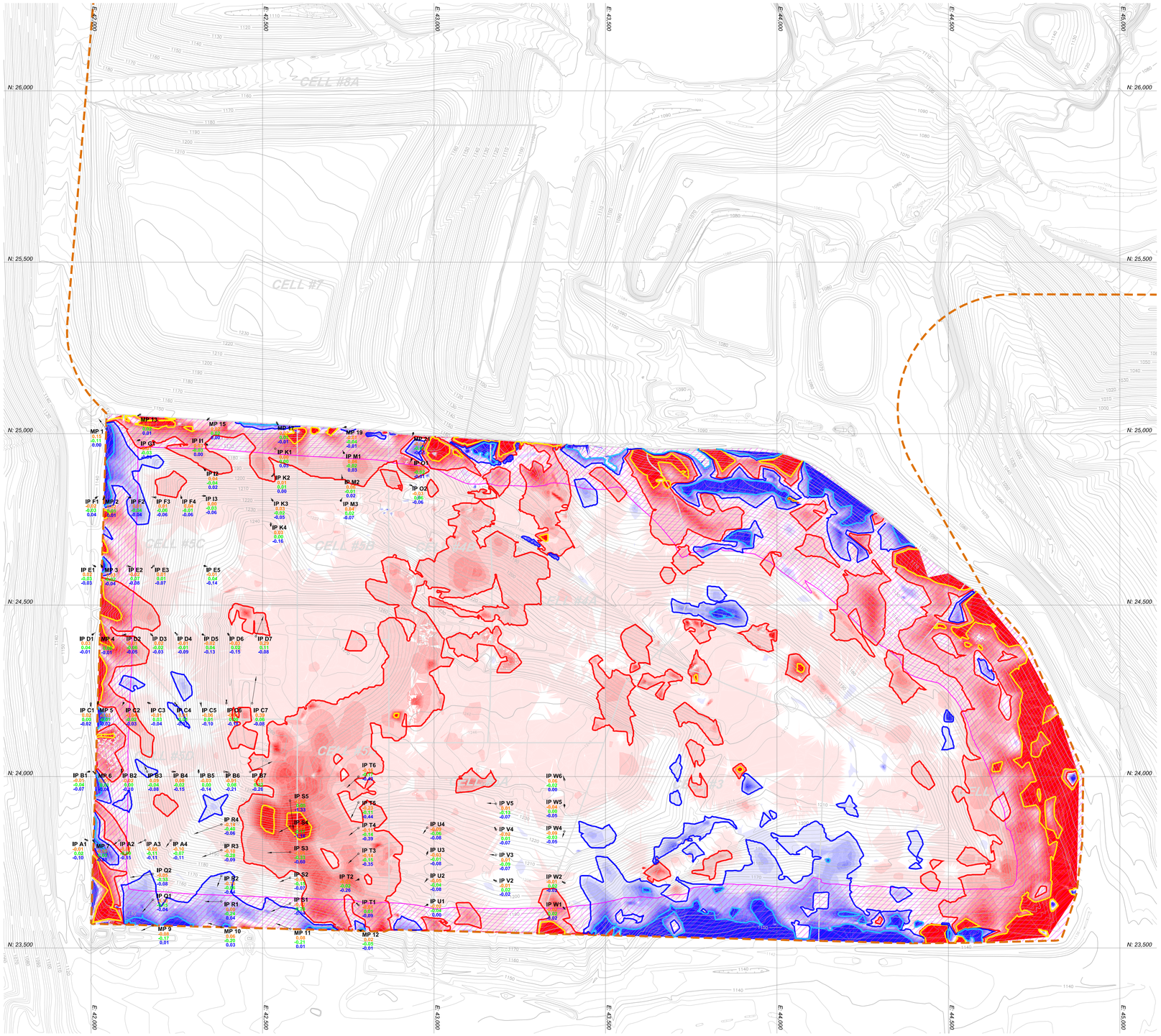
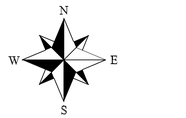




Scale: 1 in . = 150 ft.

0' 150' 300' 450'

Graphic Scale

LEGEND:

- 1120 — EXISTING CONTOUR (AERIAL MAPPING 5/21/09), CTR INT. = 2' (SHOWN FOR REFERENCE ONLY)
- 2% RATE OF SETTLEMENT LIMIT
- >10% RATE OF SETTLEMENT LIMIT
- 2% RATE OF RISE IN ELEVATION
- >10% RATE OF RISE IN ELEVATION
- ≤ 60ft OF WASTE DEPTH

ANNUALIZED RATE (%) OF SETTLEMENT COLOR LEGEND

- Greater than 10.0%
- 9.0% TO 10.0%
- 8.0% TO 9.0%
- 7.0% TO 8.0%
- 6.0% TO 7.0%
- 5.0% TO 6.0%
- 4.0% TO 5.0%
- 3.0% TO 4.0%
- 2.0% TO 3.0%
- 0.0% TO 2.0%
- 0.0% TO 0.0%
- -2.0% TO 0.0%
- -3.0% TO -2.0%
- -4.0% TO -3.0%
- -5.0% TO -4.0%
- -6.0% TO -5.0%
- -7.0% TO -6.0%
- -8.0% TO -7.0%
- -9.0% TO -8.0%
- -10.0% TO -9.0%
- Greater than -10.0%

VECTOR LABELING CONVENTION:

IP S2
CHANGE IN NORTHING (ft)
CHANGE IN EASTING (ft)
CHANGE IN ELEVATION (ft)

GENERAL NOTE:
HORIZONTAL MOVEMENT VECTORS WERE PROVIDED BY P.J. CAREY & ASSOCIATES, P.C.
VECTORS DEMONSTRATE THE HORIZONTAL MOVEMENT BETWEEN THE DATES OF 12/29/09 & 1/26/10.

ISSUE DATE	02/28/10	SCALE	1" = 150'	CTR INT.	2'
SURVEYED BY		MOAG	CHECKED BY	CRB	
DRAWN BY		BWS	APPROVED BY	CRB	

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

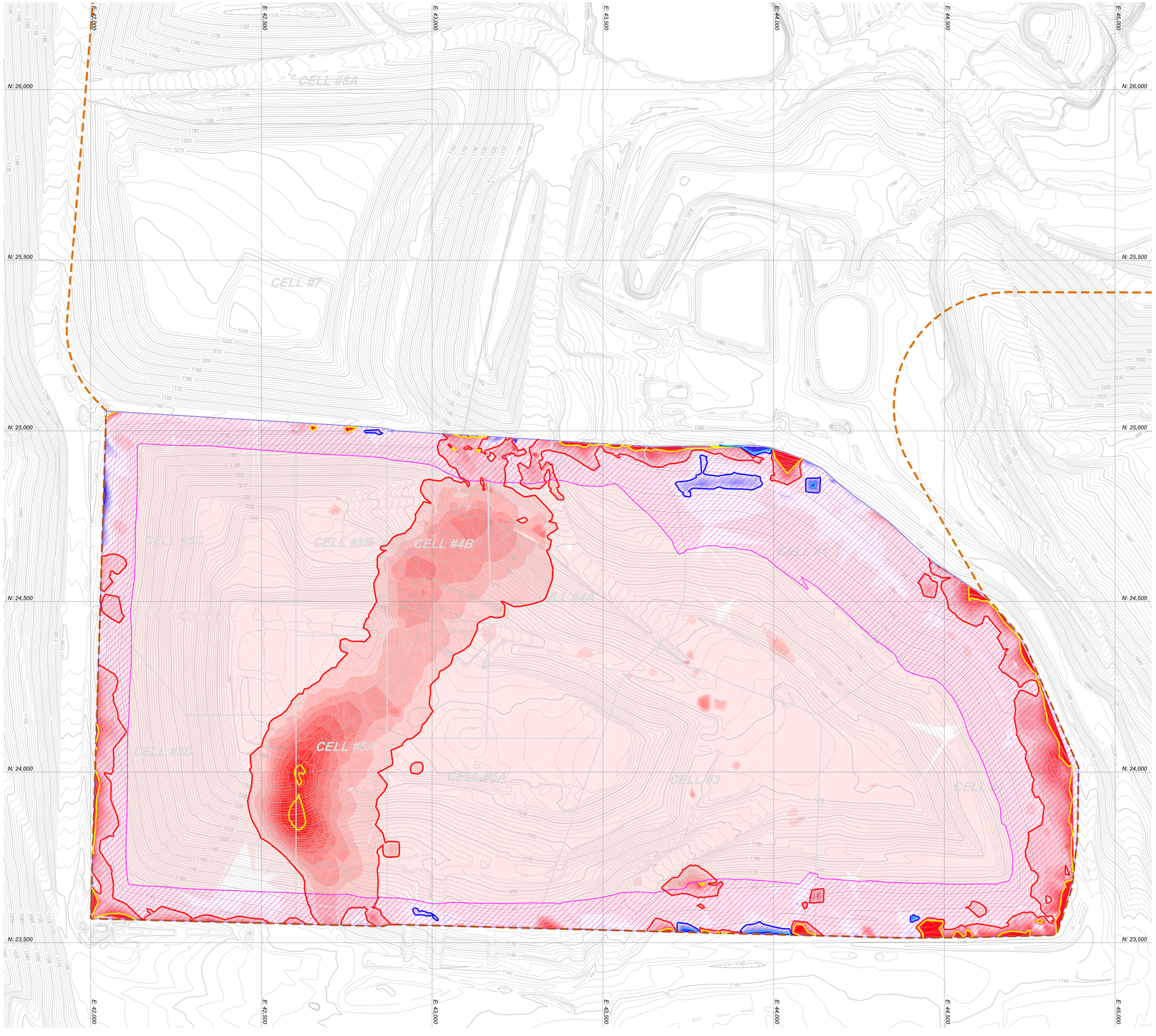
Diversified Engineering Inc.
CONSULTING ENGINEERS & SURVEYORS
2295 FAIR AVENUE, N.E.
NEW PHILADELPHIA, OH 44663
Phone: (330) 364-5531
Fax: (330) 364-4021
www.diversifiedengineering.com

PROJECT: COUNTYWIDE RDF

88 Ac. REMEDIATION UNIT

SHEET TITLE: INCREMENTAL SETTLEMENT MAP (JANUARY 2010)

FIGURE: 2



N
W E
S

Scale: 1 in . = 150 ft.

0' 150' 300' 450'

Graphic Scale

LEGEND:

- EXISTING CONTOUR (AERIAL MAPPING 5/21/09), CTR INT. = 2' (SHOWN FOR REFERENCE ONLY)
- 2% RATE OF SETTLEMENT LIMIT
- >10% RATE OF SETTLEMENT LIMIT
- 2% RATE OF RISE IN ELEVATION
- >10% RATE OF RISE IN ELEVATION
- ≤ 60ft OF WASTE DEPTH AS OF JANUARY 2010

AVERAGE ANNUALIZED MONTHY RATE (%) OF SETTLEMENT COLOR LEGEND

- Greater than 10.0%
- 9.0% TO 10.0%
- 8.0% TO 9.0%
- 7.0% TO 8.0%
- 6.0% TO 7.0%
- 5.0% TO 6.0%
- 4.0% TO 5.0%
- 3.0% TO 4.0%
- 2.0% TO 3.0%
- 0.0% TO 2.0%
- 0.0% TO 0.0%
- -2.0% TO 0.0%
- -3.0% TO -2.0%
- -4.0% TO -3.0%
- -5.0% TO -4.0%
- -6.0% TO -5.0%
- -7.0% TO -6.0%
- -8.0% TO -7.0%
- -9.0% TO -8.0%
- -10.0% TO -9.0%
- Greater than -10.0%

GENERAL NOTE:
THIS MAP REPRESENTS THE AVERAGE ANNUALIZED MONTHY SETTLEMENT FOR THE TIME PERIOD FROM OCTOBER 2009 THRU JANUARY 2010.

ISSUE DATE	02/09/10	SCALE	1" = 150'
SURVEYED BY		CHECKED BY	CRB
DRAWN BY	MOAG	APPROVED BY	CRB
REV	DATE	DESCRIPTION	DWN BY / DES BY / CHK BY / APP BY

CTR INT. 2'

Diversified Engineering Inc.
CONSULTING ENGINEERS & SURVEYORS
225 FAIR AVENUE, N.E.
NEW PHILADELPHIA, OH 44663
Phone: (330) 364-1631
Fax: (330) 364-4021
E-mail: info@deiohio.com

COUNTYWIDE RDF

PROJECT: 88 Ac. REMEDIATION UNIT

SHEET TITLE: AVERAGE ANNUALIZED MONTHLY SETTLEMENT (OCTOBER 2009 - JANUARY 2010)

FIGURE: 2A

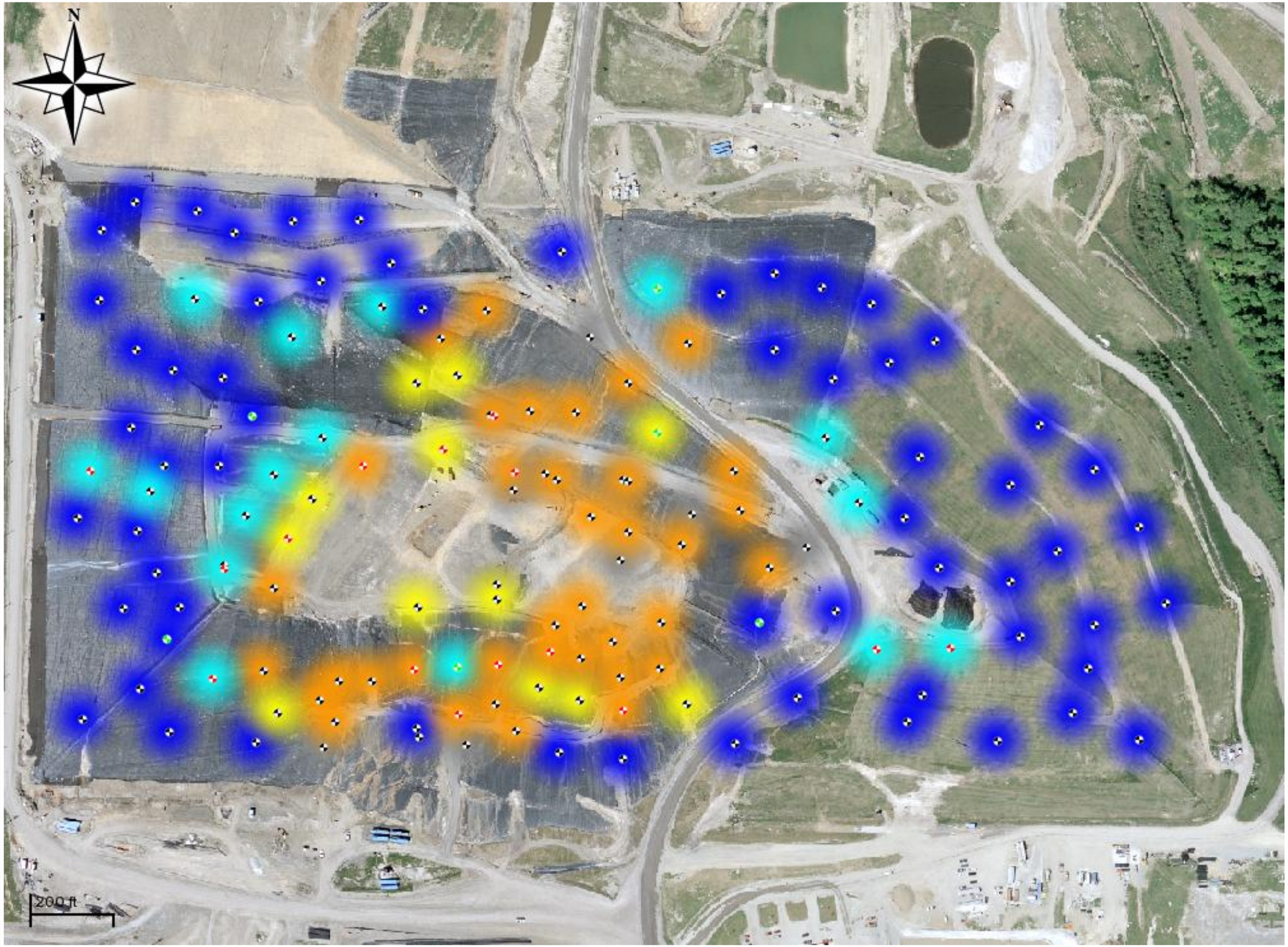


Figure 3
Average Wellhead Temperature

Countywide Recycling and Disposal Facility
3619 Gracemont St. S.W.
East Sparta, Ohio

Operation, Monitoring and Maintenance (OM&M) Plan
Monthly Report

Color Legend (deg F)

- < 131
- 131 < 150
- 150 < 180
- 180 < 210
- > 210
- No Data

Symbol Legend

Gas Well

(Red symbol denotes rise in value category from previous reporting period.) (Green symbol denotes decrease in value category from previous reporting period.)

A radius influence of 100 feet is assumed at each device.

Reporting Period: Feb, 2010

Map Generated On: 02/11/2010

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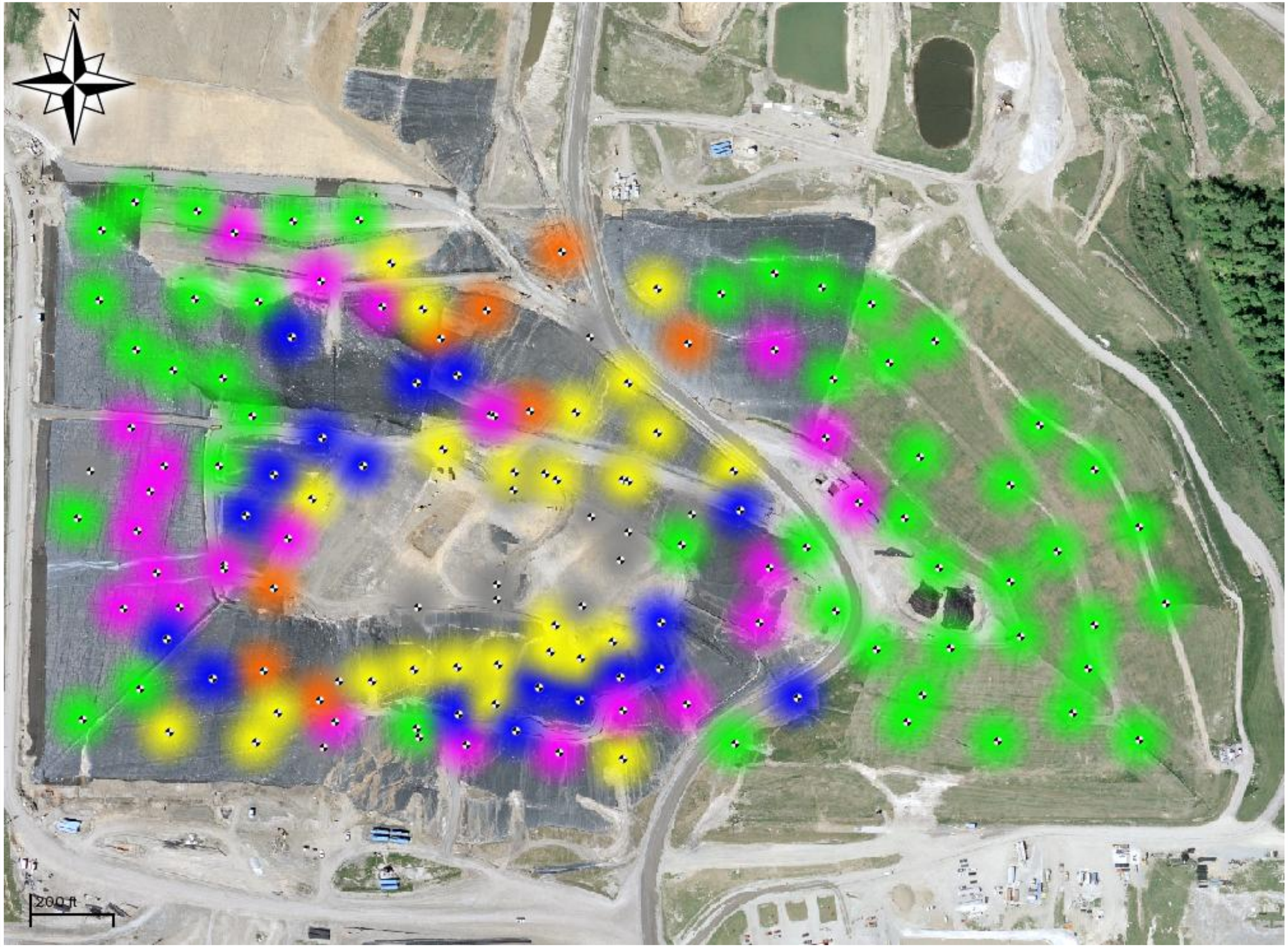

Figure 4
Carbon Monoxide Distribution

Countywide Recycling and Disposal Facility
3619 Gracemont St. S.W.
East Sparta, Ohio

Operation, Monitoring and Maintenance (OM&M) Plan
Monthly Report

Color Legend (ppm)

- < 100
- 100 to 500
- 500 to 1000
- 1000 to 2000
- > 2000
- No Data

Symbol Legend

Gas Well

A radius influence of 100 feet is assumed at each device.

Reporting Period: Oct, 2009

Map Generated On: 01/14/2010

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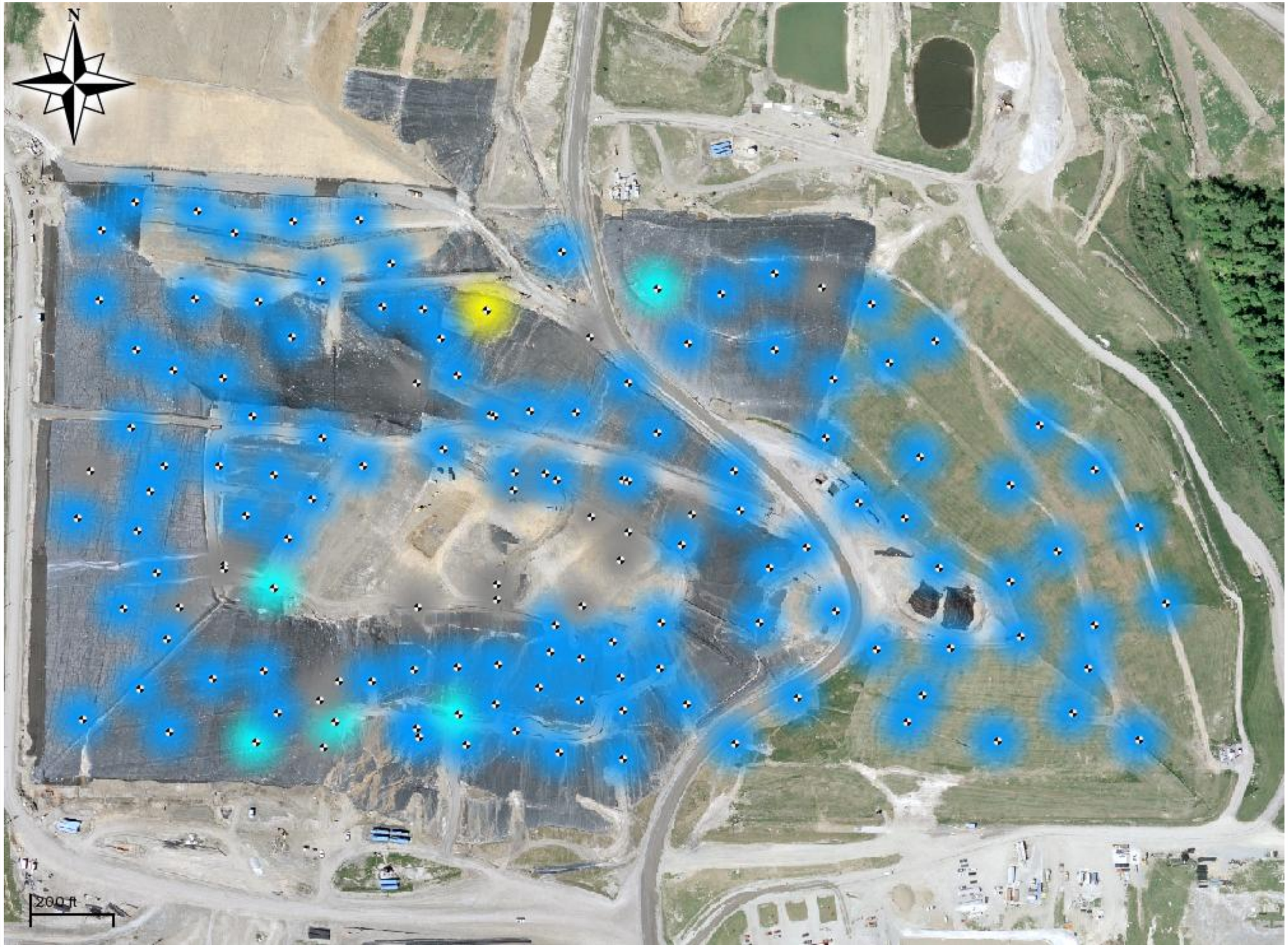


Figure 5
"Deadhead" Gas Well Pressure Distribution

Countywide Recycling and Disposal Facility
3619 Gracemont St. S.W.
East Sparta, Ohio

Operation, Monitoring and Maintenance (OM&M) Plan
Monthly Report

Color Legend (inches H2O)

- < 0
- 0 < 50
- 50 < 100
- 100 < 150
- 150 < 200
- > 200

Symbol Legend

Gas Well

(Red symbol denotes rise in value category from previous reporting period.) (Green symbol denotes decrease in value category from previous reporting period.)

A radius influence of 100 feet is assumed at each device.

Reporting Period: Nov, 2009

Map Generated On: 02/17/2010

REPUBLIC SERVICES

SHA IMPROVING EARTH

PREDICTIVE SERVICE®

safeguarding your future®

Figure 6. Aerial Infrared Photograph

Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 2/4/2010

PREDICTIVE SERVICE®
safeguarding your future®

Figure 7. Detailed Aerial Infrared Photograph

Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 2/4/2010

Attachment 4

Pin Movement Evaluation

P. J. Carey & Associates, P.C.

5878 Valine Way, Sugar Hill, Georgia 30518
Telephone (678) 482-5193
Fax (866) 845-3898
Email pjcarey@pjcarey.com

February 8, 2010

Mr. Michael Darnell
Division Manager
Republic Services
Countywide RDF
3619 Gracemont Street, SW
East Sparta, Ohio 44626

RE: Evaluation of Pin Movements
Countywide Slopes
January period

Dear Mike,

I have reviewed the pin survey data from the South, West and North Slopes at Countywide. The surveys were performed during the month of December by Diversified Engineering, Inc. (DEI) using optical survey methods. The survey data has been plotted in accordance with Section 6.5.4 of the Operation, Maintenance and Monitoring Plan creating Figures 11 through 19. In addition, we are providing two new vector plot maps that depict the pin movements for the monitoring period and since the onset of monitoring (October 6, 2009). Also included are tables showing the horizontal rate of movement for the December monitoring period and elevation motion since the original monitoring survey (October 6, 2009). Please note that we have limited the calculation of horizontal rate of movement to that based on weekly readings. It is quite evident by comparing rates of motion based on daily readings to those based on weekly readings on the S Line, that the level of repeatability on the survey does not allow for meaningful rate calculations in the horizontal direction to be made on a daily basis. We have also included a profiled view of the S line as requested, depicting the movements in profile during January and since October. This additional information has been attached after the aforementioned figures. A review of the data shows:

- Pins at IP C7, IP S5, and IP U4 exceeded the trigger rates of 0.05ft per day of horizontal movement once during January. Looking at the vector plots and the rate of movement table, it can be seen
    - C-7 moved in a non downslope direction. It is my understanding that C-7 is read with gps type equipment and is subject to lower accuracy of movement. The rate of movement in the subsequent two weeks was far lower than the trigger level.
    - S-5 continued to settle a significant amount but did not move in a direction consistent with the downslope pins on the S Line.

- U-4 slowed considerable to .0091 ft per day following the exceedence on 1/19/2010

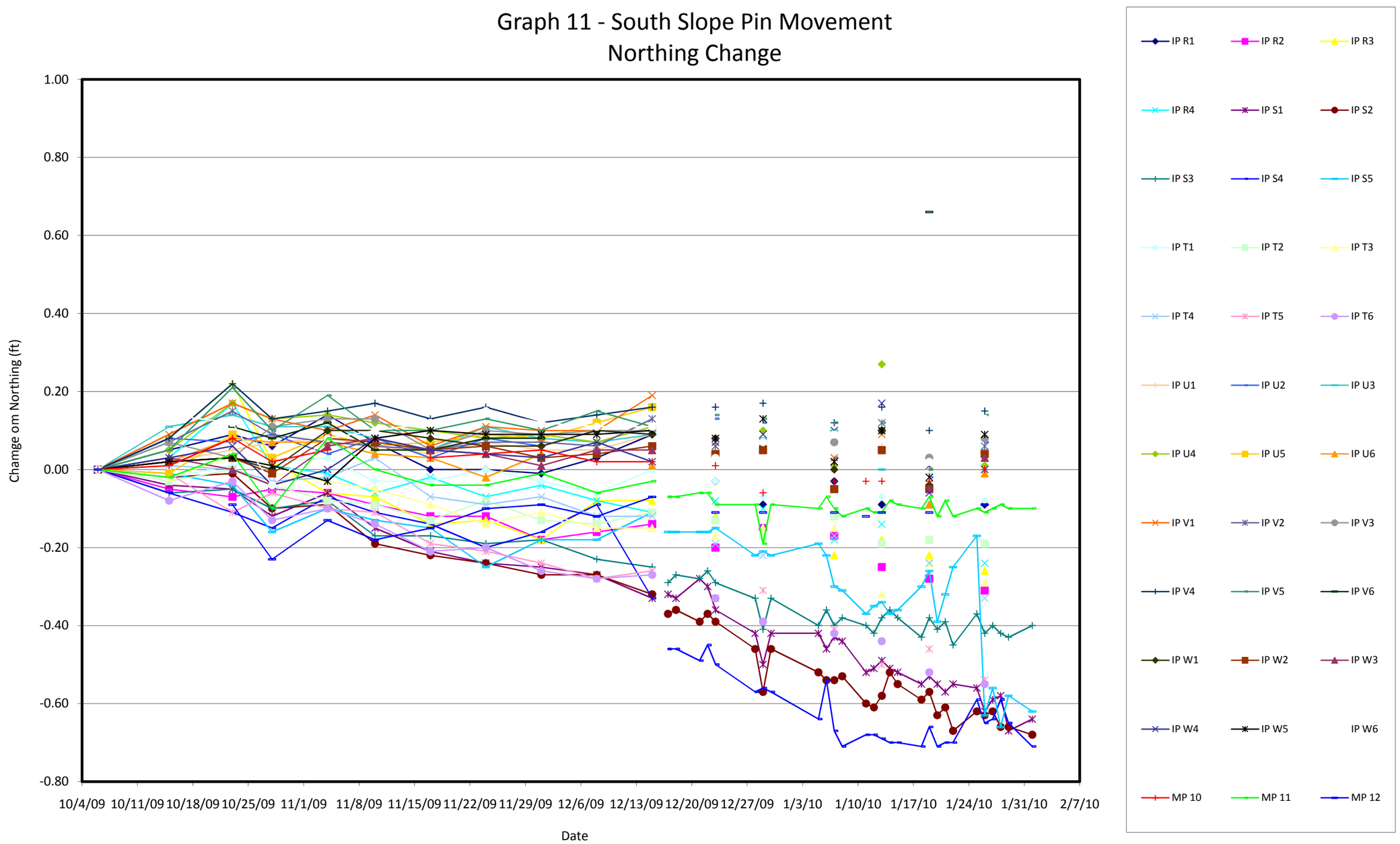
- Minor upward movements have occurred, relative to the original survey pin elevation at as many as 32 locations (max) during the period. These are called out on the attached tables and on the vector plot of displacement since October 6, 2009. The number of positive upward movement reduced to 7 during the 1/26/2010 monitoring event. No trend of upward displacement has been established and it remains my opinion that the upward movements are slight (less than 1 inch) as of the end of the period and related to frost heave, survey equipment changes and difficulty setting up over the exact pin locations.

No signs of instability are indicated..

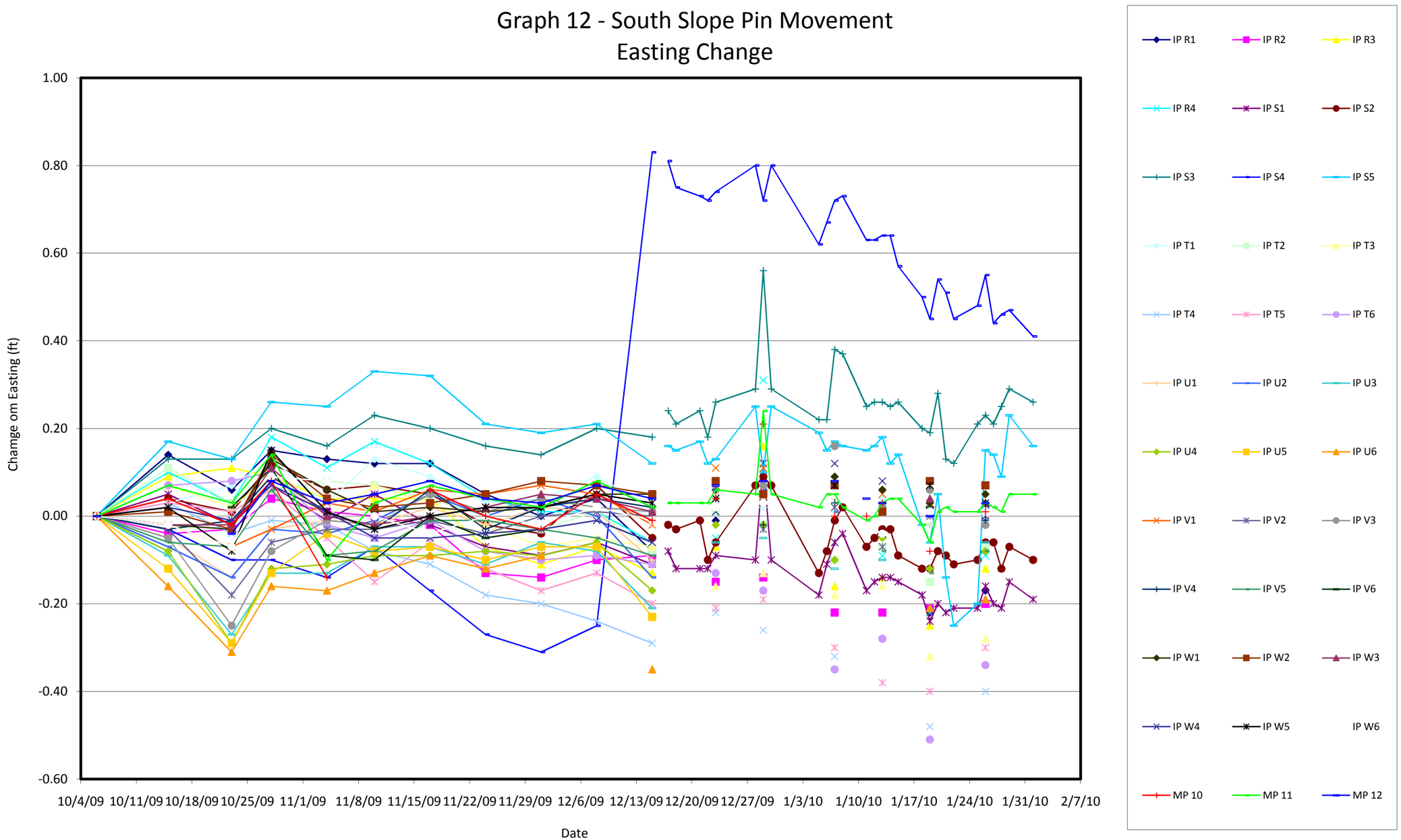
I hope this information is helpful to you. Please call if there are any questions

Sincerely,

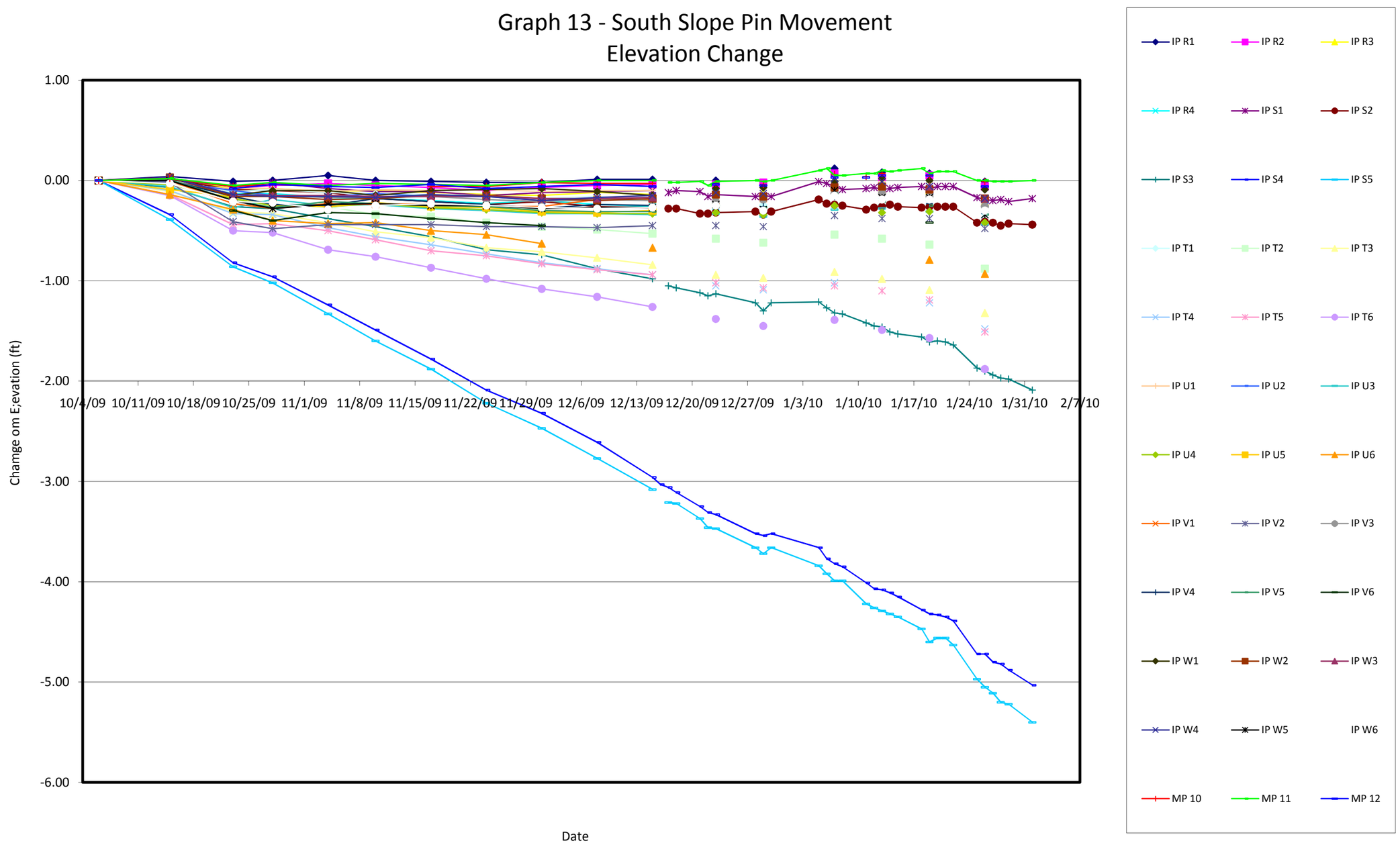
Peter J. Carey, PE
President



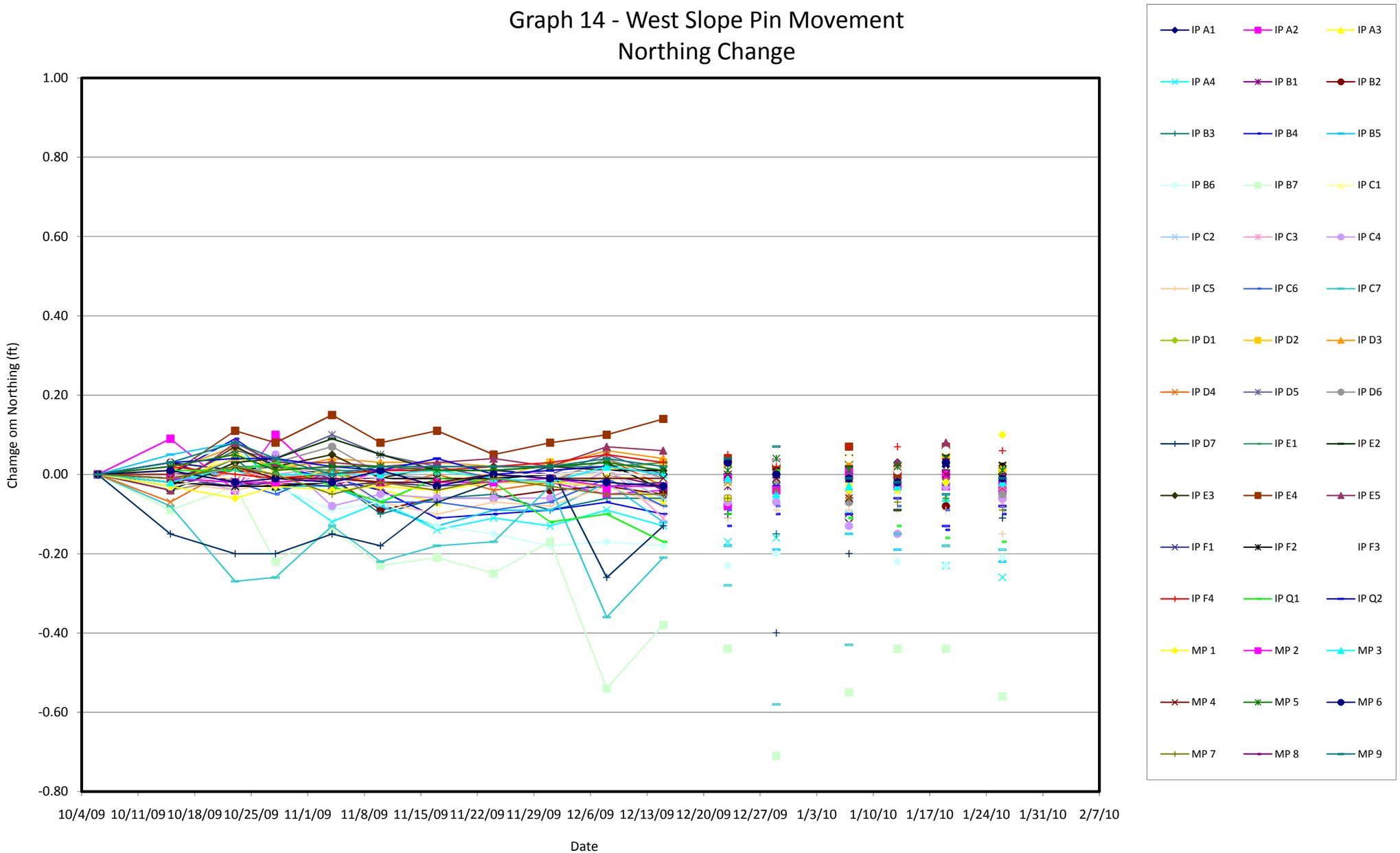
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



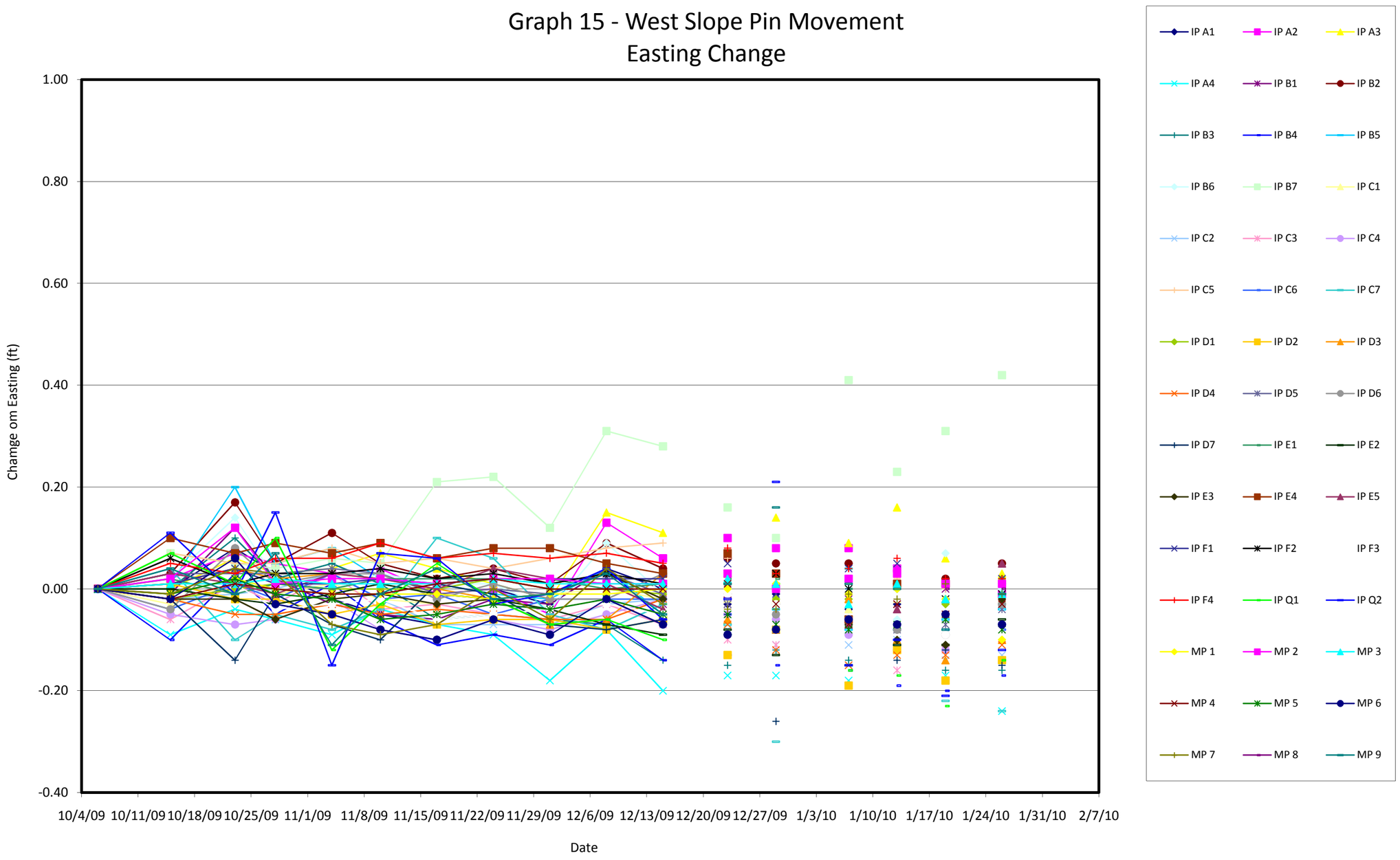
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



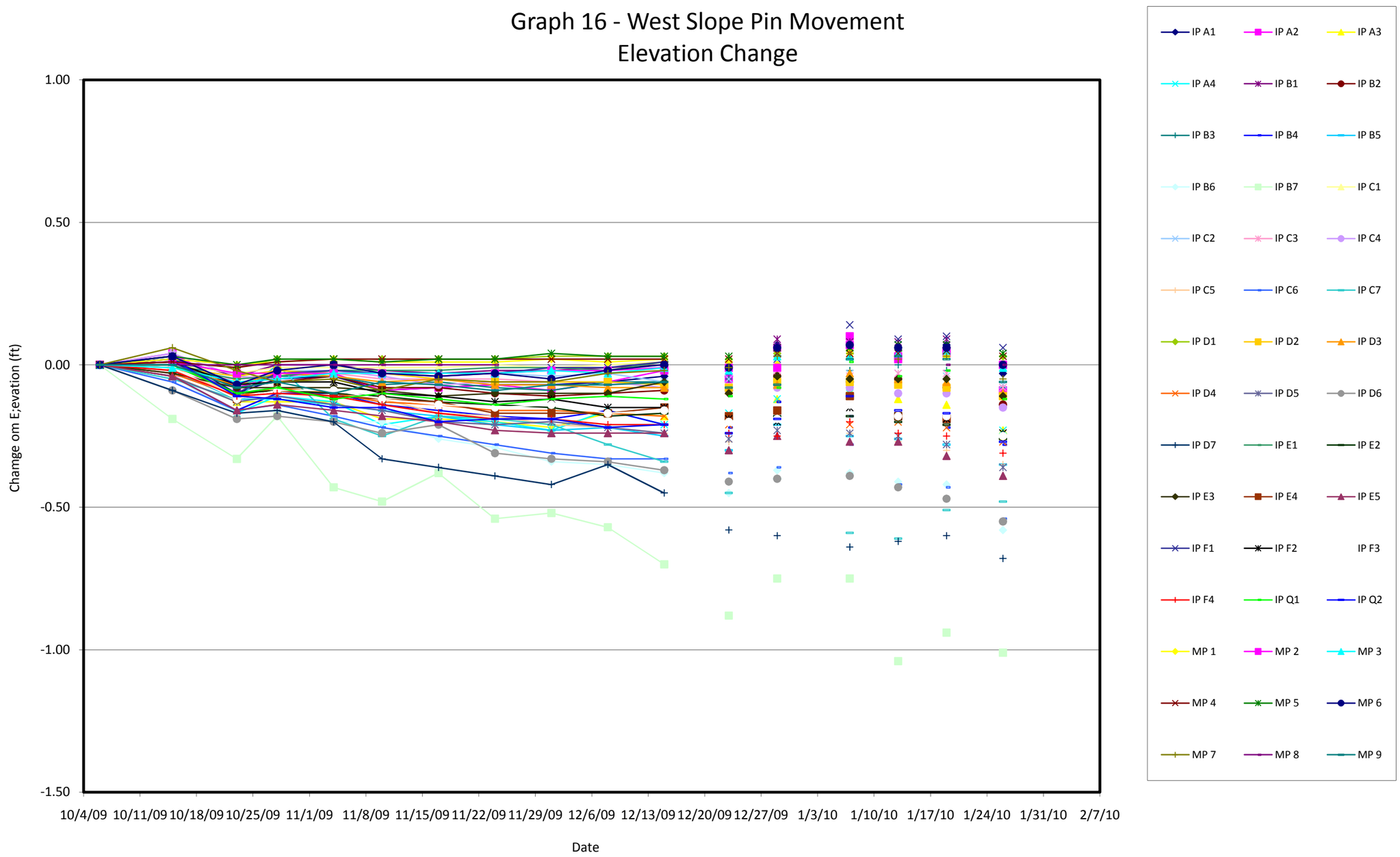
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which there was a positive change in elevation since October 6, 2009.



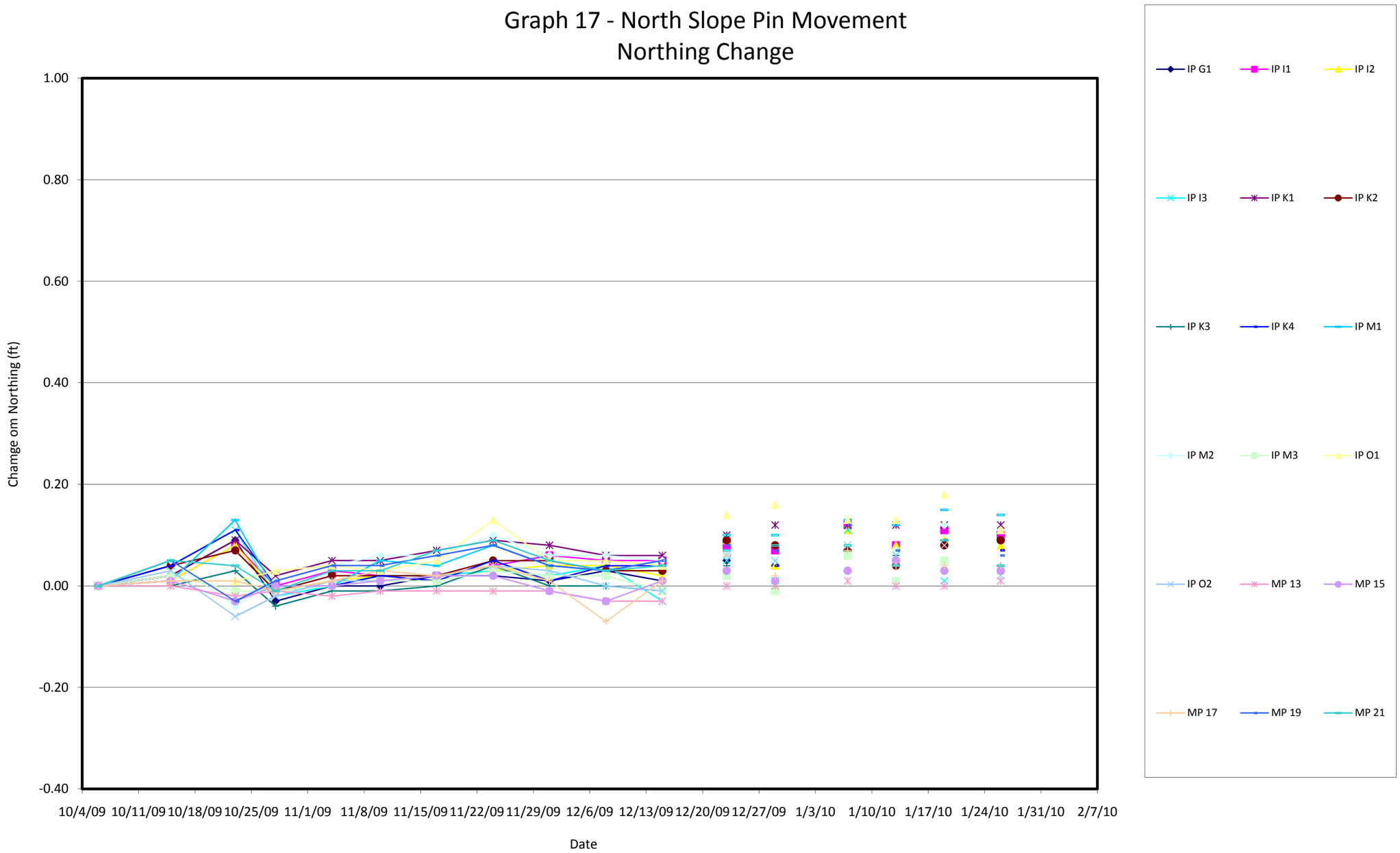
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



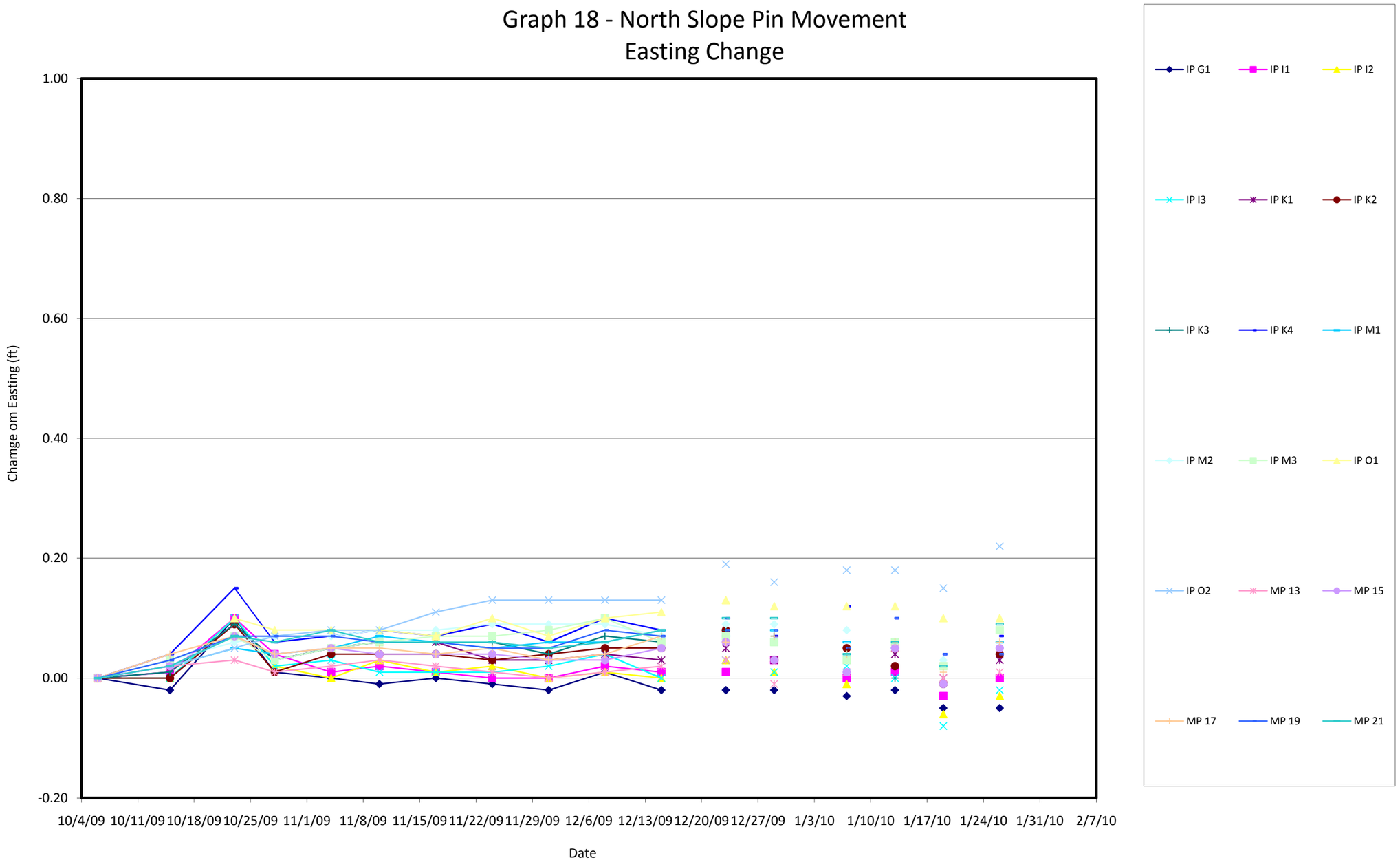
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



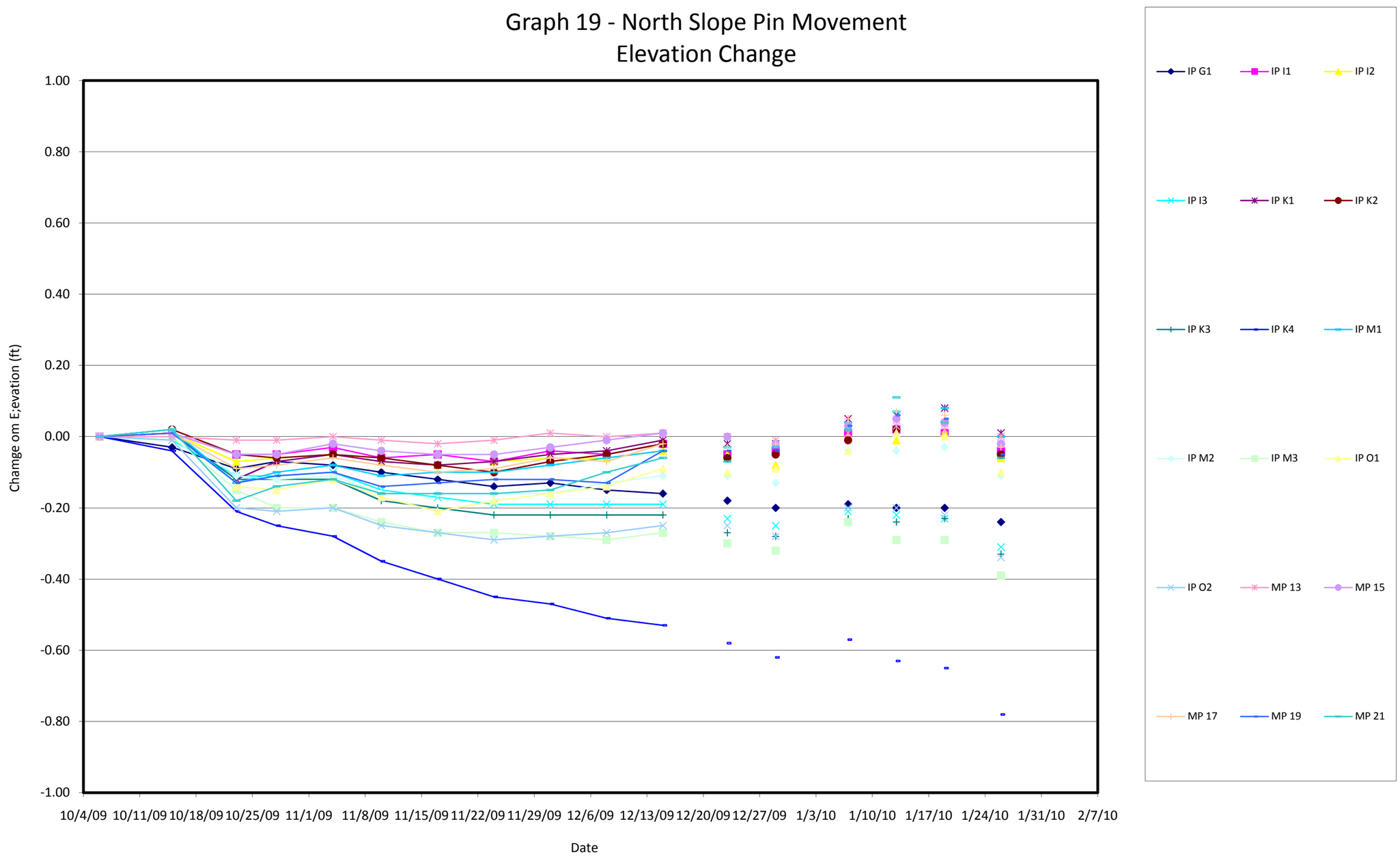
1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which there was a positive change in elevation since October 6, 2009.



1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 5, 2009.



1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which there was a positive change in elevation since October 6, 2009.

HORIZONTAL RATE OF MOVEMENT (FT/DAY)

CALCULATED BASED ON WEEKLY READING AT EACH POINT

ID	1/7/10	1/13/10	1/19/10	1/26/10
IP G1	0.0016	0.0037	0.0050	0.0029
IP I1	0.0065	0.0069	0.0083	0.0045
IP I2	0.0081	0.0112	0.0184	0.0045
IP I3	0.0112	0.0090	0.0157	0.0086
IP K1	0.0000	0.0017	0.0067	0.0043
IP K2	0.0025	0.0071	0.0083	0.0073
IP K3	0.0075	0.0069	0.0024	0.0087
IP K4	0.0114	0.0105	0.0105	0.0052
IP M1	0.0040	0.0024	0.0071	0.0059
IP M2	0.0016	0.0037	0.0097	0.0073
IP M3	0.0085	0.0097	0.0094	0.0090
IP O1	0.0033	0.0000	0.0090	0.0100
IP O2	0.0040	0.0033	0.0060	0.0132
MP 13	0.0025	0.0069	0.0083	0.0020
MP 15	0.0031	0.0075	0.0105	0.0086
MP 17	0.0065	0.0060	0.0083	0.0071
MP 19	0.0065	0.0118	0.0105	0.0043
MP 21	0.0067	0.0075	0.0107	0.0123
IP R1	0.0200	0.0141	0.0300	0.0071
IP R2	0.0092	0.0133	0.0053	0.0045
IP R3	0.0362	0.0075	0.0195	0.0194
IP R4	0.0421	0.0083	0.0273	0.0186
IP S1	0.0215	0.0224	0.0180	0.0172
IP S2	0.0116	0.0361	0.0151	0.0121
IP S3	0.0200	0.0400	0.0117	0.0081
IP S4	0.0122	0.0141	0.0321	0.0144
IP S5	0.0127	0.0224	0.0422	0.0608
IP T1	0.0079	0.0127	0.0105	0.0073
IP T2	0.0105	0.0127	0.0134	0.0115
IP T3	0.0056	0.0285	0.0298	0.0091
IP T4	0.0087		0.0146	0.0172
IP T5	0.0165	0.0201	0.0075	0.0183
IP T6	0.0203	0.0121	0.0406	0.0247
IP U1	0.0022	0.0142	0.0121	0.0064
IP U2	0.0114	0.0154	0.0217	0.0132
IP U3	0.0081	0.0170	0.0075	0.0155
IP U4	0.0134	0.0441	0.0530	0.0091
IP U5				
IP U6			0.0049	0.0118
IP V1	0.0105	0.0112	0.0137	
IP V2	0.0079	0.0224	0.0217	0.0073
IP V3	0.0100	0.0239	0.0134	0.0135
IP V4	0.0079	0.0134	0.0154	0.0091
IP V5	0.0025	0.0183	0.0217	0.0212
IP V6			0.0119	
IP W1	0.0094	0.0174	0.0239	0.0118
IP W2	0.0113	0.0194	0.0203	0.0129
IP W3			0.0030	0.0115
IP W4	0.0101	0.0134	0.0401	0.0087

1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which the horizontal rate of movement exceed the trigger value of 0.05 ft/day.

HORIZONTAL RATE OF MOVEMENT (FT/DAY)

CALCULATED BASED ON WEEKLY READING AT EACH POINT

IP W5	0.0130	0.0227	0.0271	0.0167
IP W6	0.0031	0.0172	0.0217	0.0157
MP 10	0.0236	0.0150	0.0183	0.0136
MP 11	0.0300	0.0300	0.0500	0.0224
MP 12	0.0000	0.0071	0.0050	0.0052
IP A1	0.0040	0.0053	0.0069	0.0014
IP A2	0.0022	0.0069	0.0071	0.0032
IP A3	0.0060	0.0118	0.0186	0.0045
IP A4	0.0068		0.0109	0.0109
IP B1	0.0057	0.0037	0.0053	0.0020
IP B2	0.0078	0.0180	0.0118	0.0052
IP B3	0.0168	0.0047	0.0069	0.0071
IP B4	0.0035	0.0142	0.0024	0.0071
IP B5	0.0063	0.0067	0.0037	0.0064
IP B6	0.0134	0.0209	0.0217	0.0104
IP B7	0.0388	0.0352	0.0133	0.0233
IP C1	0.0031	0.0037	0.0033	0.0014
IP C2	0.0000	0.0085	0.0075	0.0020
IP C3	0.0046	0.0154	0.0069	0.0091
IP C4	0.0075	0.0060	0.0200	0.0083
IP C5	0.0000	0.0017	0.0033	0.0090
IP C6	0.0092	0.0137	0.0017	0.0000
IP C7	0.0413	0.0529	0.0190	0.0032
IP D1	0.0056	0.0047	0.0053	0.0073
IP D2	0.0124	0.0121	0.0112	0.0081
IP D3	0.0070	0.0133	0.0083	0.0071
IP D4	0.0040	0.0047	0.0100	0.0104
IP D5	0.0031	0.0033	0.0037	0.0052
IP D6	0.0060	0.0069	0.0053	0.0112
IP D7	0.0364	0.0367	0.0037	0.0136
IP E1	0.0081	0.0083	0.0097	0.0032
IP E2	0.0022	0.0195	0.0167	0.0073
IP E3	0.0050	0.0112	0.0118	0.0132
IP E4	0.0114	0.0165	0.0117	
IP E5	0.0090	0.0083	0.0090	0.0163
IP F1	0.0060	0.0024	0.0067	0.0020
IP F2	0.0040	0.0060	0.0085	0.0014
IP F3	0.0035	0.0083	0.0143	0.0029
IP F4	0.0057	0.0033	0.0083	0.0029
IP Q1	0.0231	0.0037	0.0112	0.0129
IP Q2	0.0407	0.0107	0.0217	0.0147
MP 1	0.0025	0.0017	0.0047	0.0206
MP 2	0.0050	0.0053	0.0060	0.0029
MP 3	0.0050	0.0067	0.0071	0.0059
MP 4	0.0071	0.0149	0.0047	0.0032
MP 5	0.0035	0.0024	0.0037	0.0052
MP 6	0.0025	0.0024	0.0090	0.0064
MP 7	0.0040	0.0024	0.0053	0.0052
MP 8	0.0000			
MP 9	0.0189	0.0180	0.0142	0.0115

1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which the horizontal rate of movement exceed the trigger value of 0.05 ft/day.

CHANGE IN ELEVATION (FT)
CALCULATED BASED ON ORIGINAL SURVEY DATE OF 10-06-09

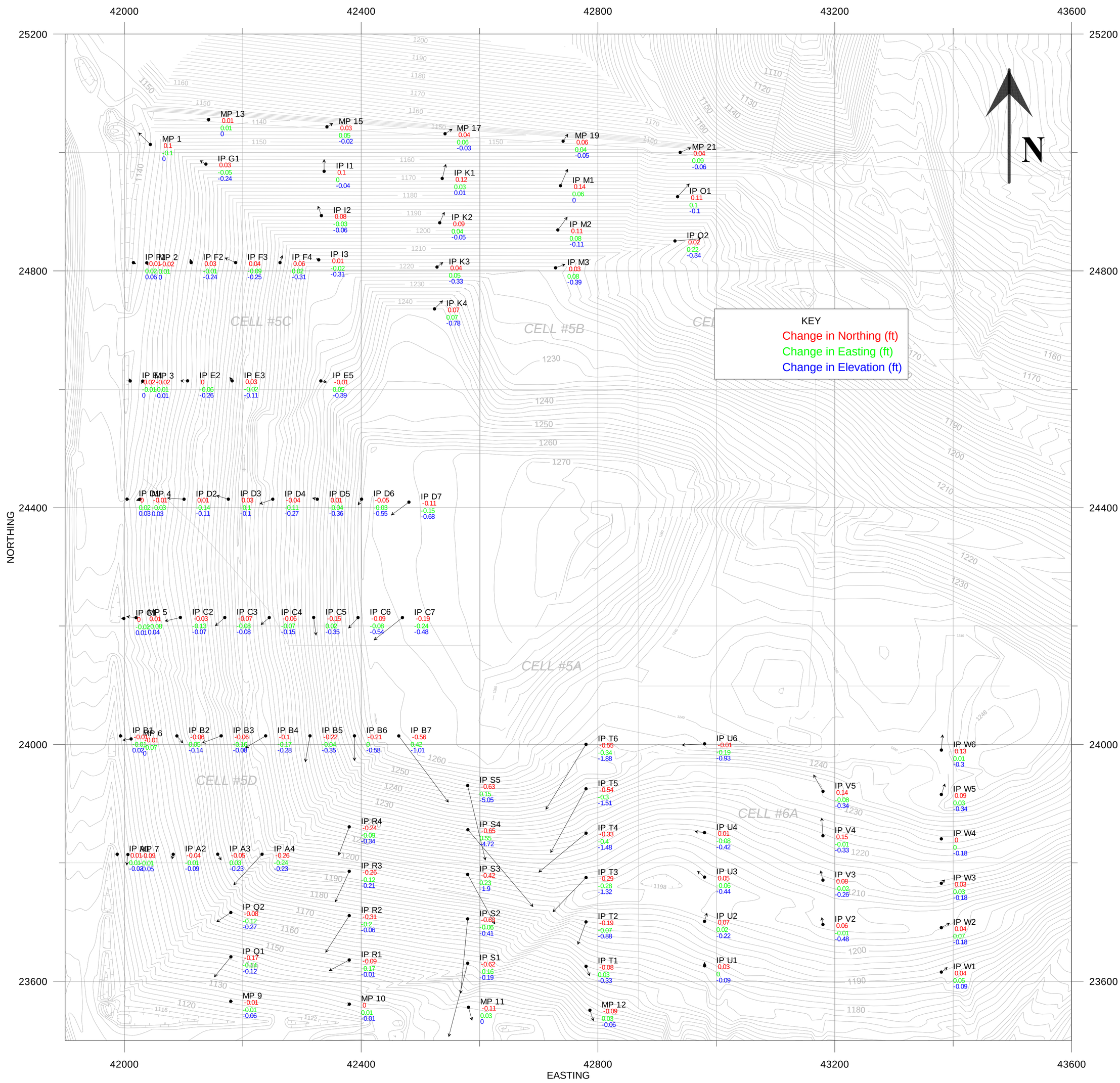
ID	12/30/09	1/5/10	1/6/10	1/7/10	1/8/10	1/11/10	1/12/10	1/13/10	1/14/10	1/15/10	1/18/10	1/19/10	1/20/10	1/21/10	1/22/10	1/25/10	1/26/10	1/27/10	1/28/10	1/29/10
IP G1				-0.19				-0.20				-0.20					-0.24			
IP I1				0.01				0.02				0.01					-0.04			
IP I2				0.00				-0.01				0.01					-0.06			
IP I3				-0.21				-0.22				-0.23					-0.31			
IP K1				0.05				0.06				0.08					0.01			
IP K2				-0.01				0.02				0.04					-0.05			
IP K3				-0.23				-0.24				-0.23					-0.33			
IP K4				-0.57				-0.63				-0.65					-0.78			
IP M1				0.04				0.07				0.08					0.00			
IP M2				-0.04				-0.04				-0.03					-0.11			
IP M3				-0.24				-0.29				-0.29					-0.39			
IP O1				-0.04				0.01				0.00					-0.10			
IP O2				-0.20				-0.20				-0.22					-0.34			
MP 13				0.01				0.03				0.02					0.00			
MP 15				0.03				0.05				0.04					-0.02			
MP 17				0.05				0.07				0.06					-0.03			
MP 19				0.03				0.06				0.05					-0.05			
MP 21				0.02				0.11				0.04					-0.06			
IP R1				0.12				0.08				0.07					-0.01			
IP R2				0.07				0.03				0.05					-0.06			
IP R3				-0.05				-0.09				-0.10					-0.21			
IP R4				-0.11				-0.21				-0.21					-0.34			
IP S1	-0.16	-0.01	-0.03	-0.06	-0.09	-0.08	-0.07	-0.09	-0.08	-0.07	-0.06	-0.08	-0.06	-0.06	-0.06	-0.17	-0.19	-0.20	-0.19	-0.21
IP S2	-0.31	-0.19	-0.23	-0.24	-0.25	-0.29	-0.27	-0.26	-0.24	-0.26	-0.27	-0.26	-0.26	-0.26	-0.26	-0.42	-0.41	-0.42	-0.45	-0.43
IP S3	-1.22	-1.21	-1.27	-1.32	-1.33	-1.42	-1.45	-1.46	-1.51	-1.53	-1.56	-1.61	-1.60	-1.61	-1.64	-1.87	-1.90	-1.94	-1.97	-1.98
IP S4	-3.52	-3.66	-3.77	-3.82	-3.85	-4.01	-4.07	-4.08	-4.11	-4.15	-4.28	-4.32	-4.33	-4.35	-4.39	-4.72	-4.72	-4.80	-4.82	-4.88
IP S5	-3.66	-3.84	-3.92	-3.99	-3.99	-4.22	-4.26	-4.29	-4.32	-4.35	-4.47	-4.60	-4.56	-4.56	-4.63	-4.97	-5.05	-5.11	-5.20	-5.22
IP T1				-0.12				-0.11				-0.18					-0.33			
IP T2				-0.54				-0.58				-0.64					-0.88			
IP T3				-0.91				-0.98				-1.09					-1.32			
IP T4				-1.02								-1.22					-1.48			
IP T5				-1.05				-1.10				-1.19					-1.51			
IP T6				-1.39				-1.49				-1.57					-1.88			
IP U1				0.02				-0.01				-0.02					-0.09			
IP U2				-0.10				-0.10				-0.13					-0.22			
IP U3				-0.29				-0.28				-0.31					-0.44			
IP U4				-0.25				-0.32				-0.31					-0.42			
IP U5																				
IP U6												-0.79					-0.93			
IP V1				-0.09				-0.08				-0.11								
IP V2				-0.35				-0.38				-0.38					-0.48			
IP V3				-0.13				-0.13				-0.16					-0.26			
IP V4				-0.16				-0.19				-0.23					-0.33			
IP V5				-0.13				-0.21				-0.25					-0.34			
IP V6												-0.42								
IP W1				-0.01				0.02				0.00					-0.09			
IP W2				-0.07				-0.06				-0.09					-0.18			
IP W3												-0.06					-0.18			
IP W4				0.02				-0.01				-0.06					-0.18			
IP W5				-0.10				-0.17				-0.17					-0.34			

1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which there was a positive change in elevation since October 6, 2009.

CHANGE IN ELEVATION (FT)
CALCULATED BASED ON ORIGINAL SURVEY DATE OF 10-06-09

IP W6				-0.15				-0.19				-0.19					-0.30			
MP 10				0.06		0.04		0.07				0.05					-0.01			
MP 11	0.00	0.10	0.12	0.05	0.05	0.07	0.07	0.10	0.09	0.10	0.12	0.07	0.09	0.09	0.09	0.00	0.00	-0.01	-0.01	-0.01
MP 12				0.03		0.03		0.05				0.05					-0.06			
IP A1				0.06				0.06				0.07					-0.03			
IP A2				0.10				0.02				0.04					-0.09			
IP A3				-0.09				-0.12				-0.14					-0.23			
IP A4				-0.10								-0.19					-0.23			
IP B1				0.08				0.08				0.09					0.02			
IP B2				-0.06				-0.05				-0.08					-0.14			
IP B3				-0.02				0.00				-0.02					-0.08			
IP B4				-0.18				-0.18				-0.22					-0.28			
IP B5				-0.25				-0.26				-0.28					-0.35			
IP B6				-0.38				-0.41				-0.42					-0.58			
IP B7				-0.75				-1.04				-0.94					-1.01			
IP C1				0.04				0.04				0.06					0.01			
IP C2				-0.03				-0.03				-0.04					-0.07			
IP C3				-0.04				-0.03				-0.03					-0.08			
IP C4				-0.08				-0.10				-0.10					-0.15			
IP C5				-0.24				-0.27				-0.30					-0.35			
IP C6				-0.28				-0.42				-0.43					-0.54			
IP C7				-0.59				-0.61				-0.51					-0.48			
IP D1				0.05				0.04				0.04					0.03			
IP D2				-0.06				-0.07				-0.08					-0.11			
IP D3				-0.03				-0.05				-0.06					-0.10			
IP D4				-0.21				-0.20				-0.22					-0.27			
IP D5				-0.24				-0.25				-0.28					-0.36			
IP D6				-0.39				-0.43				-0.47					-0.55			
IP D7				-0.64				-0.62				-0.60					-0.68			
IP E1				0.04				0.05				0.06					0.00			
IP E2				-0.18				-0.20				-0.21					-0.26			
IP E3				-0.05				-0.05				-0.05					-0.11			
IP E4				-0.11				-0.18				-0.19								
IP E5				-0.27				-0.27				-0.32					-0.39			
IP F1				0.14				0.09				0.10					0.06			
IP F2				-0.15				-0.18				-0.19					-0.24			
IP F3				-0.14				-0.18				-0.18					-0.25			
IP F4				-0.20				-0.24				-0.25					-0.31			
IP Q1				0.01				-0.04				-0.02					-0.12			
IP Q2				-0.11				-0.16				-0.17					-0.27			
MP 1				0.04				0.03				0.03					0.00			
MP 2				0.07				0.03				0.05					0.00			
MP 3				0.03				0.04				0.05					-0.01			
MP 4				0.04				0.04				0.05					0.03			
MP 5				0.06				0.07				0.07					0.04			
MP 6				0.07				0.06				0.06					0.00			
MP 7				0.04				0.02				0.03					-0.05			
MP 8												0.00					0.00			
MP 9				0.02				0.03				0.02					-0.06			

1. Data compiled by PJ Carey Associates, PC.
2. Survey provided by DEI beginning on October 6, 2009.
3. Highlighted regions indicate points which there was a positive change in elevation since October 6, 2009.

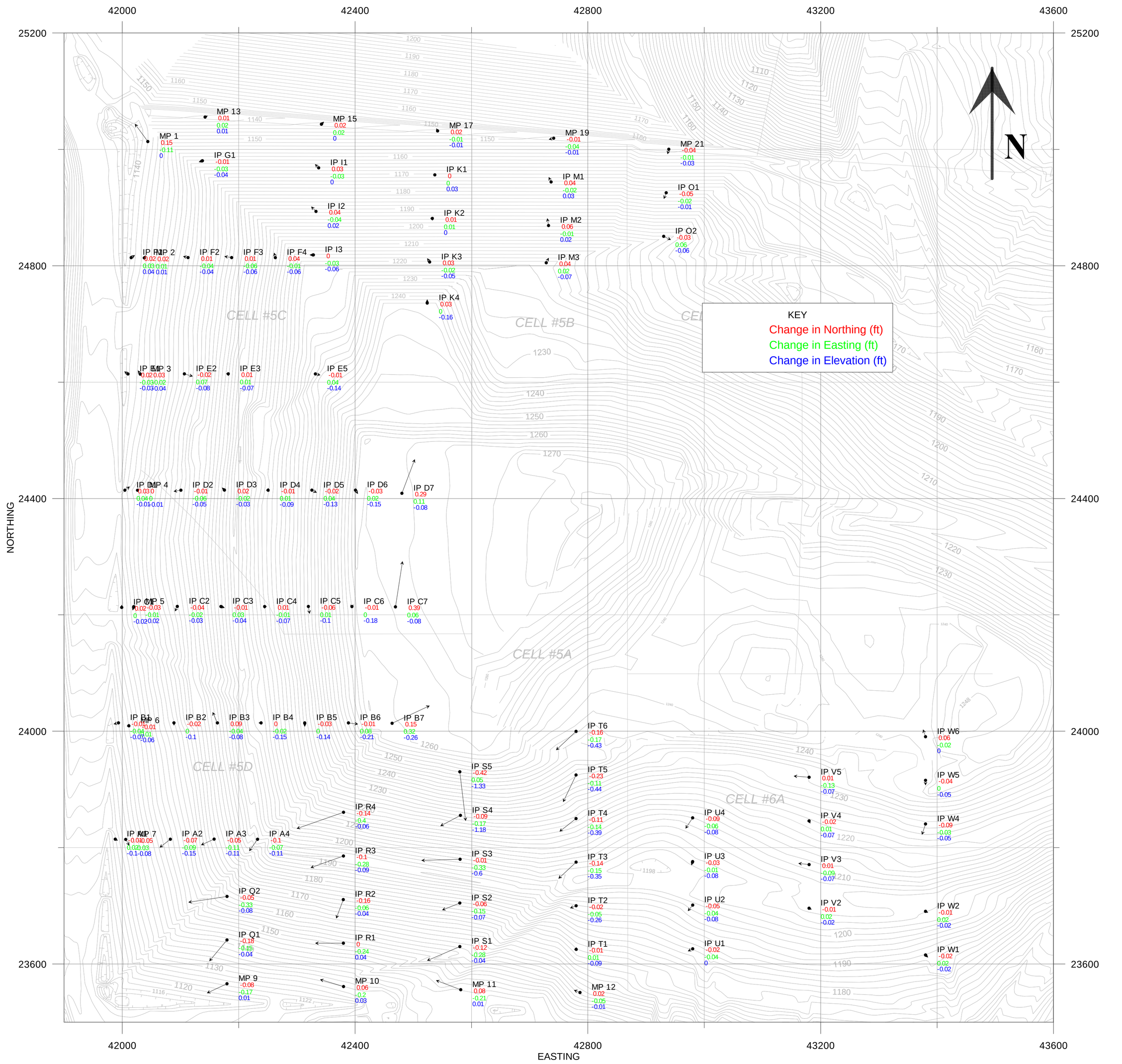


NOTE:

1. TOPOGRAPHY PROVIDED BY DIVERSIFIED ENGINEERING INC AS PART OF THE "88 REMEDIATION UNIT SLOPE PINS AND MONITORING PLATES LOCATION" PROJECT, DRAWING DATED 7/21/2009.

2. THE ELEVATION TRIGGER OF AN INCREASE SINCE 10-6-09 OCCURED AT POINTS IP B1, C1, D1, F1, K1 MP4, AND MP5.

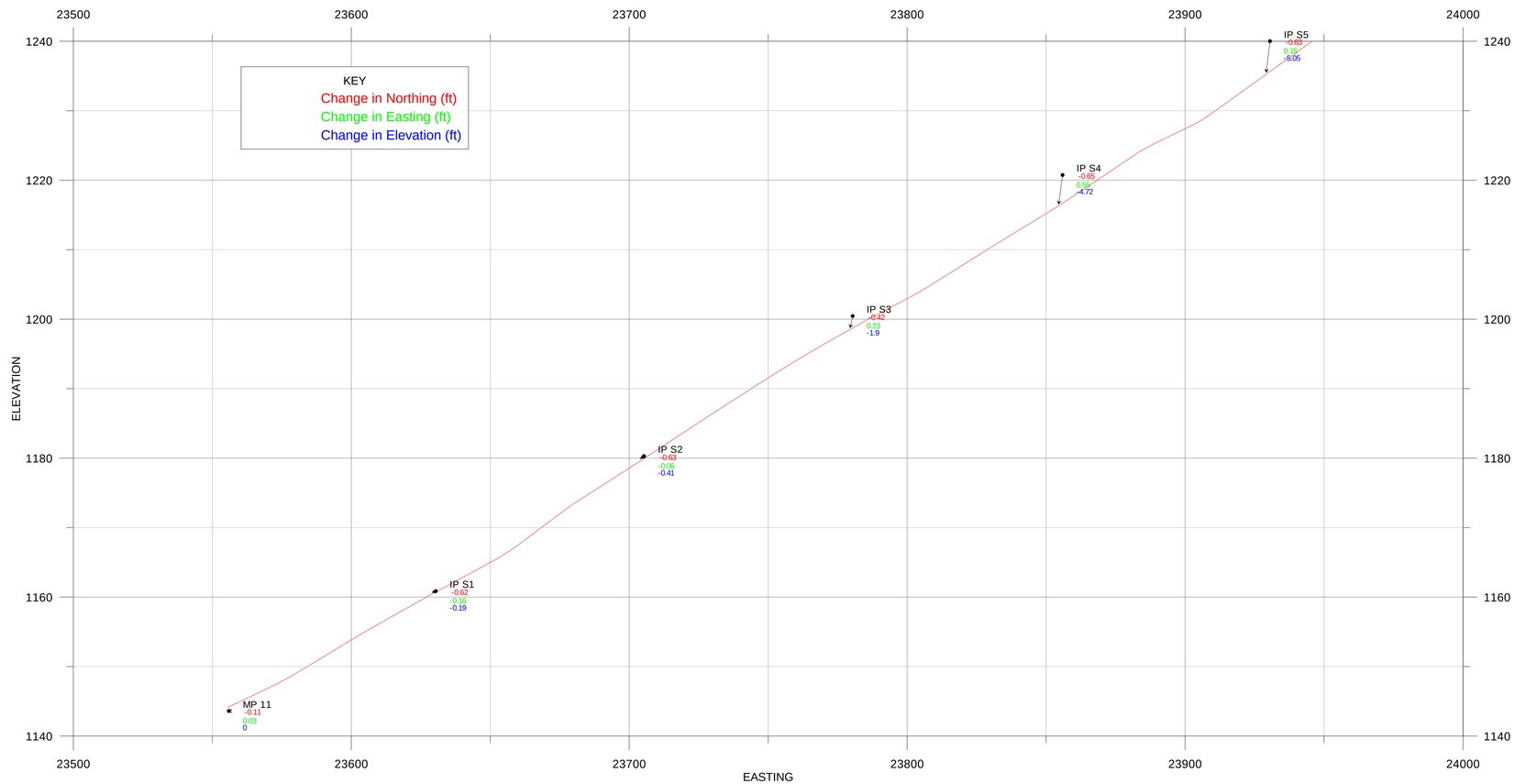
HORIZONTAL MOVEMENTS
BETWEEN 10/06/2009 & & 01/26/2010



NOTE:

1. TOPOGRAPHY PROVIDED BY DIVERSIFIED ENGINEERING INC AS PART OF THE "88 REMEDIATION UNIT SLOPE PINS AND MONITORING PLATES LOCATION" PROJECT, DRAWING DATED 7/21/2009.

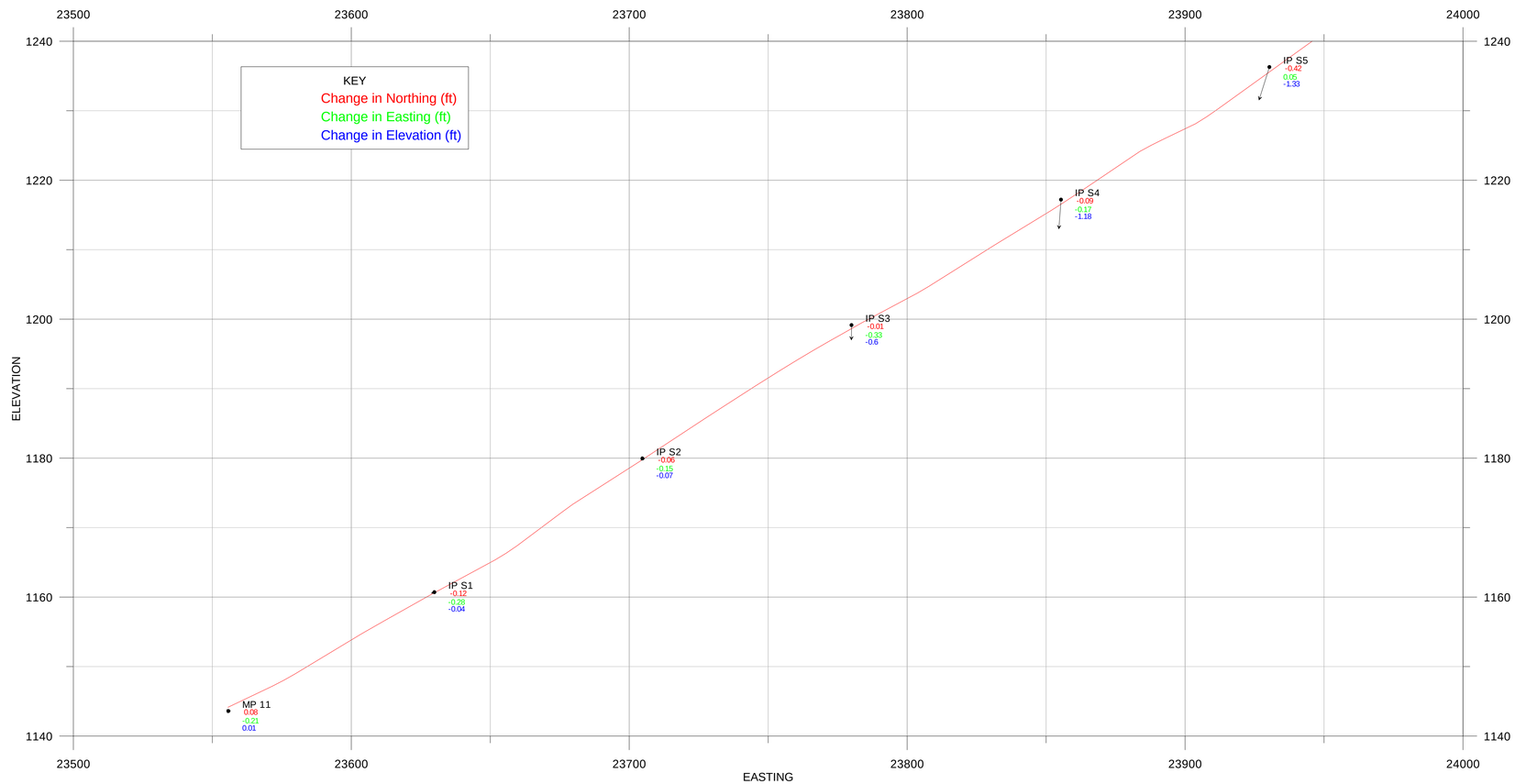
HORIZONTAL MOVEMENTS
BETWEEN 12/29/2009 & 01/26/2010



NOTE:

1. PROFILE PROVIDED BY DIVERSIFIED ENGINEERING INC FOR THE BEGINNING OF JANUARY.

PROFILE MOVEMENT FOR ROW 'S'
BETWEEN 10/06/2009 & 01/26/2010



NOTE:

1. PROFILE PROVIDED BY DIVERSIFIED ENGINEERING INC FOR THE BEGINNING OF JANUARY.

PROFILE MOVEMENT FOR ROW 'S'
BETWEEN 12/29/2009 & 01/26/2010