

# Countywide Recycling and Disposal Facility

## Weekly Progress Report

### 02/01/08

This Weekly Progress Report is prepared by Countywide and submitted to the OEPA weekly by the close of business on each Friday. This meets the requirement of Order No. 5 of the December 31, 2007 Findings and Orders to provide updates on progress of field activities.

In addition, this report provides updated presentations of data being collected. All information presented in this report originates from the publicly-available data being gathered as part of the normal operational requirements of the facility or as part of the Director's Findings and Orders. **This report covers the period January 26, 2008 to February 1, 2008.**

#### **PROGRESS ON FIELD ACTIVITIES TOWARD DECEMBER 31, 2007 ORDERS**

See the attached Table 1.

#### **DATA PRESENTATION**

**Bold font in comments column means updated version included with this report.**

<u>Attachment</u>	<u>Attachment No.</u>	<u>Comments</u>
Wellhead Temperature Graph	1	Updated Jan. 11, 2008
Downhole Temp. Graph	2	Updated Jan. 4, 2008
FBMP Max. In-Situ Temp. Graph	3	<b>Updated Feb. 1, 2008</b>
Inclinometer Max. In-Situ Temp. Graph	4	<b>Updated Feb. 1, 2008</b>
Leachate Sump Temperature. Graph	5	<b>Updated Feb. 1, 2008</b>
LCS Temperature Graph	6	<b>Updated Feb. 1, 2008</b>
Weekly Cumulative Sett. Graph	7	<b>Updated Feb. 1, 2008</b>
Quarterly Cumulative Sett. Graph	8	Updated Jan. 4, 2008
CO Graph	9	<b>Updated Feb. 1, 2008</b>
Leachate Volume Graph	10	Updated Jan. 11, 2008
Leachate COD Graph	11	Updated Jan. 11, 2008
Leachate TDS Graph	12	Updated Jan. 11, 2008
<u>Appendices (transmitted separately)</u>	<u>Appendix No.</u>	<u>Comments</u>
Wellhead Temperature Zone Map	A	<b>Updated Feb. 1, 2008</b>
4-Week Cumulative Sett. Front Map	B	Updated Jan. 25, 2008
Carbon Monoxide Zone Map	C	<b>Updated Feb. 1, 2008</b>

#### **COMMENTARY ON DATA**

Updated Attachment 3 shows direct measurements of maximum waste temperature in the North part of the 88-acre area, near Cell 7. In the past two months one of these has increased by 1 deg. F, two have not changed, and two are trending down.

Updated Attachment 4 shows direct measurements of maximum waste temperature within the landfill. INC 3 and INC 5 are from part of the South Slope area and show that temperatures are declining there; this corresponds with other observations which suggest that the reaction ceased in that area several months ago, and now residual heat is slowly attenuating. Also show on Attachment 4, INC 8 and INC 10 are from the West Slope area; these show about a 1-2 deg. F rise over the past 4 months.

Attachments 5 and 6 show temperatures in the leachate sumps (Att. 5) and under the landfill (Att. 6); these vary from week-to-week, some are rising slowly and some are decreasing slowly.

The updated Attachment 7 shows that the amount of settlement (as weekly volume reduction) continues to trend downward as indicated by the dashed trendline.

Updated Attachment 9 shows that the average and the maximum Carbon Monoxide concentration in the reaction area has been decreasing since October 2007.

Attachments A and C show the wellhead temperature and the concentration of carbon monoxide within the reaction area. Comparing these maps to previous versions confirms that the maximum values of both of these are decreasing.

### **OUTSTANDING ISSUES**

Significant documents pending approval:

- Fire Suppression Plan submitted May 25, 2007
- Permit-to-Install (PTI) "Needs Analysis" submitted May 29, 2007
- Data Reduction Request submitted September 6, 2007
- Dewatering and EGES Enhancement Work Plan submitted on Jan. 14, 2008
- West Slope Monitoring Reduction Request submitted on Jan. 16, 2008.

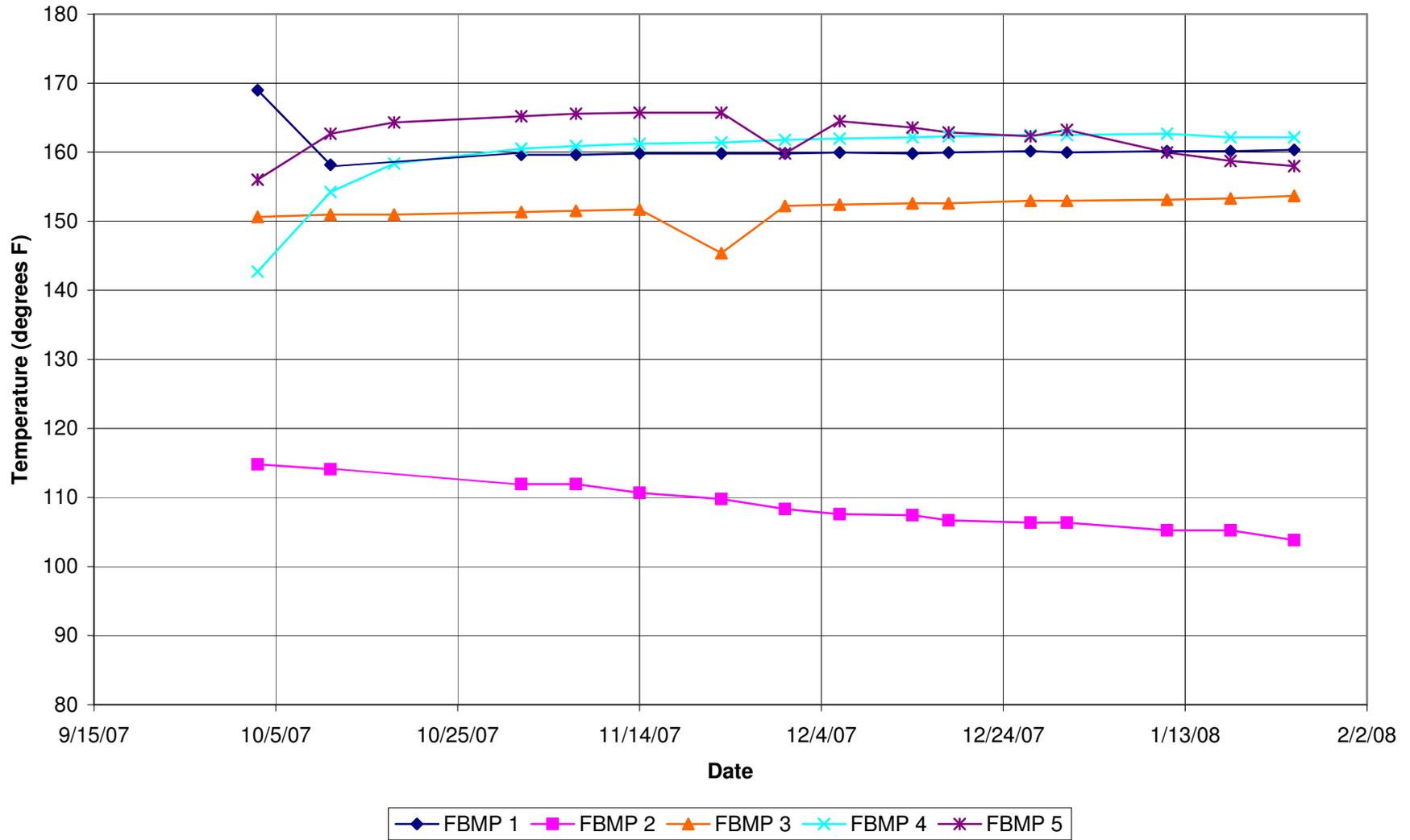
**TABLE 1**  
**WEEKLY PROGRESS REPORT FOR DECEMBER 31, 2007 F&Os**  
**COUNTYWIDE LANDFILL**  
**WEEK ENDING 02-01-08**

Work Item	Units of Measure	Estimated Required or Goal*	Previously Completed	Completed This Period	Total Completed to Date	Est. to be Completed Next Week	Comments
Install Vertical Relief Wells	ea.	4	0	0	0	0	Fianlized contract with driller (Layne-Christensen) this week. May start to set 60' long temporary surface casings (using a bucket auger) during the week of Feb. 4 with deep, rotary drilling starting the week of Feb. 11. Two of the relief wells are scheduled to be in by Feb. 29. The remaining two are scheduled to be completed by March 28.
Install Perm. Dewatering Pumps and Infrastructure	ea.	44	44	0	44	0	Have fully satisfied the requirement to have at least 37 pumps in by Feb. 15. and have installed pumps in all wells as identified in the Dewatering Work Plan (which was submitted this week on Jan. 14). Emphasis will now be placed on increasing uptime of pumps and working toward a fully operation field.
Install 4-inch HDPE Liquid Discharge Line	l.f.	3200	2870	0	2870	0	Have fully satisfied the requirement for a minimum 37 gas wells required by Feb. 15. Misc. connections are being made to connect the remaining 7 pump-equipped gas wells.
Install 2-inch HDPE Air Supply Line	l.f.	10500	9545	0	9545	0	Have fully satisfied the requirement for a minimum 37 gas wells required by Feb. 15. Misc. connections are being made to connect the remaining 7 pump-equipped gas wells.
Install and Test Compressors	ea.	2	1	1	2	0	Both new compressors are in place and in service, meeting the F&O required schedule of Jan. 31. Emphasis is now on fine-tuning the compressed air distribution system.
Relocate Flares from Top of Landfill	ea.	2	0	0	0	0	Infrastructure for the relocation for both flares was worked on this week. The committed schedule for relocating the flares is May 12, but we expect to have both done before the end of February.
Install New Gas Wells	ea.	10	0	0	0	0	The driller has put this work on his schedule. Drilling is scheduled to begin Feb. 18. Placed order for pipe. Gravel and bentonite are on site.
Replace Compromised Wells	ea.	12	0	0	0	0	The driller has put this work on his schedule. Drilling is scheduled to begin Feb. 18. Placed order for pipe. Gravel and bentonite are on site.
Install 4-inch HDPE Liquid Discharge Line for new gas wells	l.f.	600	0	0	0	0	To be started concurrent with drilling of new and replacement wells in Feb.
Install 2-inch HDPE Air Supply Line for new gas wells	l.f.	1000	0	0	0	0	To be started concurrent with drilling of new and replacement wells in Feb.
Measure Achievable Drawdown	ea.	99	0	0	0	0	This process is scheduled to start after new and replacement wells are in place and after the pumping system has been operating well. Currently, this task is scheduled to begin May 20.
Establish Baseline Flow	ea.	1	0	0	0	0	This will be performed after measuring achievable drawdown and is estimated to be completed July 2.

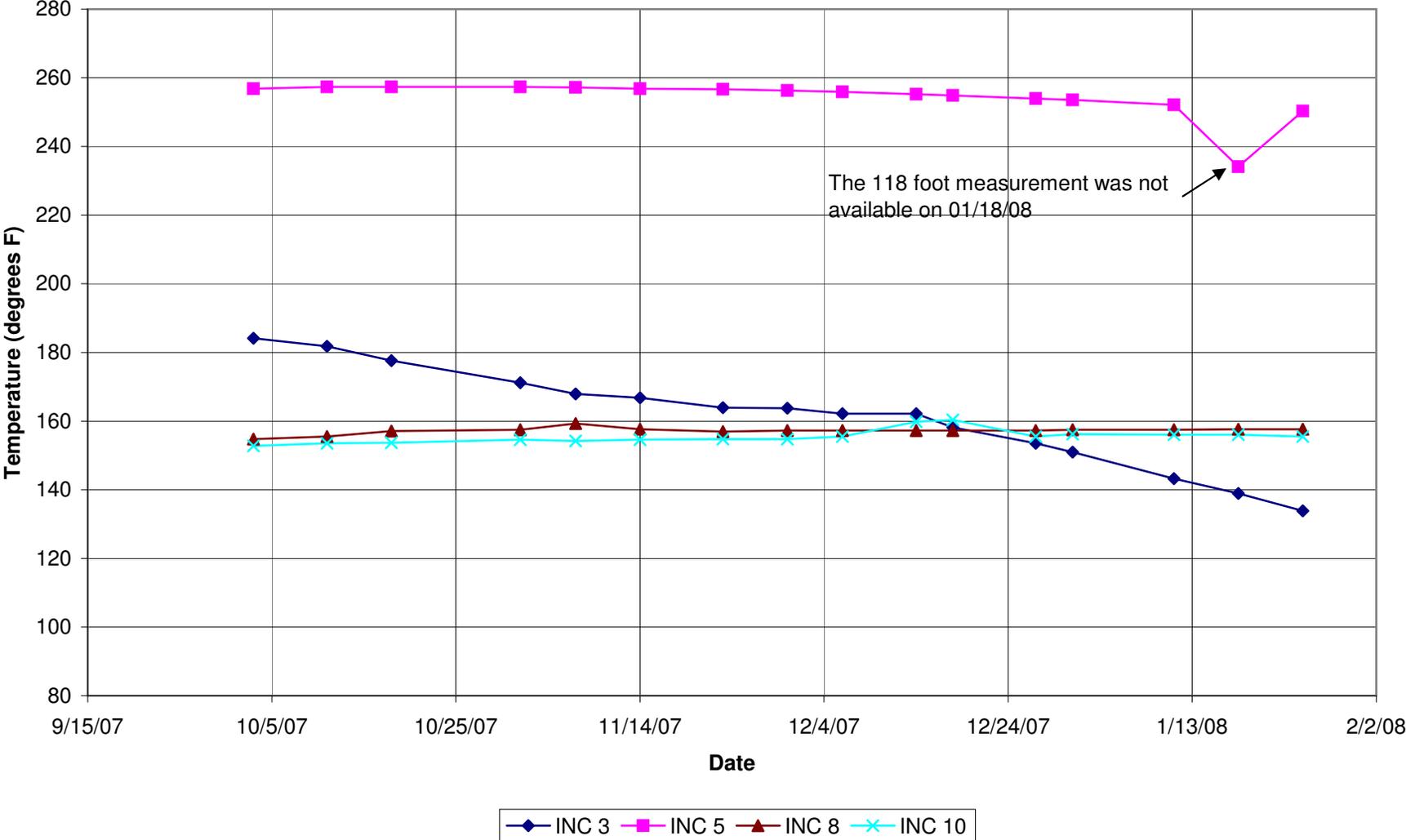
\* The estimate of "required" or "goal" items may change as project progresses.

Note: This table presents one-time field activities and does not address recurring activities such as liquid level measurements, downhole temperature profiles, liquid sampling, etc.

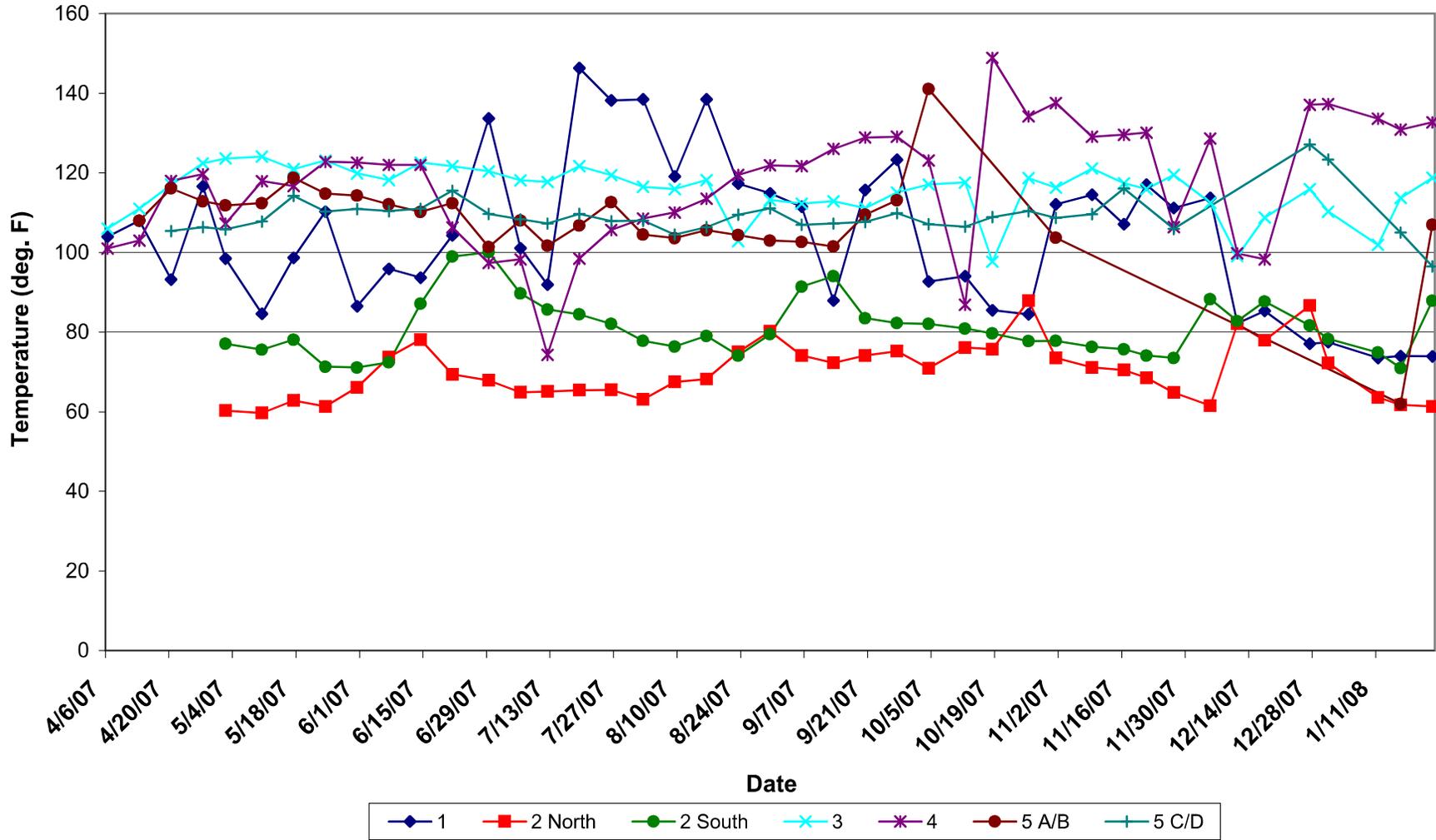
### In-situ Temperatures Maximum Readings per Date per Boring



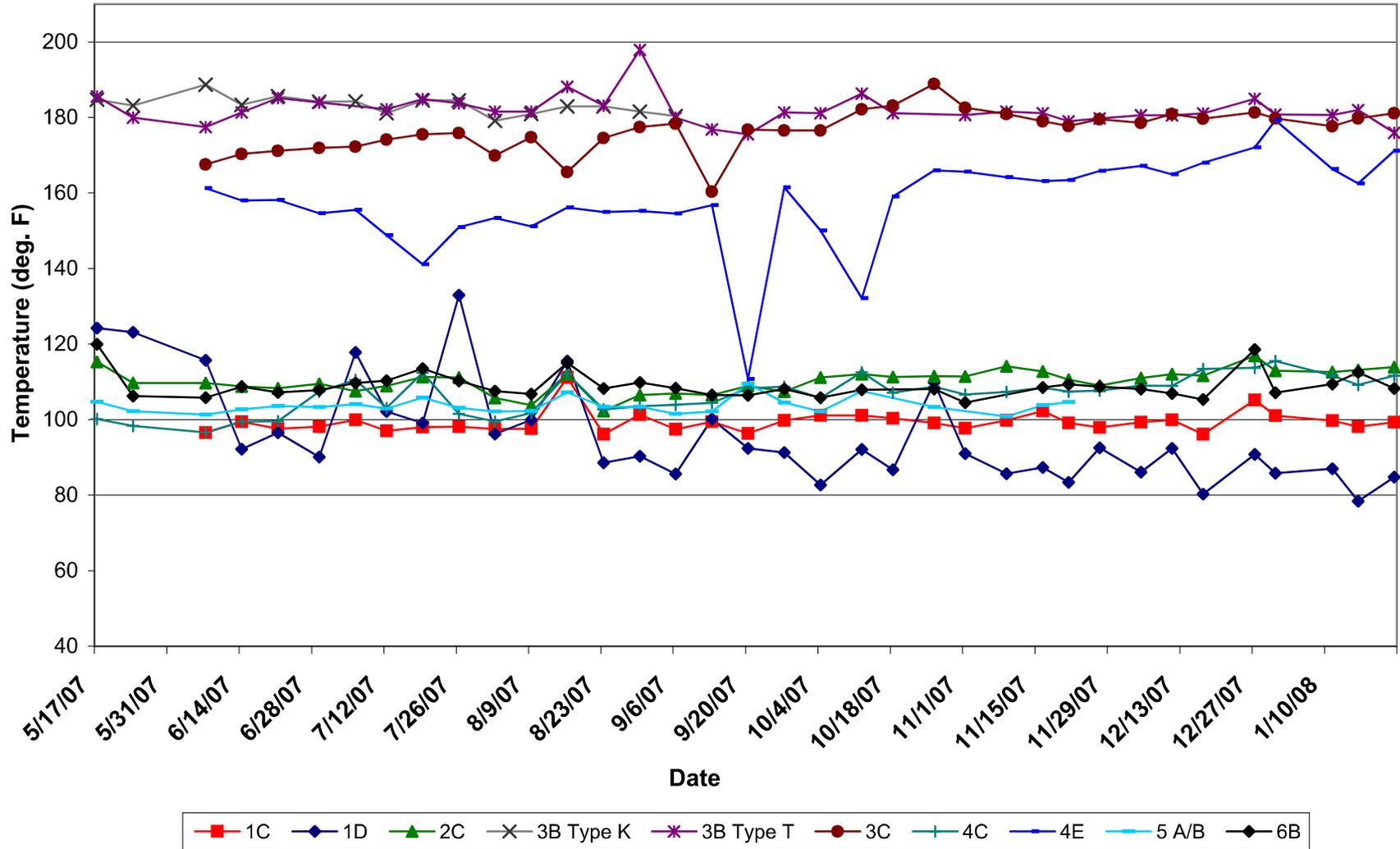
**In-situ Temperatures  
Maximum Readings per Date per Inclinator**



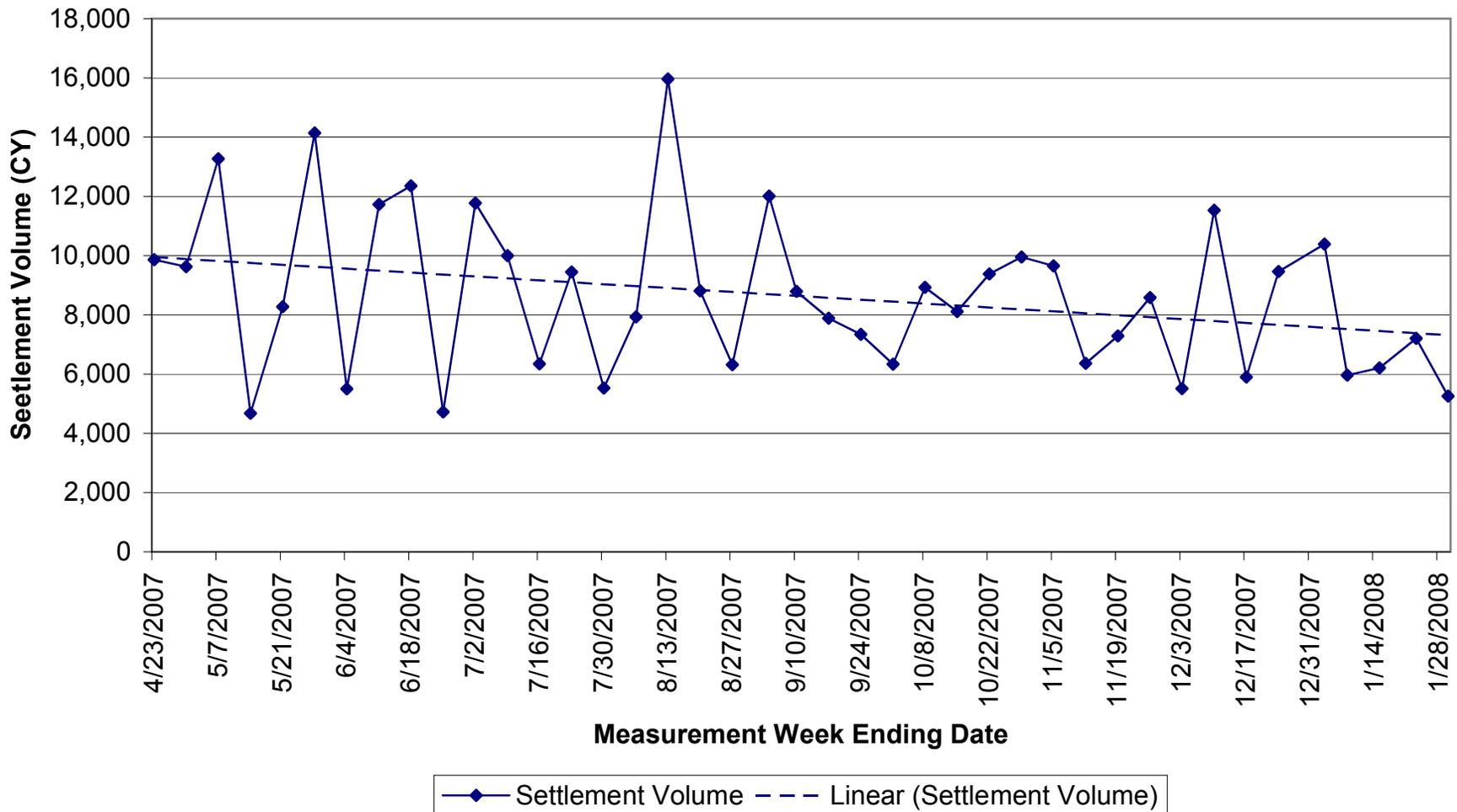
### Weekly Leachate Temperatures in Cell Sump



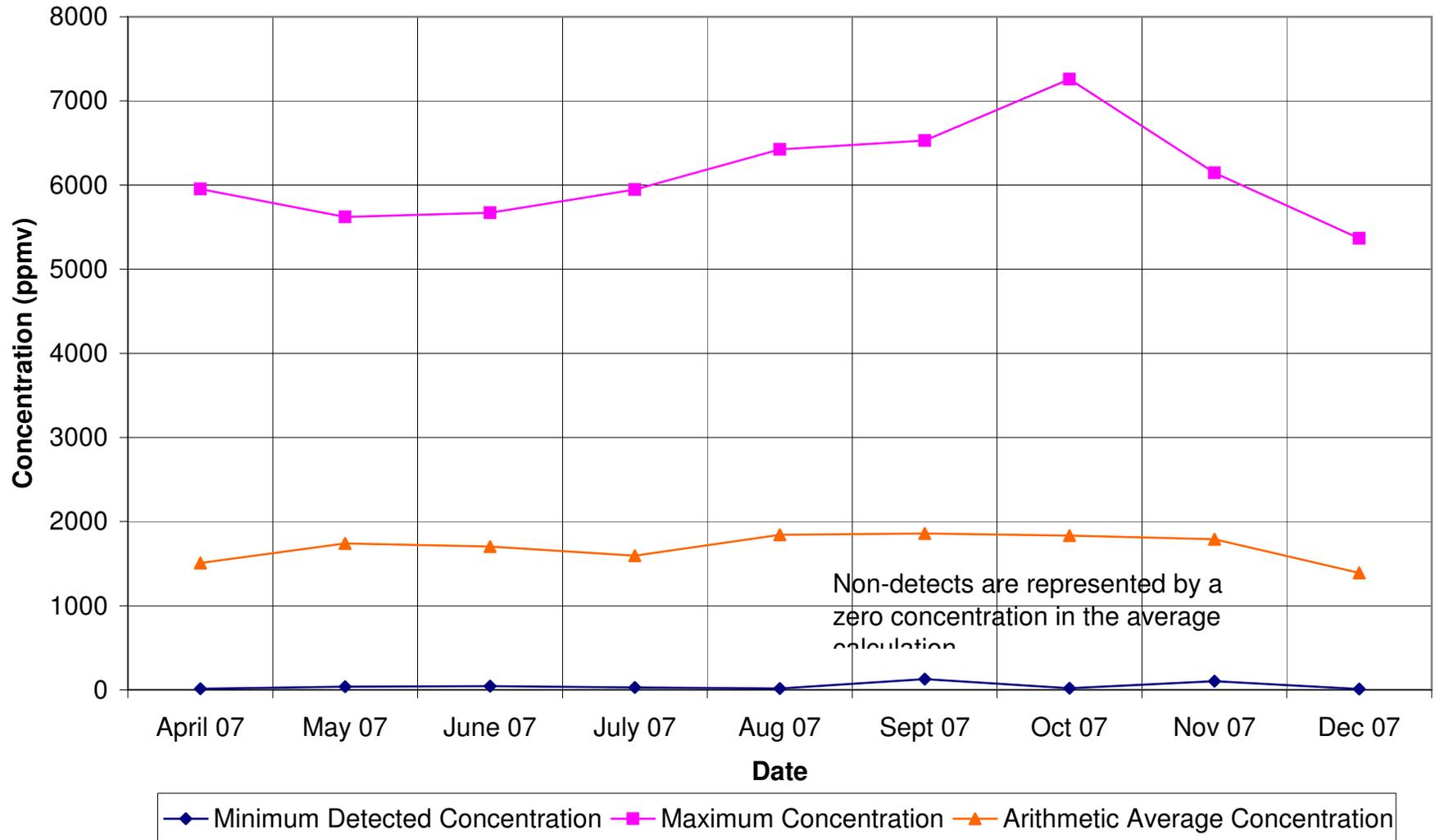
## Weekly Leachate Cleanout Riser Temperatures



### Weekly Settlement Survey in "Reaction Area" Countywide Landfill

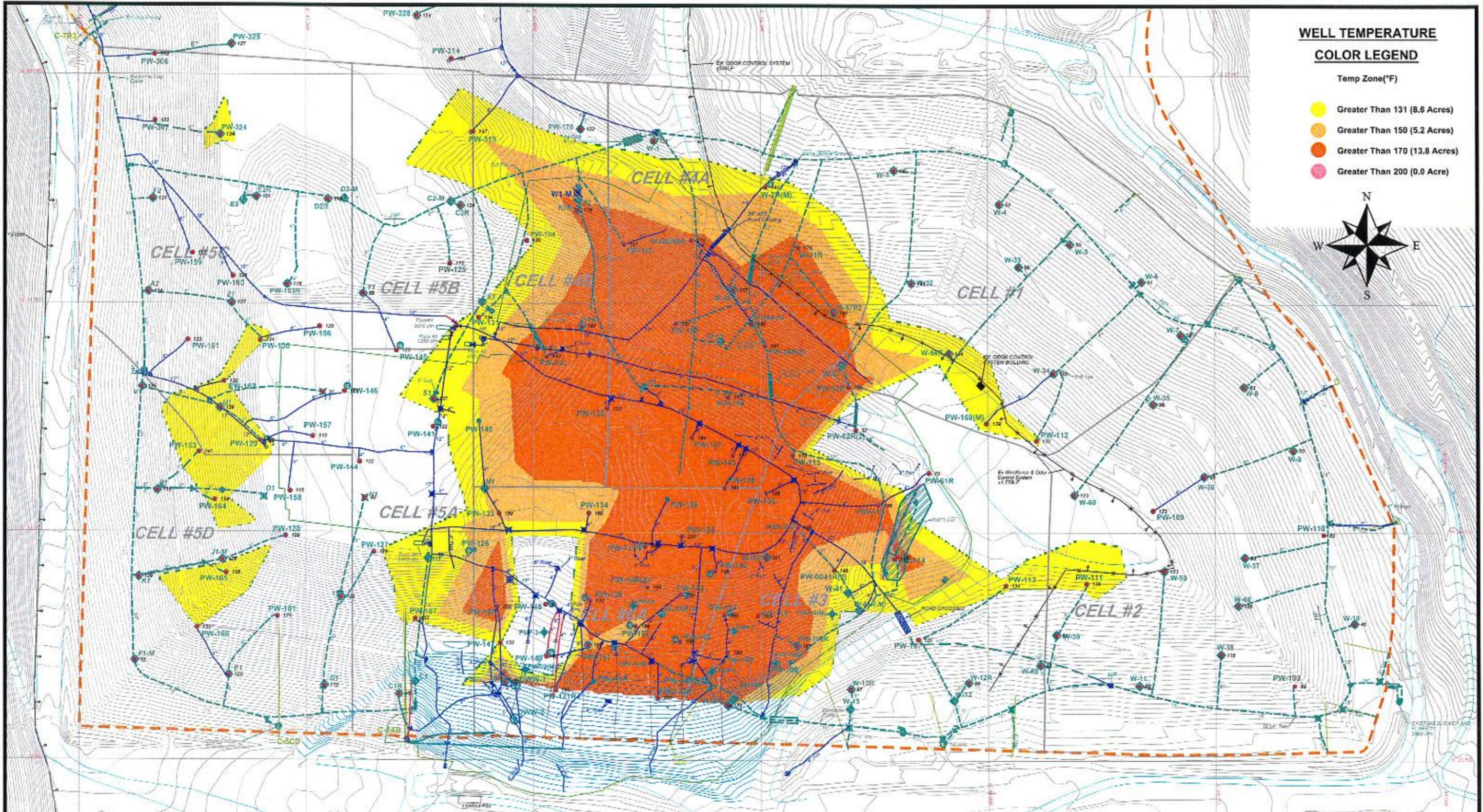


# Carbon Monoxide Concentrations

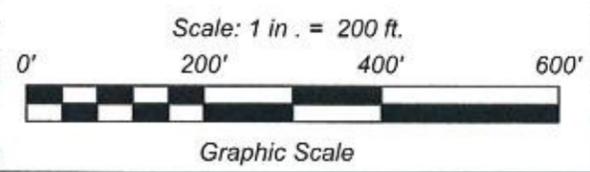


**WELL TEMPERATURE  
COLOR LEGEND**

- Temp Zone(°F)
- Greater Than 131 (8.6 Acres)
  - Greater Than 150 (5.2 Acres)
  - Greater Than 170 (13.8 Acres)
  - Greater Than 200 (0.0 Acre)

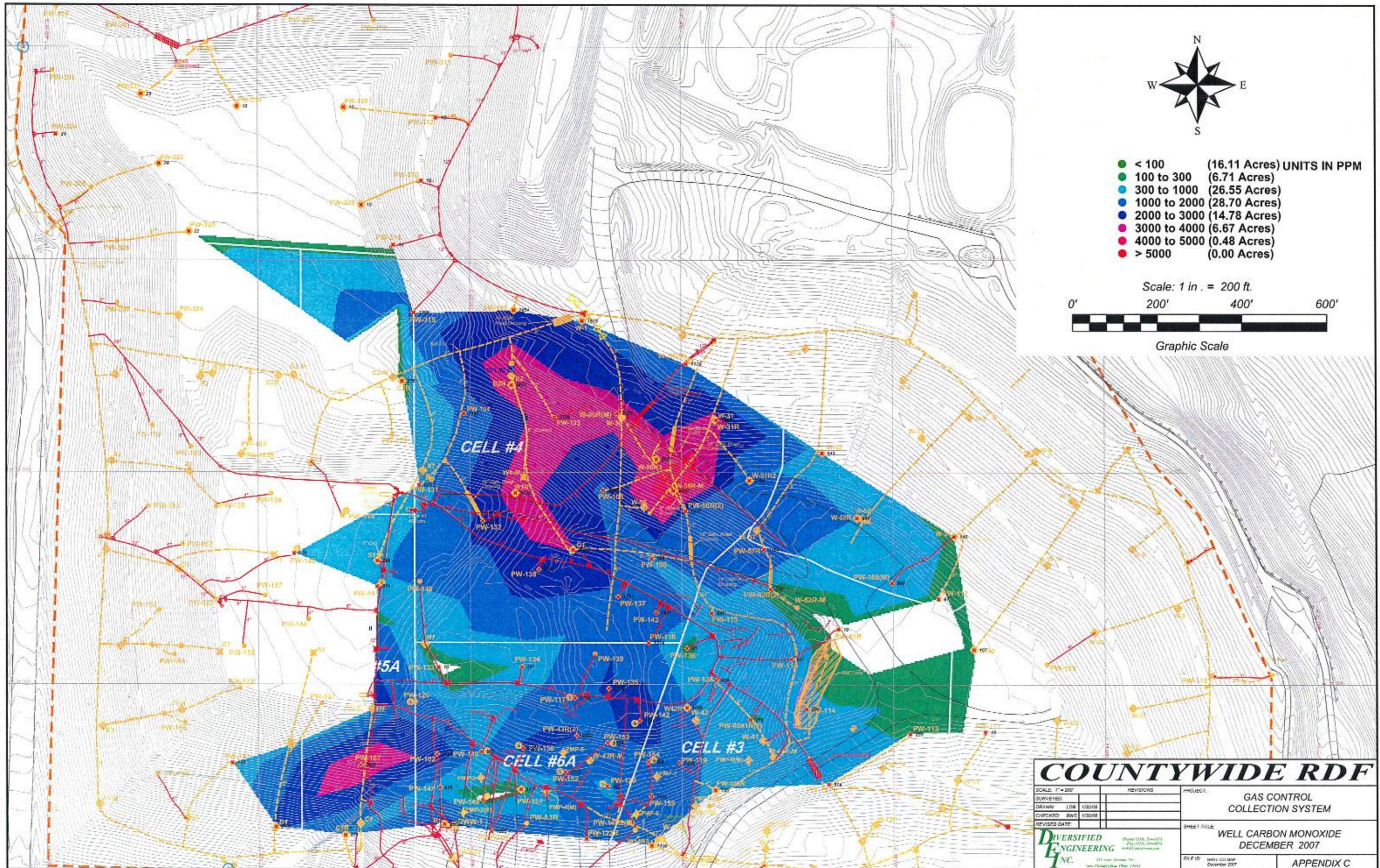


C:\Carlson Projects\13-15-07\Well Temperature Map December 2007.dwg, 12/20/2007 9:03:45 AM

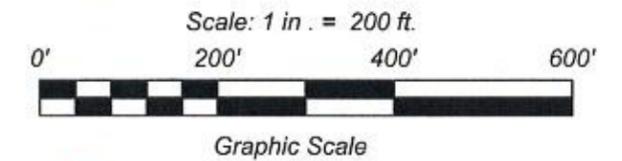


<b>COUNTYWIDE RDF</b>		PROJECT: <b>GAS CONTROL COLLECTION SYSTEM</b>	
SCALE: 1" = 200' CTR = 2"	REVISIONS:	SHEET TITLE: <b>INITIAL WELL TEMPERATURES DECEMBER 2007</b>	
SURVEYED:		FILE NO: WELL TEMPERATURE MAP December 2007	
DRAWN: LMS 12/20/07		<b>SHEET 1 OF 1</b>	
CHECKED: BWS 12/20/07			
REVISED DATE:			
<b>DIVERSIFIED ENGINEERING INC.</b>			

I:\projects\gas\countywide\landfill\gas\concrete\systems\2007\well\temp\_data\drawings\well\carbon\_monoxide\cd\well\_cd\_map\_december\_2007.dwg, 1/20/2008 10:41:21 AM



- UNITS IN PPM**
- < 100 (16.11 Acres)
  - 100 to 300 (6.71 Acres)
  - 300 to 1000 (28.70 Acres)
  - 1000 to 2000 (28.70 Acres)
  - 2000 to 3000 (14.78 Acres)
  - 3000 to 4000 (6.47 Acres)
  - 4000 to 5000 (0.48 Acres)
  - > 5000 (0.00 Acres)



<b>COUNTYWIDE RDF</b> SCALE: 1" = 200' SURVEYED: _____ DRAWN: LDB 1/20/08 CHECKED: BWS 1/20/08 REVISED DATE: _____		REVISIONS	PROJECT:
			GAS CONTROL COLLECTION SYSTEM
		SHEET TITLE:	
		WELL CARBON MONOXIDE DECEMBER 2007	
337 Four Seasons Way New Castle, NC 28763 Phone: (704) 754-0372 Fax: (704) 754-0913 email: info@diversified.com		PLI #:	APPENDIX C