

SHEET NUMBER: 1  
 FIGURE NUMBER: 1

LOCATION MAP		
Semi-Annual Remedial Performance Report, July 2009 - December 2009 Henderson, Nevada		
SCALE: 1:24,000	DATE: 02/22/10	PROJECT NUMBER: 2027

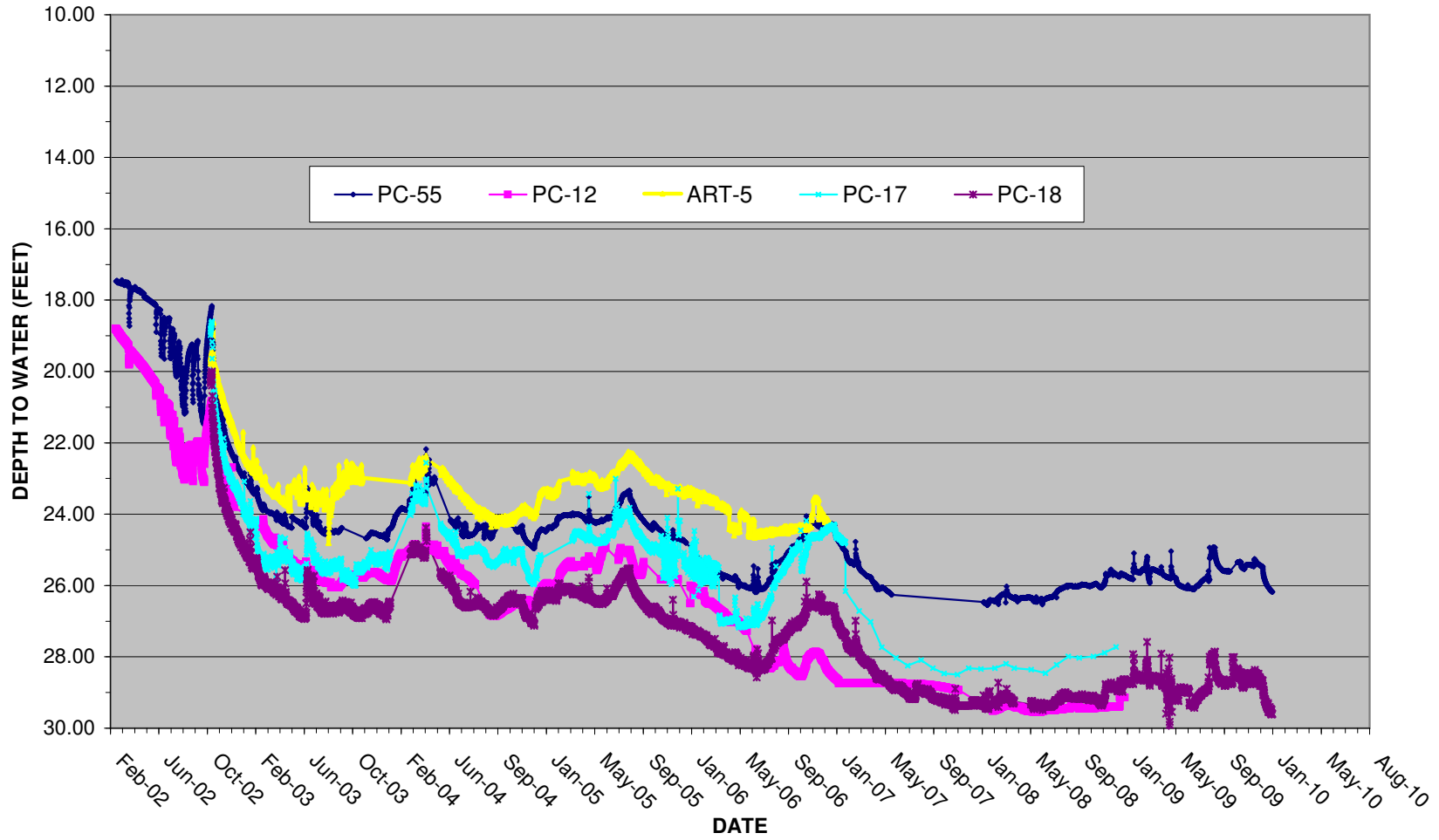
DESIGNED BY:		REVISIONS			
NGEM	NO.:	DESCRIPTION:	DATE:	BY:	
DRAWN BY:					
NGEM					
CHECKED BY:					
NGEM					
APPROVED BY:					
NGEM					

**northgate**  
 environmental management, inc.  
**TRONOX**  
<http://www.ngem.com>

## FIGURE 2 Hydrograph Pairs across the Barrier Wall

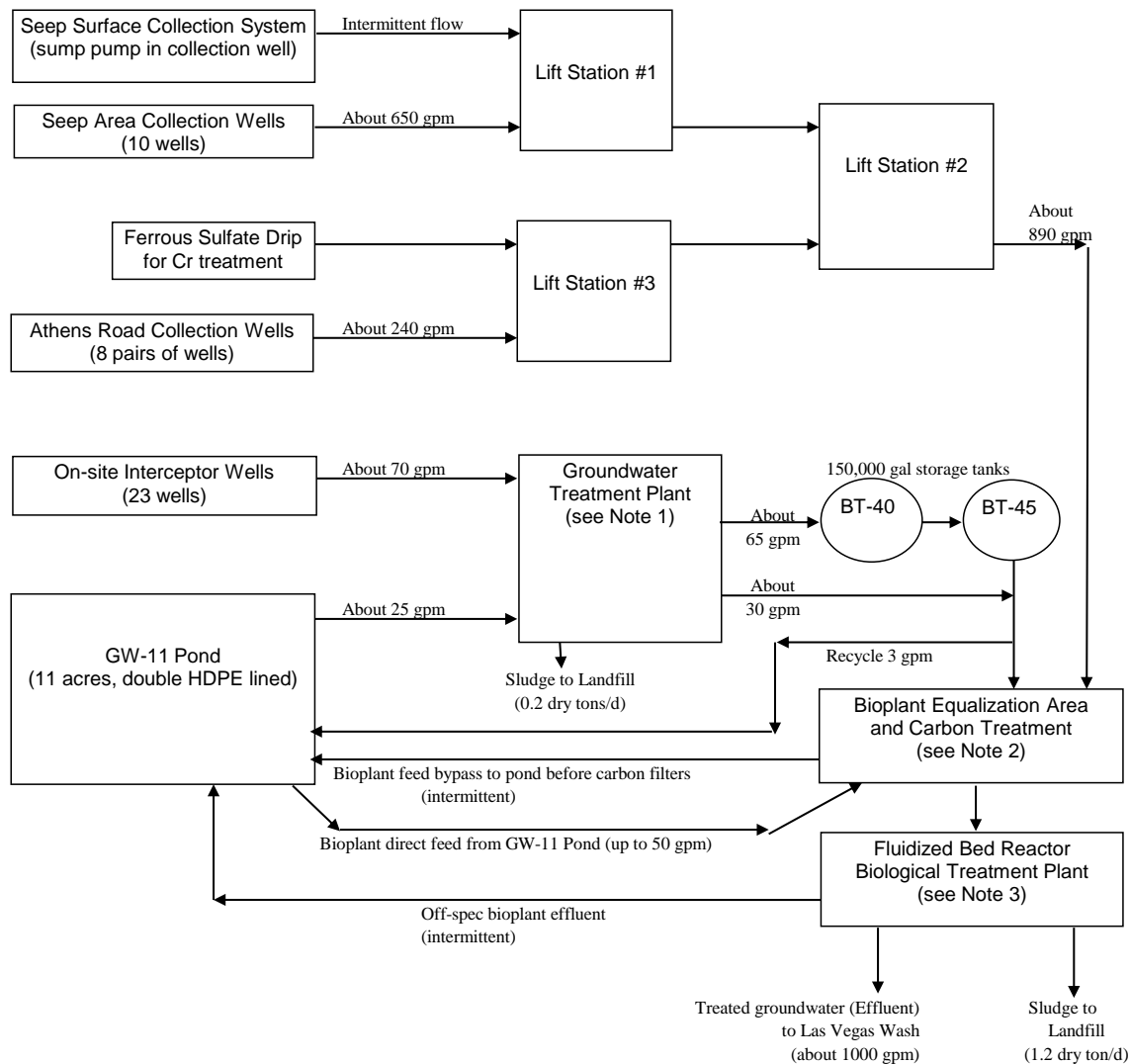


Figure 3: Athens Road Well Field Drawdown  
Tronox LLC, Henderson, Nevada



**FIGURE 4**  
**Tronox Henderson Groundwater Treatment Flow Diagram**

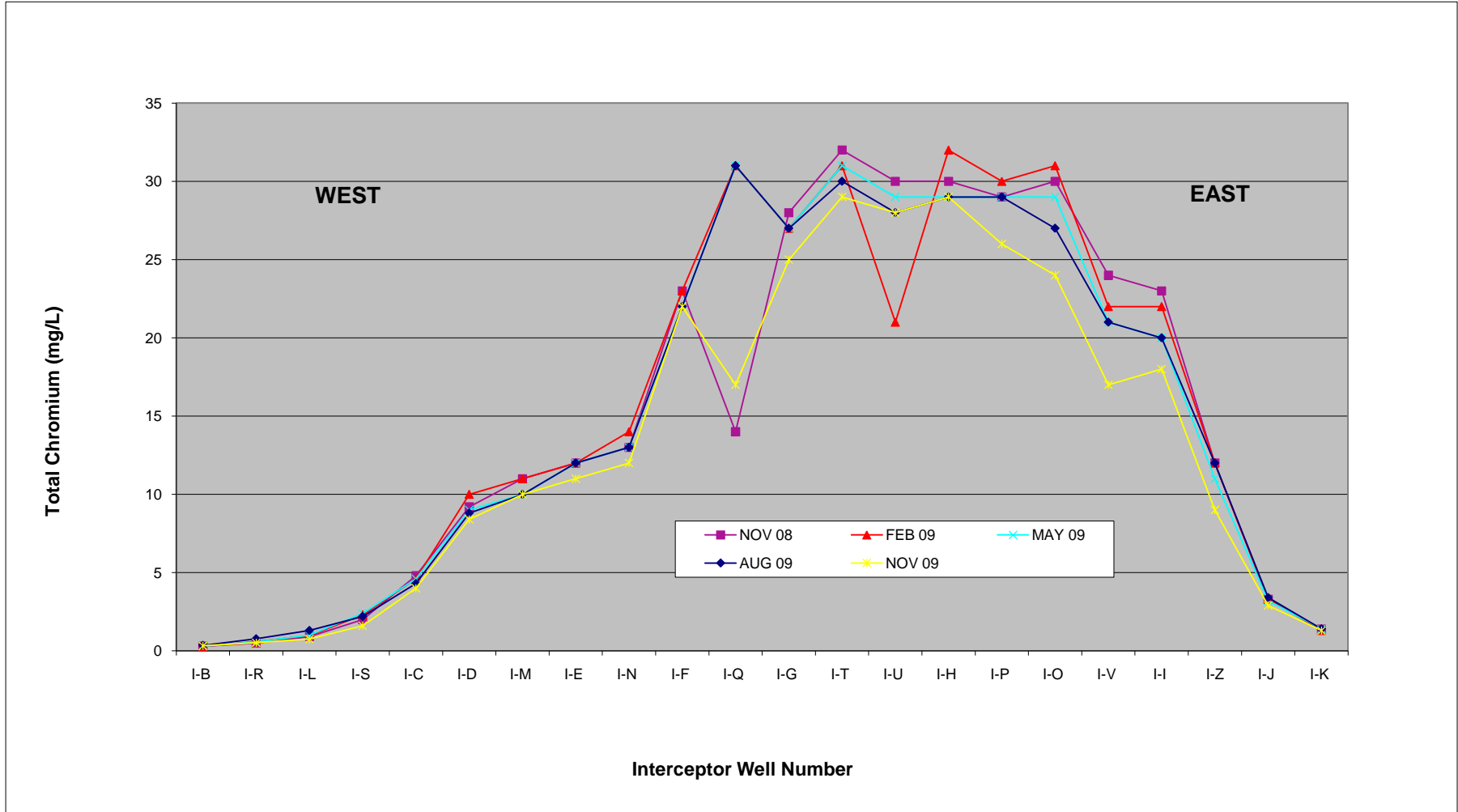
Last modified 12/31/2008



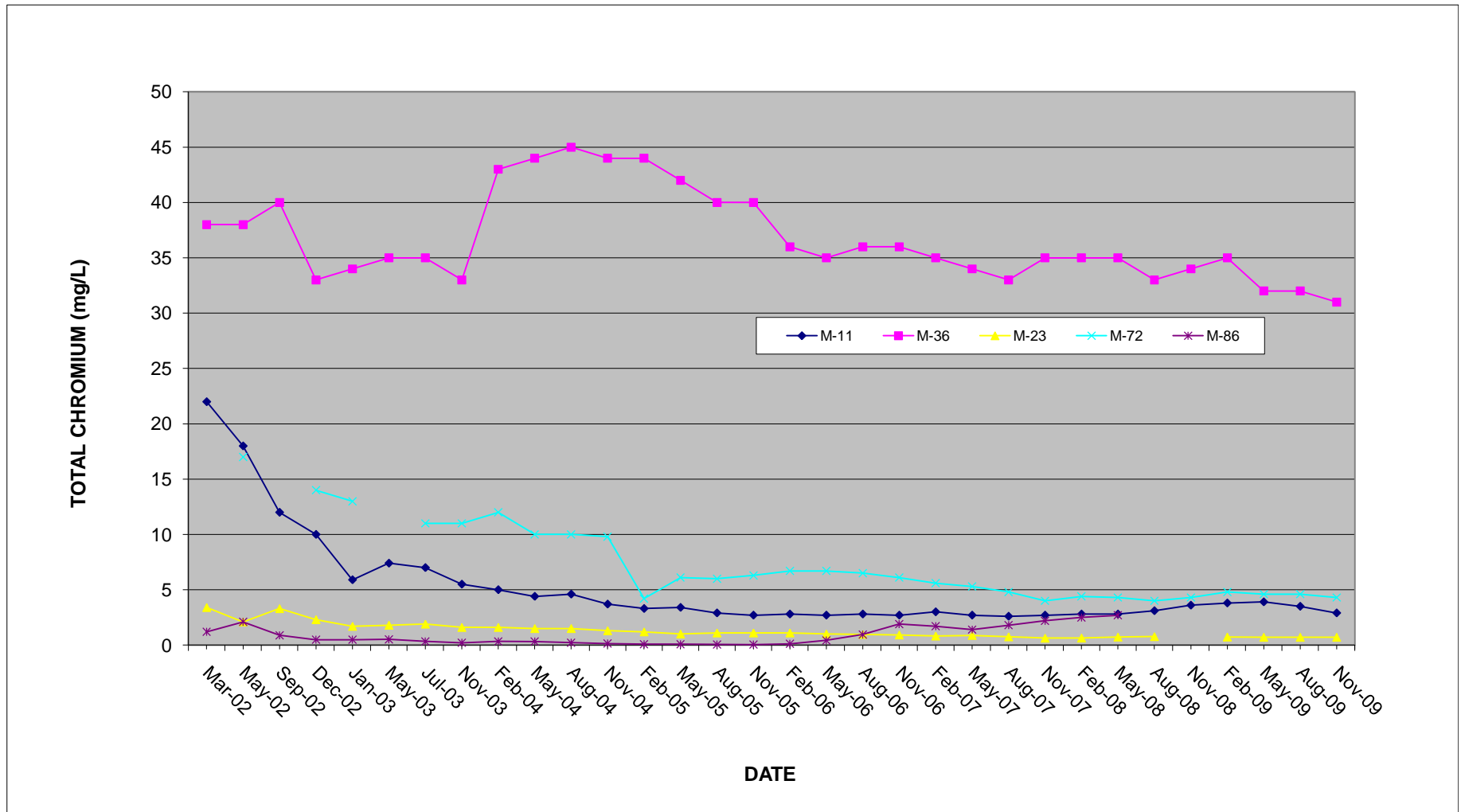
Notes:

- 1) Ferrous sulfate added for chromium removal. Clarifier settles solids. Sludge is removed and landfilled.
- 2) Two 12,000 gallon tanks plus three activated carbon vessels to remove organics which could harm bacteria, followed by cartridge filters.
- 3) Five 33,000 gallon primary reactors, four 28,800 gallon secondary reactors, aeration, dissolved air flotation, UV disinfection, two plate and frame filter presses, and a sand filter.
- 4) Bioplant feed is sampled after cartridge filters (note 2) and effluent is sampled at the discharge to Las Vegas Wash.

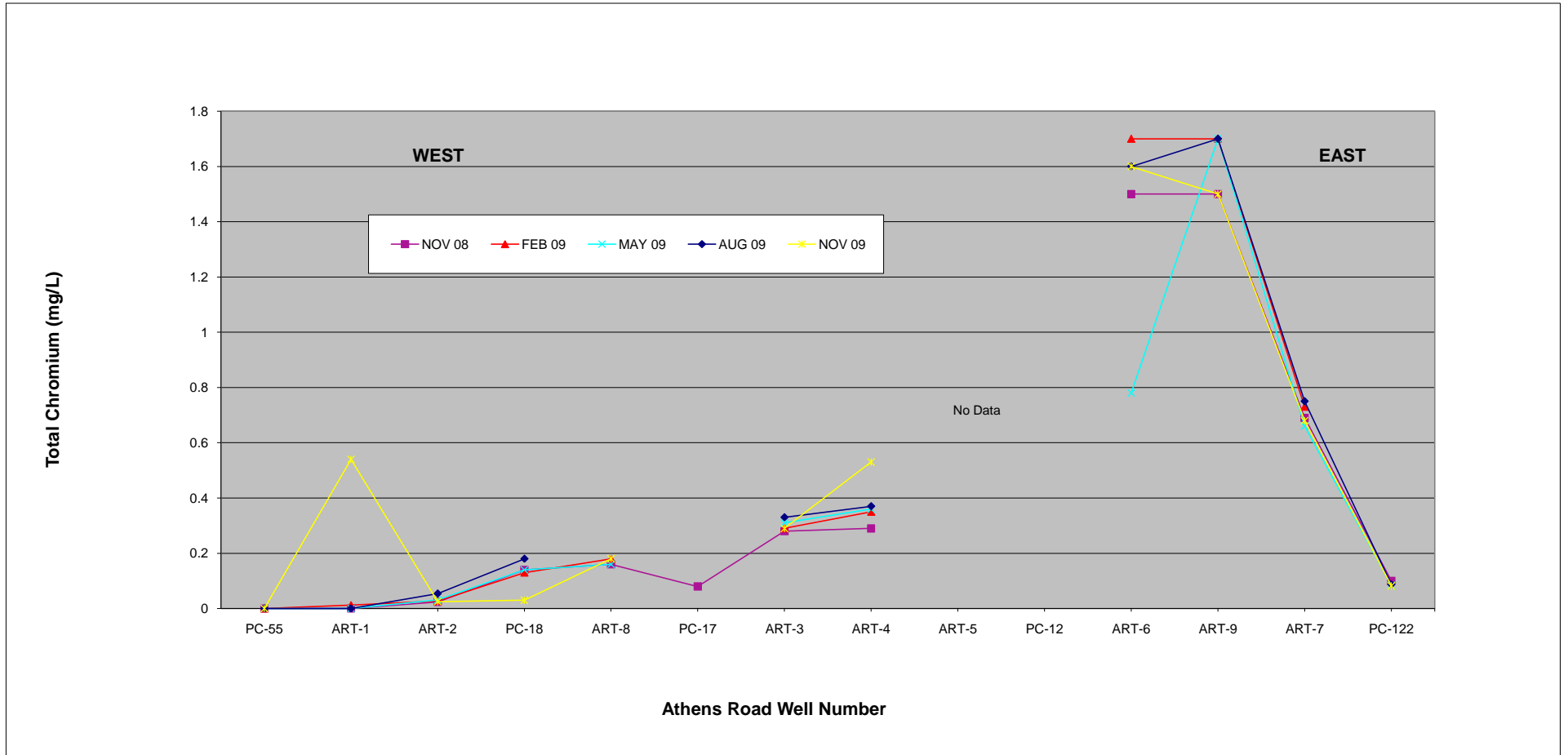
**FIGURE 5**  
**Interceptor Well Field Total Chromium Section Graph**



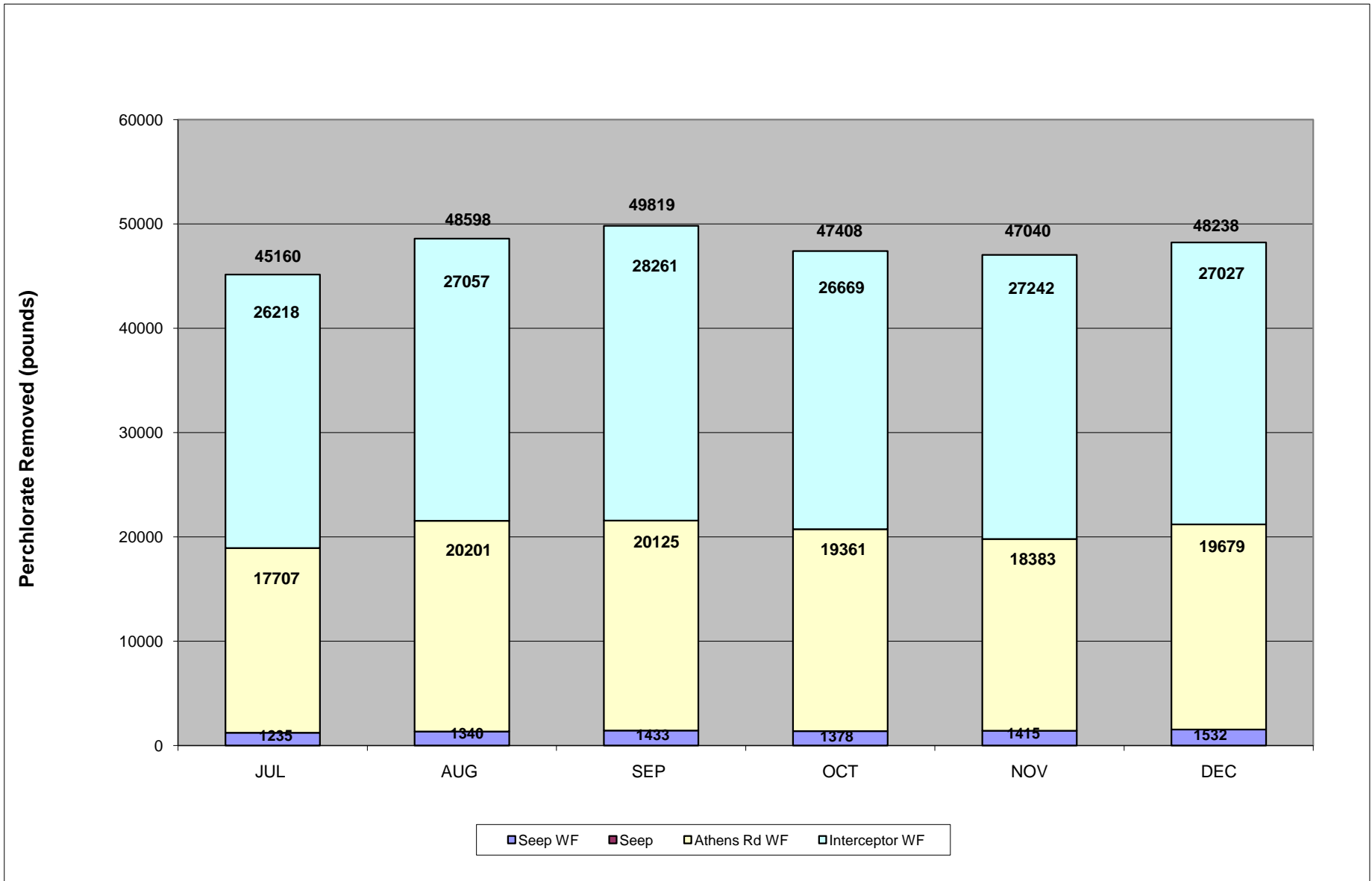
**FIGURE 6**  
**Consent Order Appendix J Wells Total Chromium Concentration Trend Graph**



**FIGURE 7**  
**Athens Road Well Field Total Chromium Section Graph**

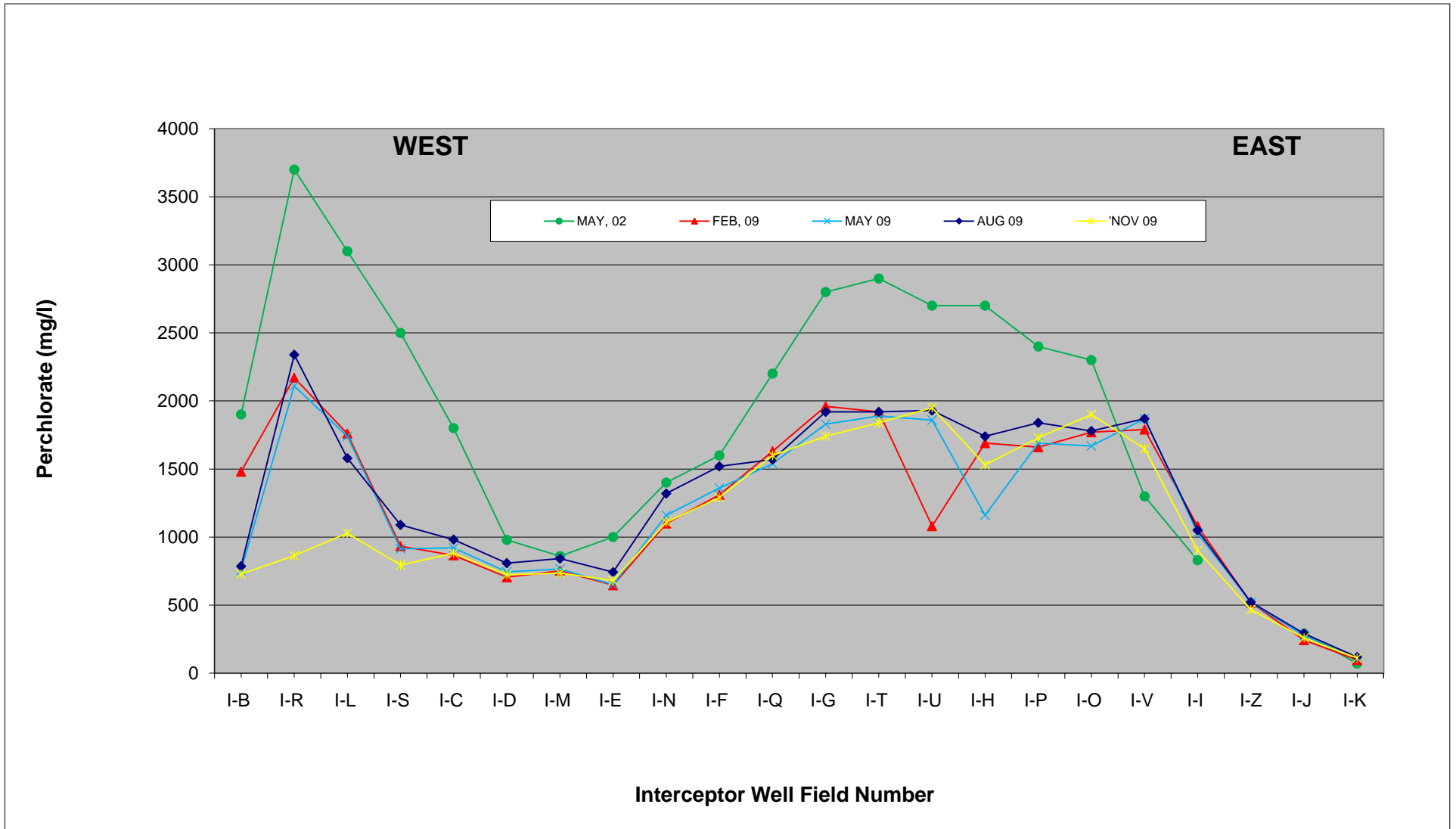


**FIGURE 8**  
**Perchlorate Removed from the Environment July to December 2009**

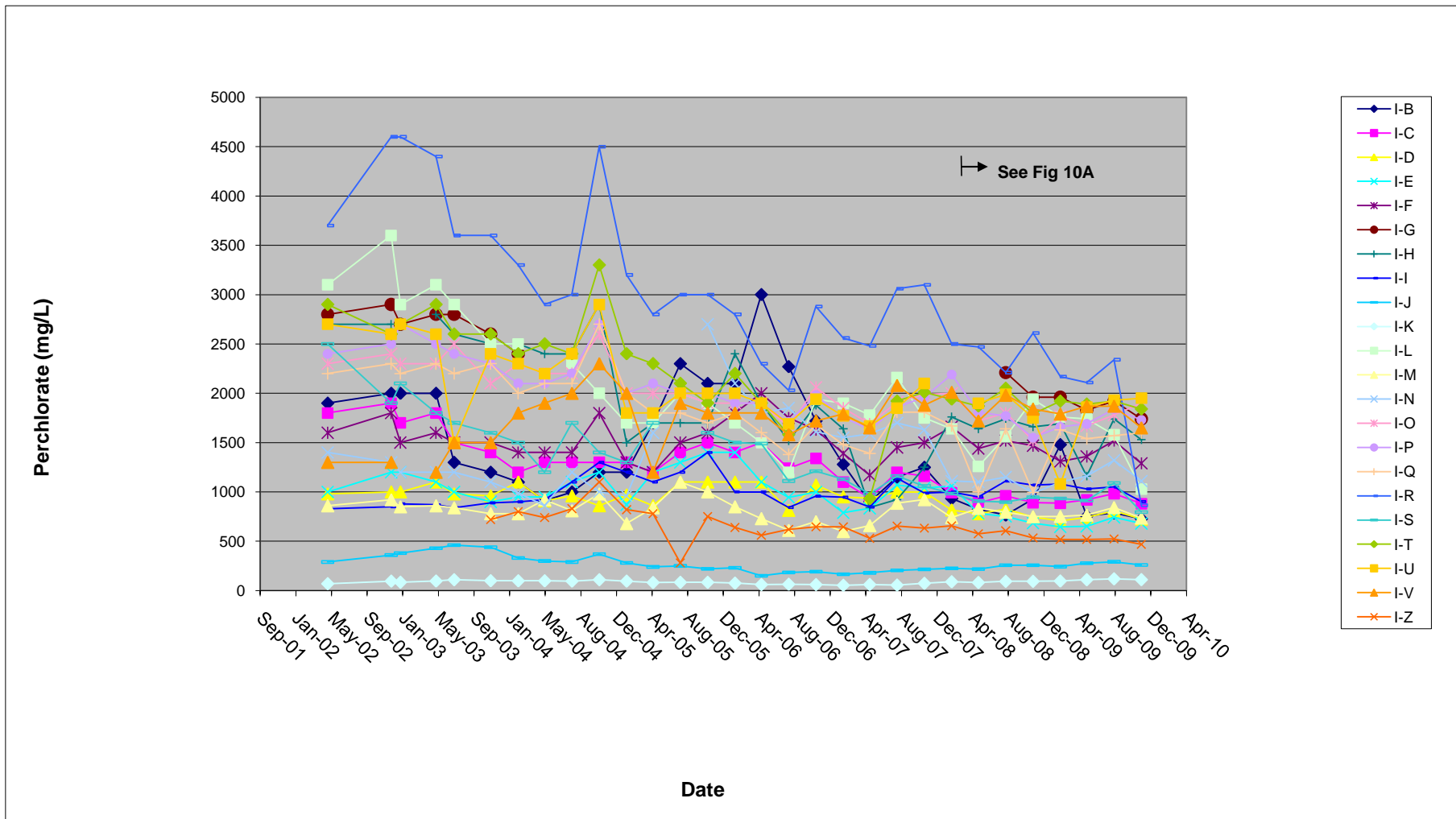




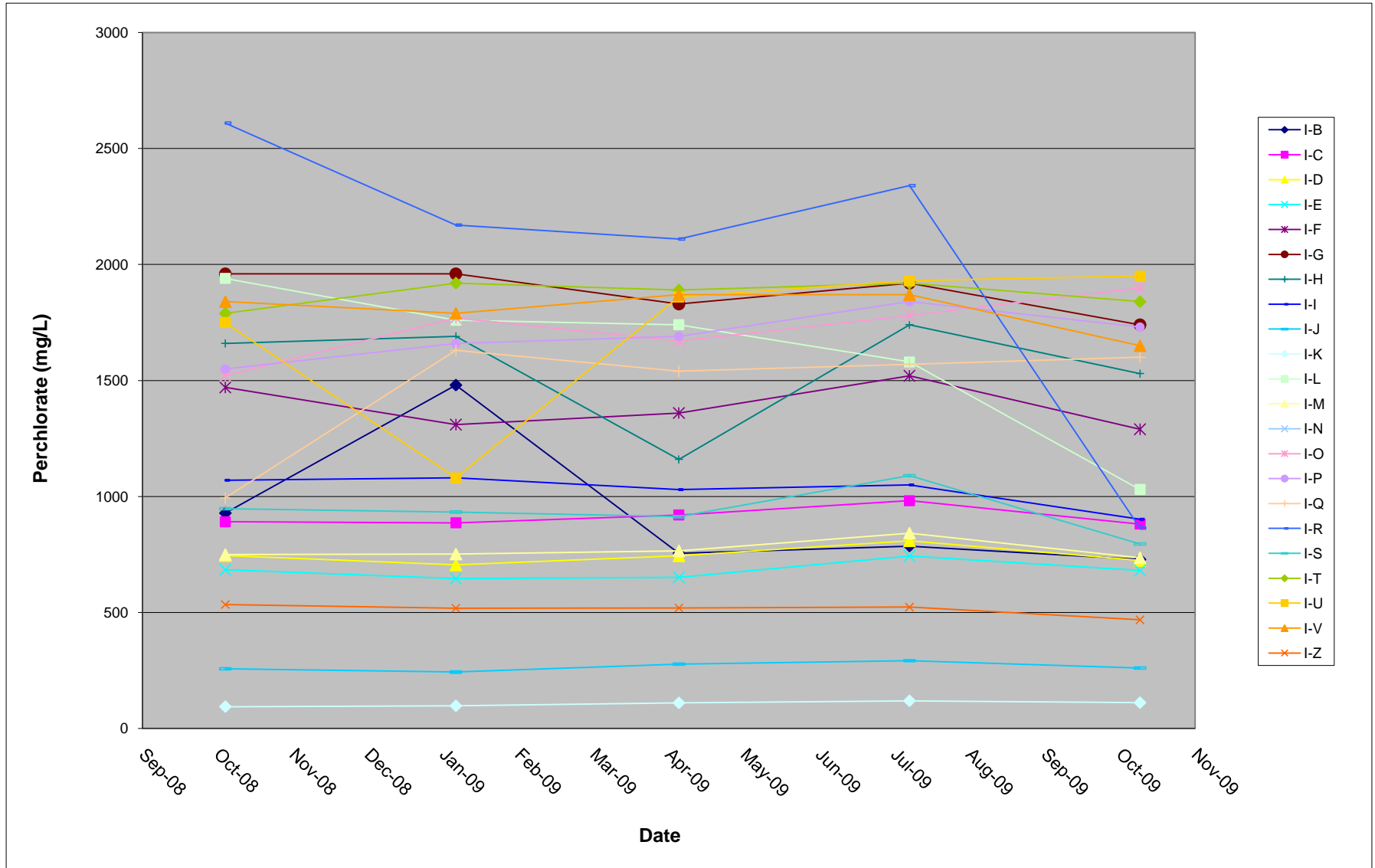
**FIGURE 9**  
**Interceptor Well Field Perchlorate Section Graph**



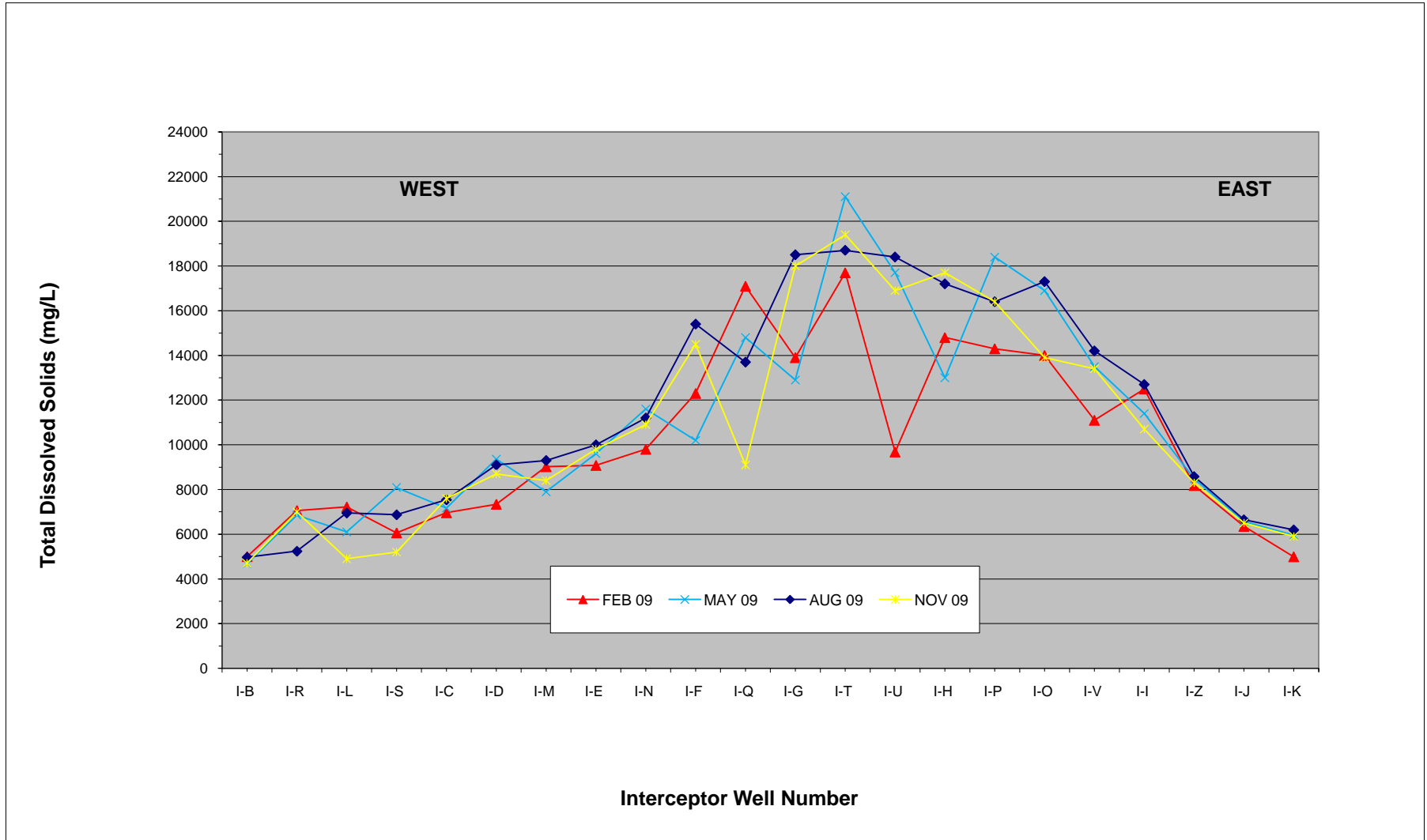
**FIGURE 10**  
**Interceptor Well Field Perchlorate Trend Graph**



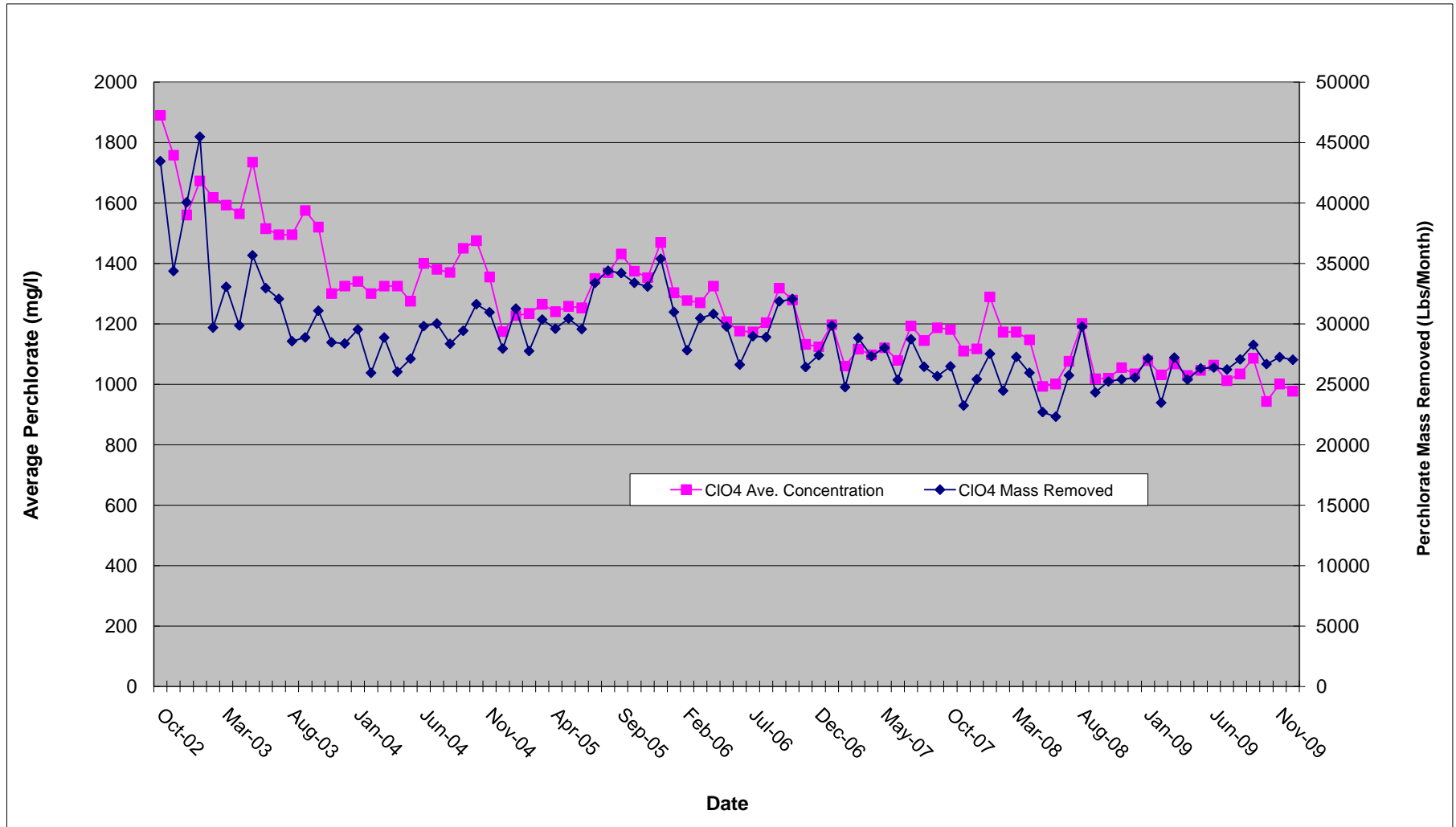
**FIGURE 10A**  
**Interceptor Well Field Perchlorate Trend Graph, November 2008 – November 2009**



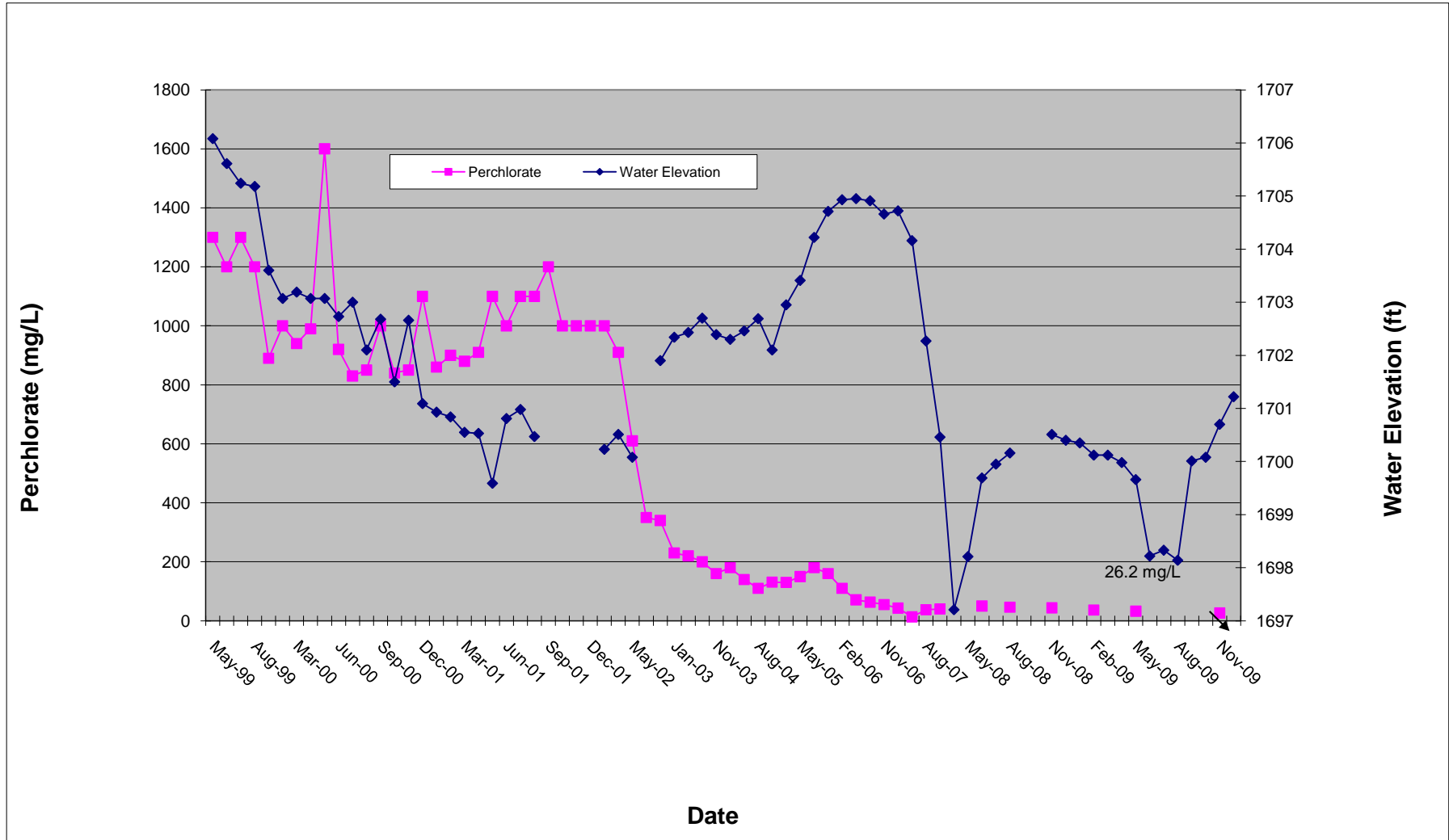
**FIGURE 11**  
**Interceptor Well Field Total Dissolved Solids Section Graph**



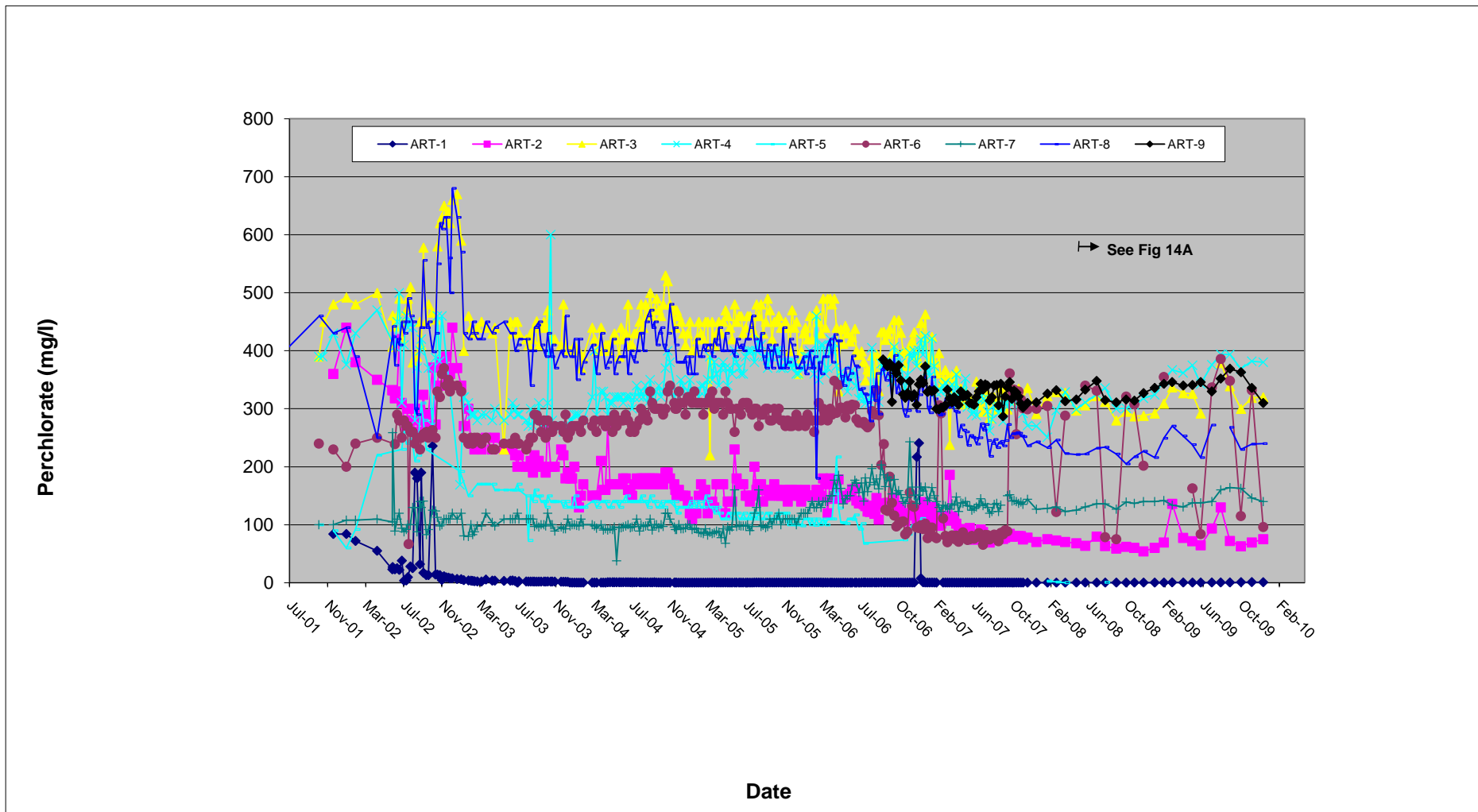
**FIGURE 12**  
**Interceptor Well Field Average Perchlorate Concentration and Mass Removed**



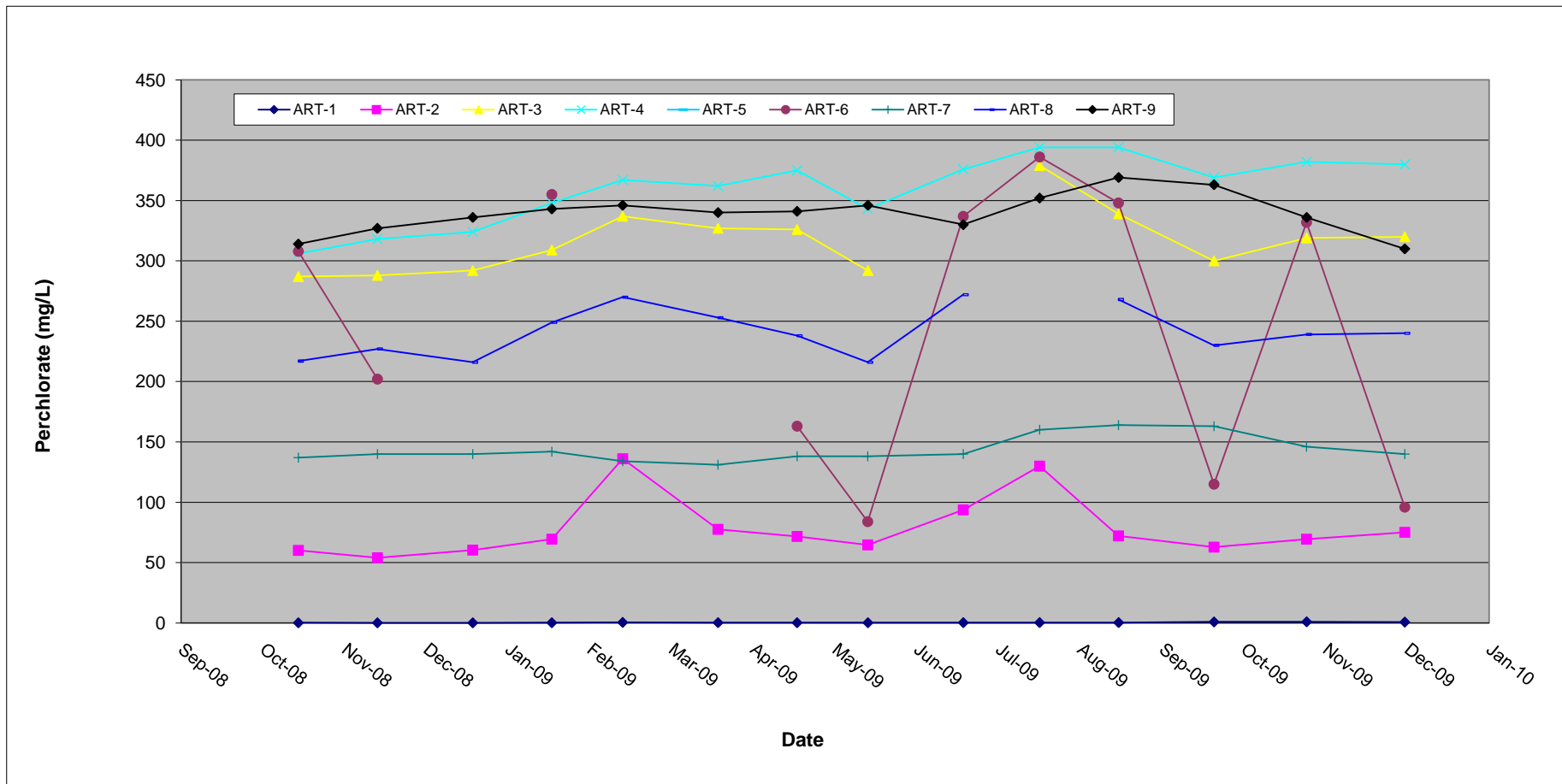
**FIGURE 13**  
**Well M-100 Perchlorate vs. Water Elevation Trend Graph**



**FIGURE 14**  
**Athens Road Well Field Perchlorate Concentration Trend Graph**

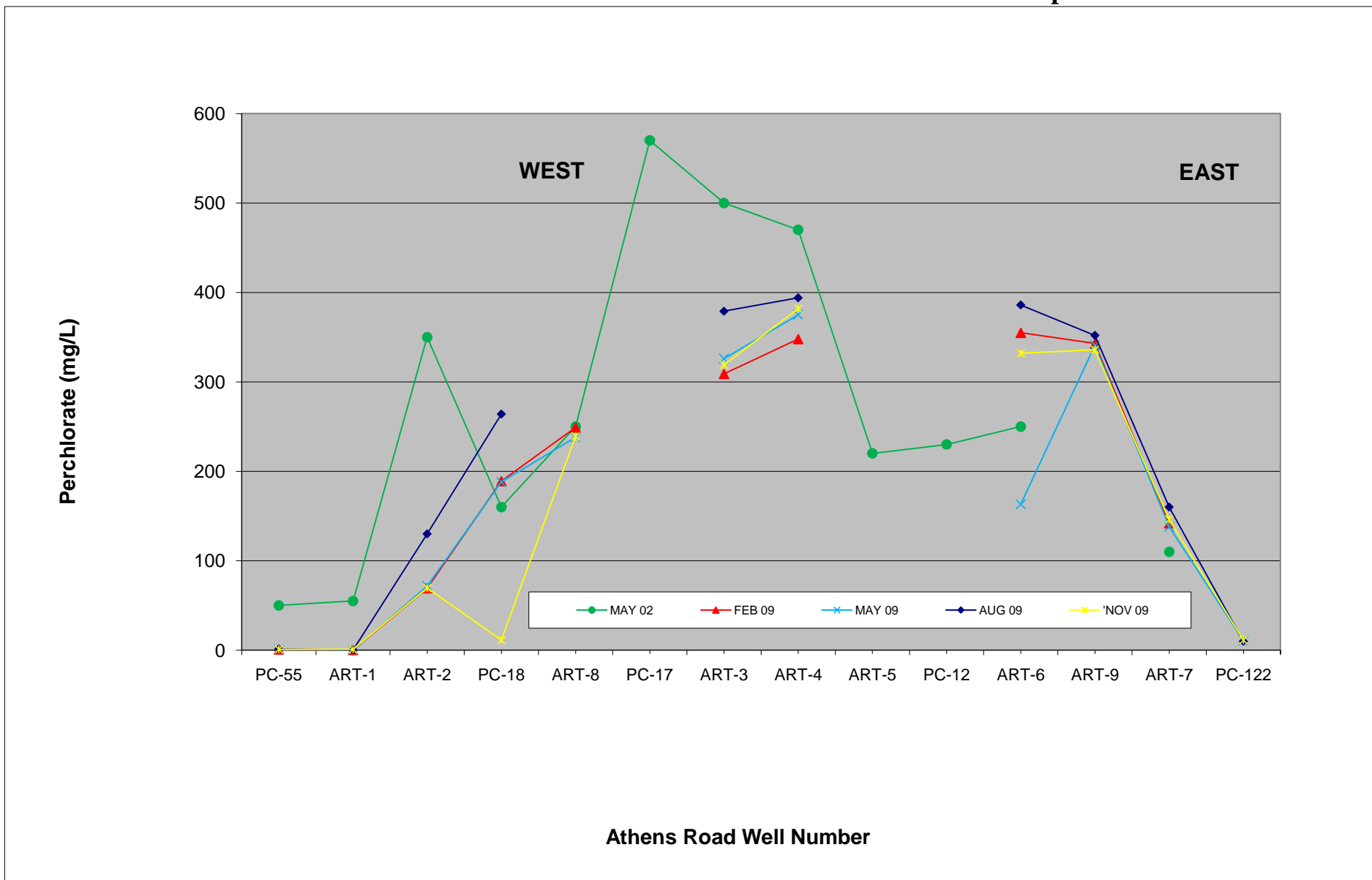


**FIGURE 14A**  
**Athens Road Well Field Perchlorate Concentration Trend Graph, November 2008 – December 2009**

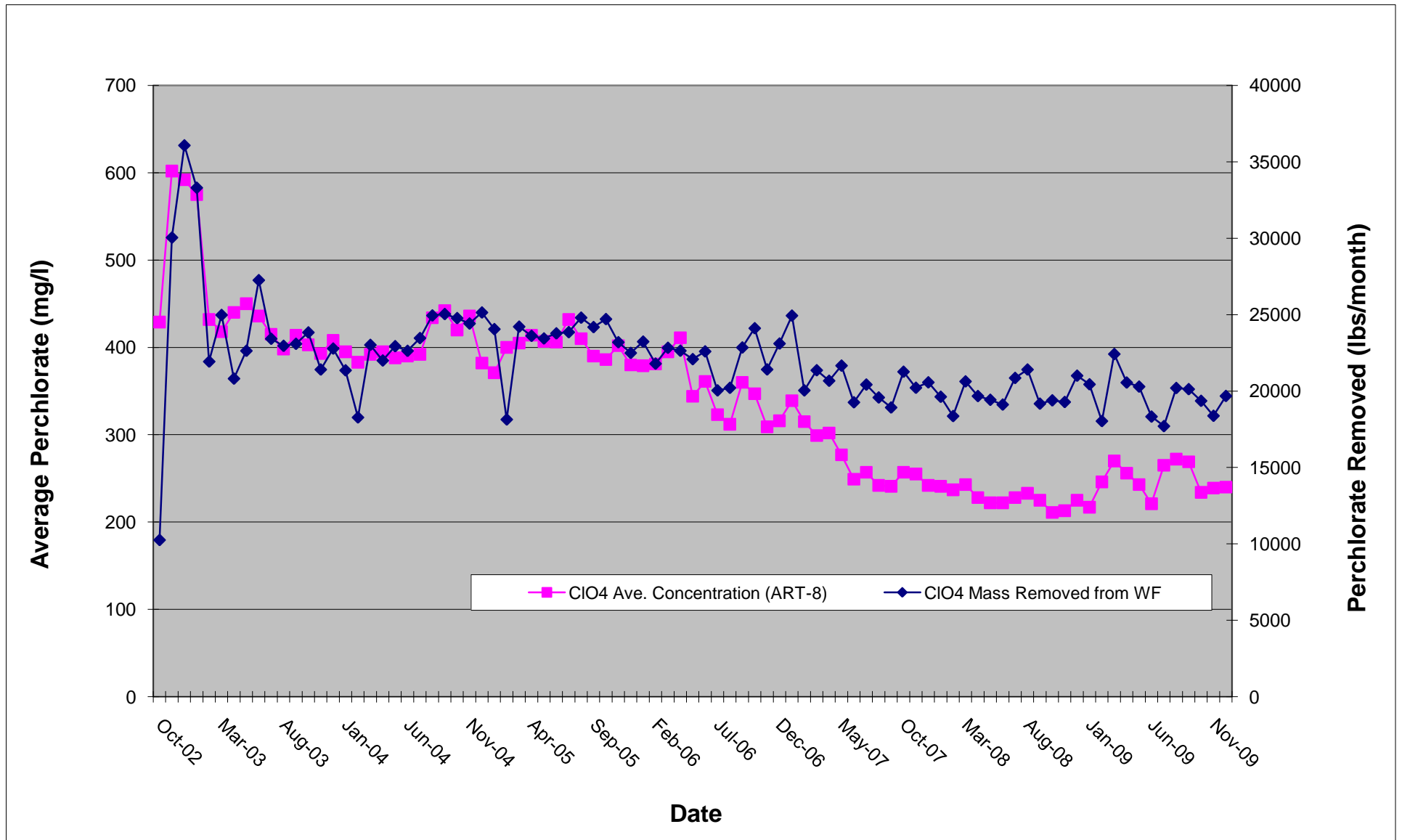




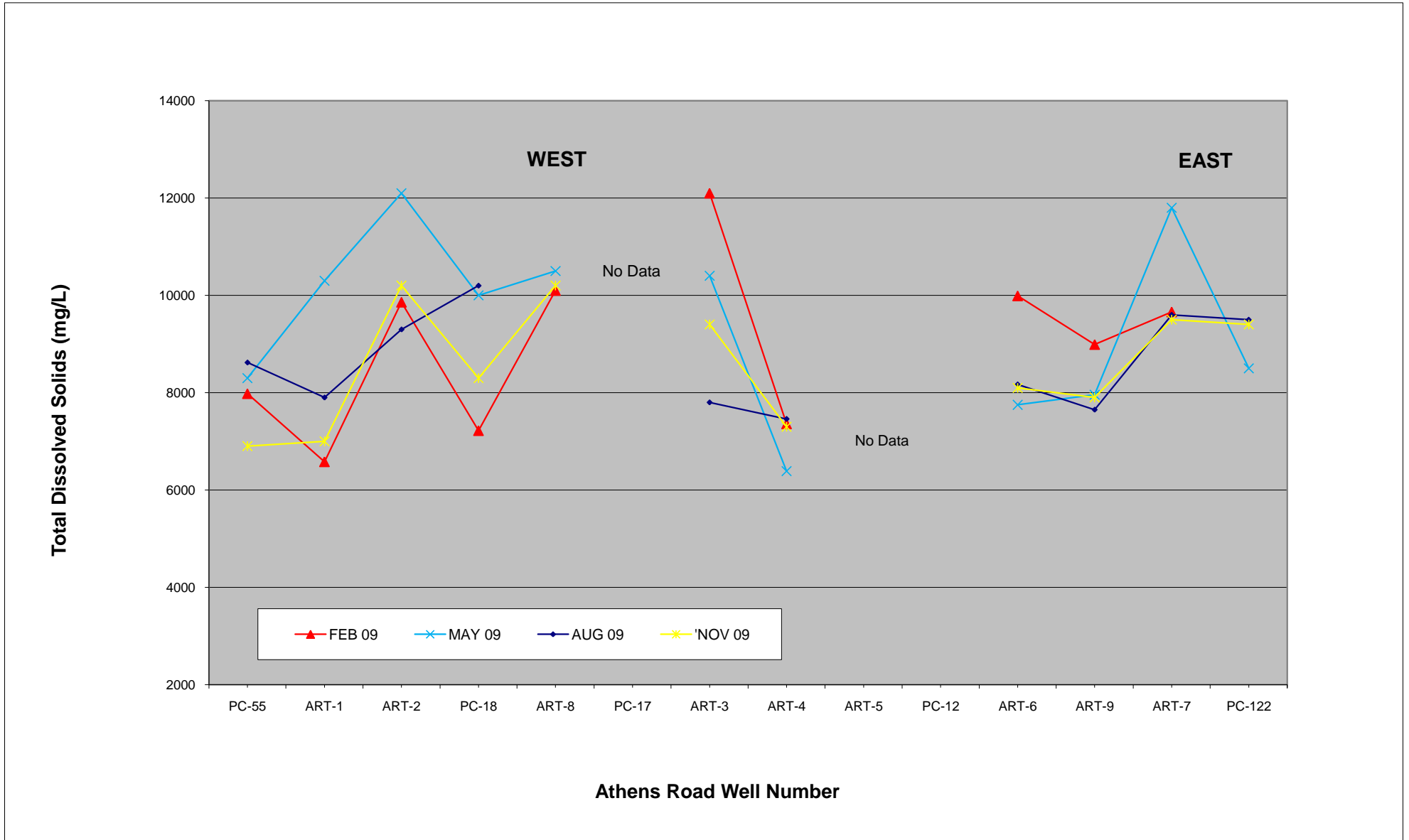
**FIGURE 15**  
**Athens Road Well Field Perchlorate Concentration Section Graph**



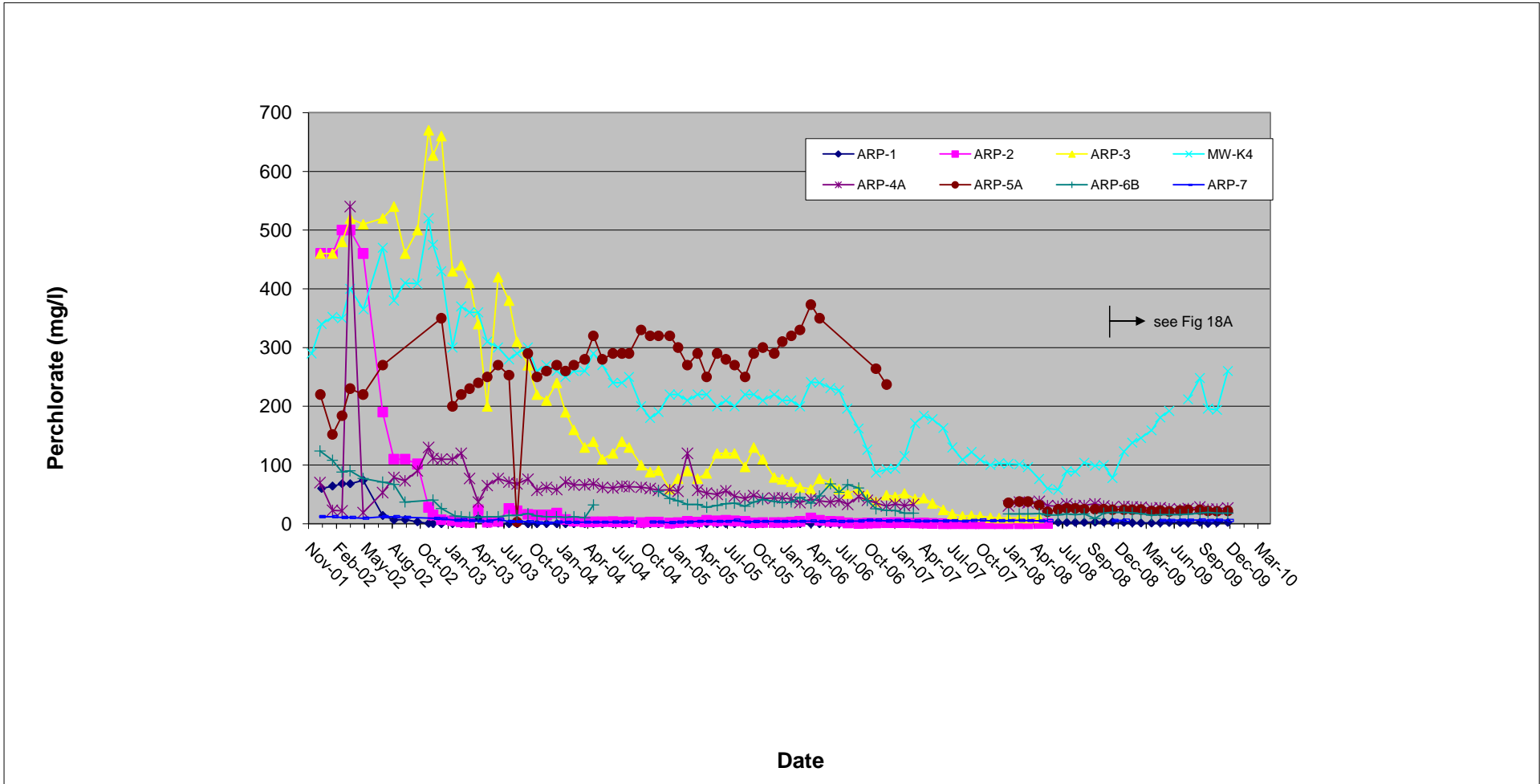
**FIGURE 16**  
**Athens Road Well Field Average Perchlorate Concentration in ART-8 and Mass Removed**



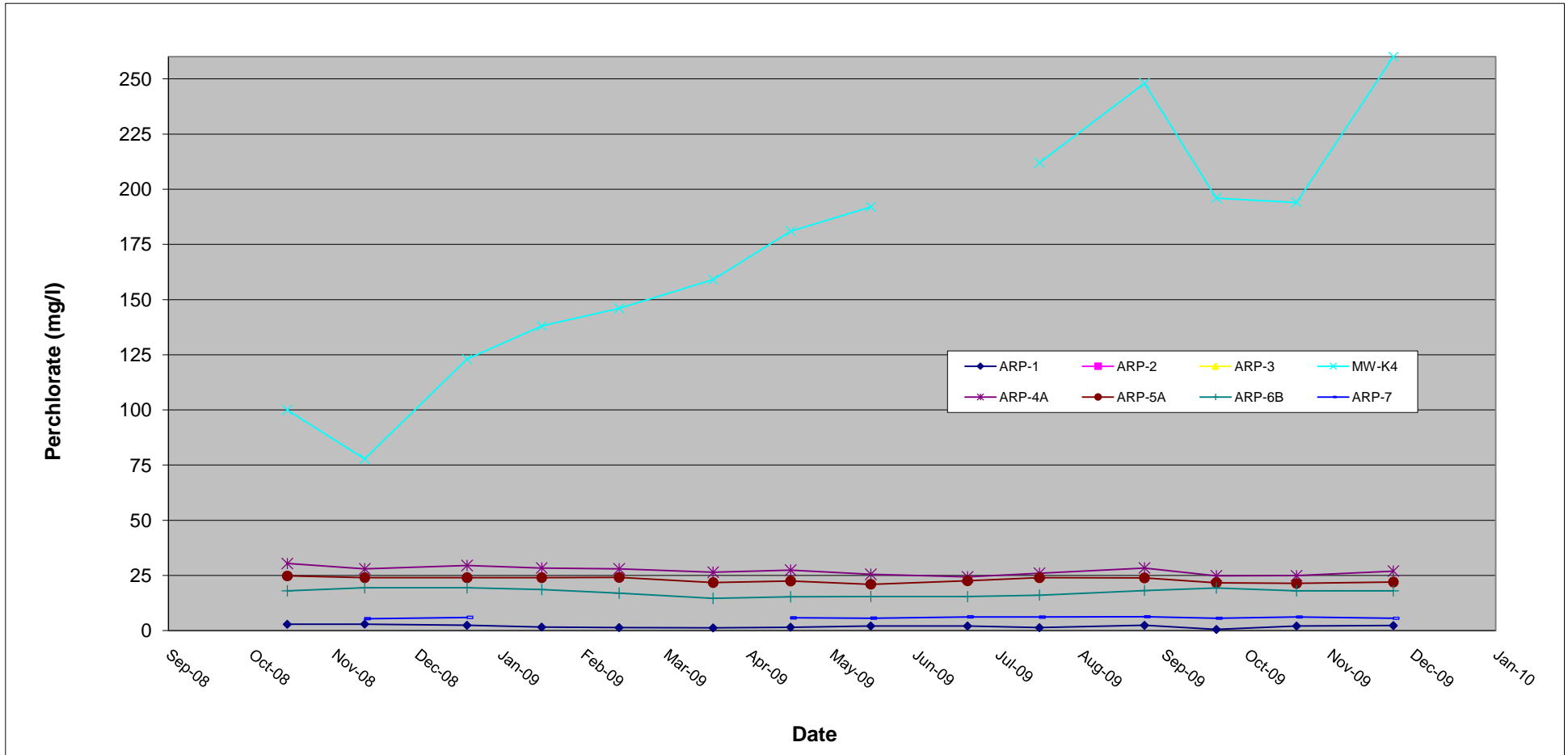
**FIGURE 17**  
**Athens Road Well Field Total Dissolved Solids Section Graph**



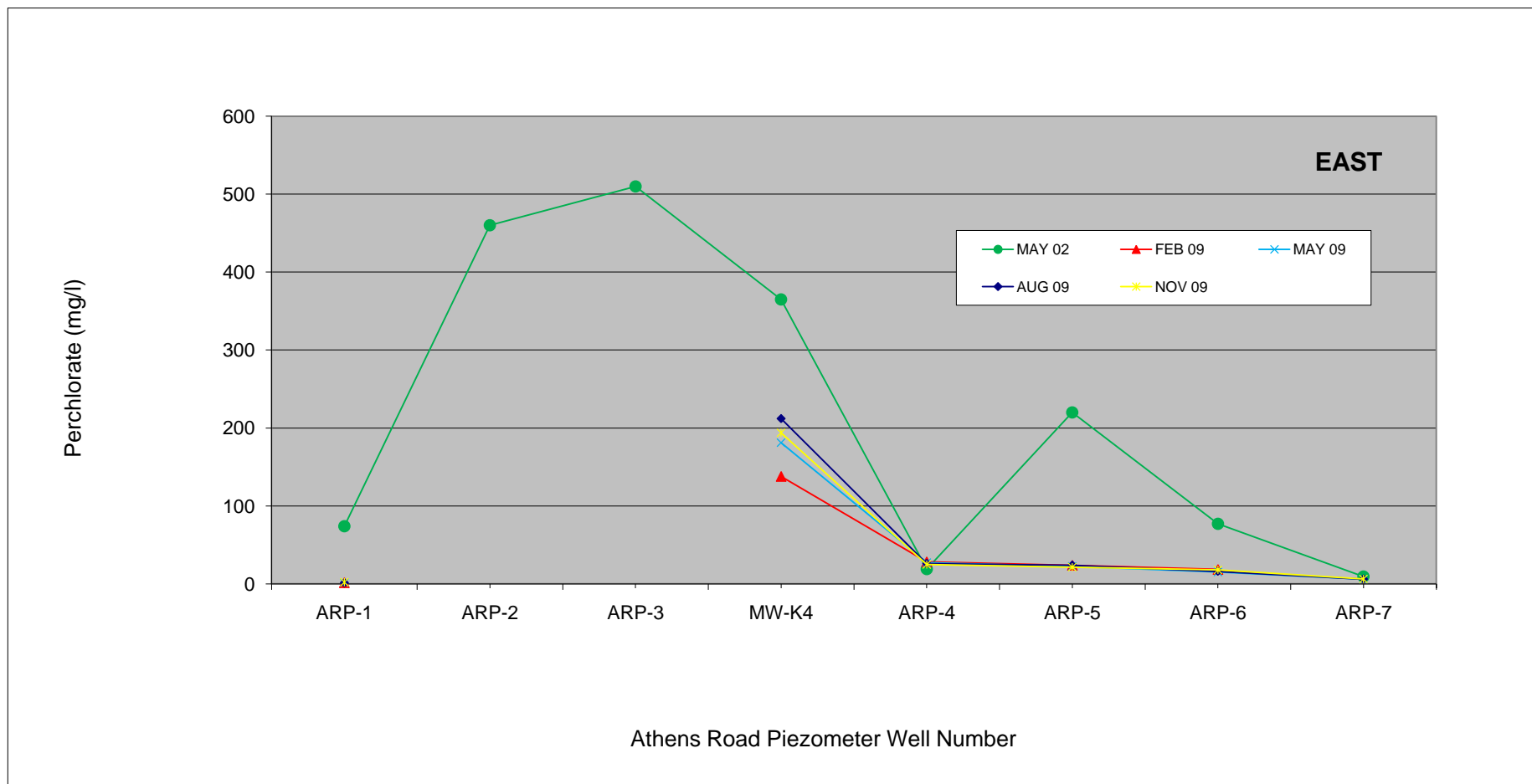
**FIGURE 18**  
**Athens Road Piezometer Wells Perchlorate Concentration Trend Graph**



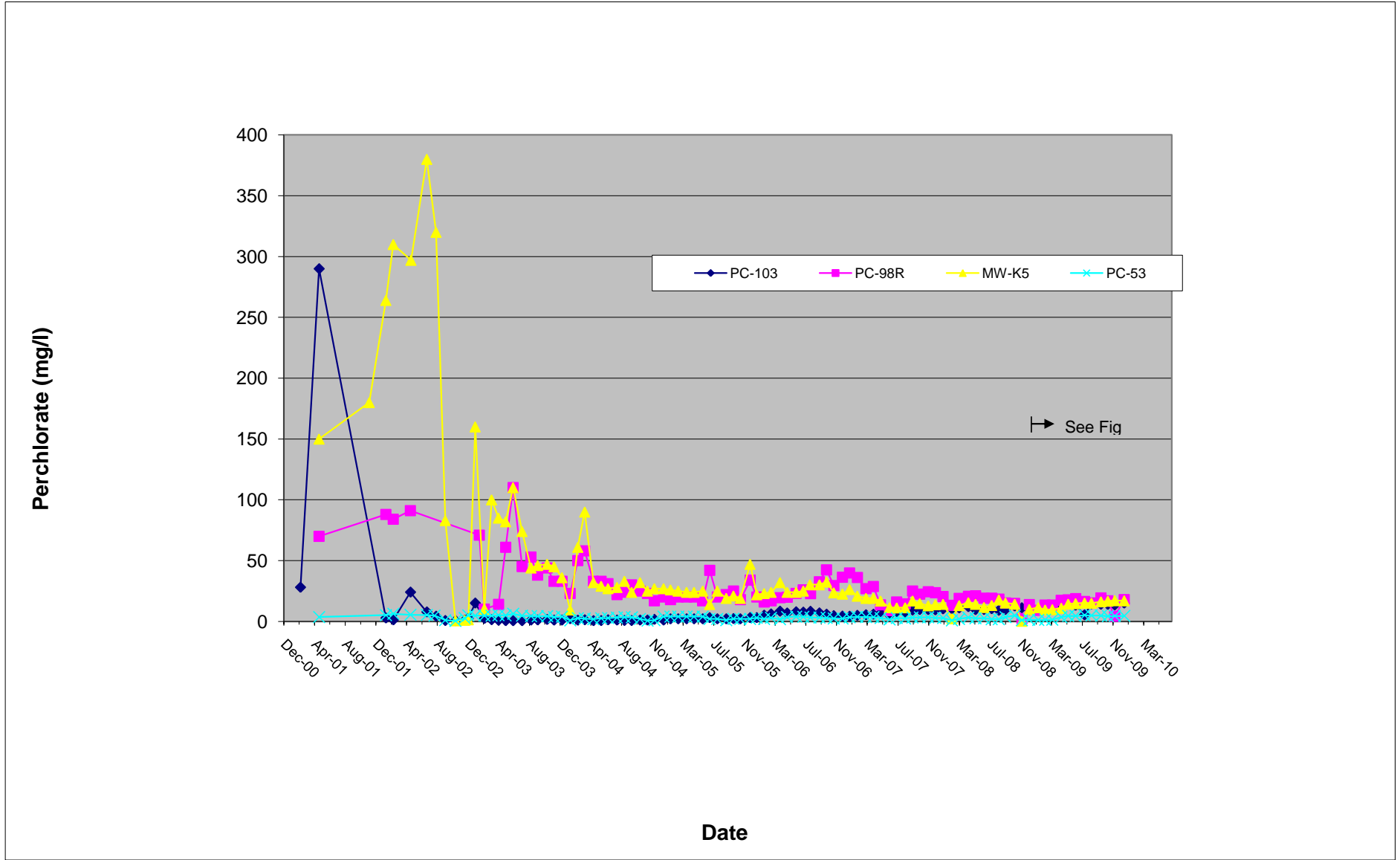
**FIGURE 18A**  
**Athens Road Piezometer Wells Perchlorate Concentration Trend Graph, November 2008 – December 2009**



**FIGURE 19**  
**Athens Road Piezometer Well Line Perchlorate Concentration Section Graph**

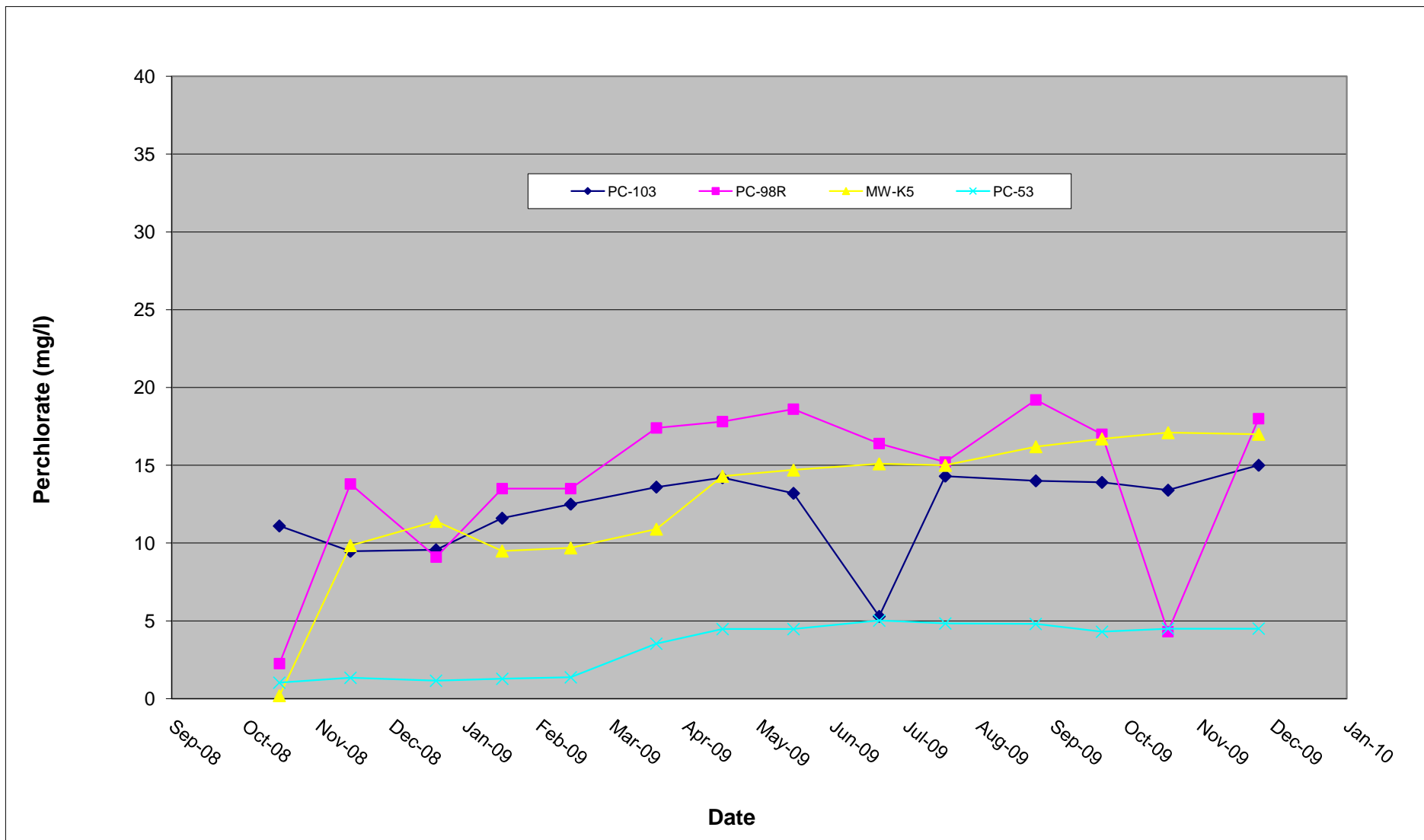


**FIGURE 20**  
**City of Henderson WRF Well Line Perchlorate Concentration Trend Graph**



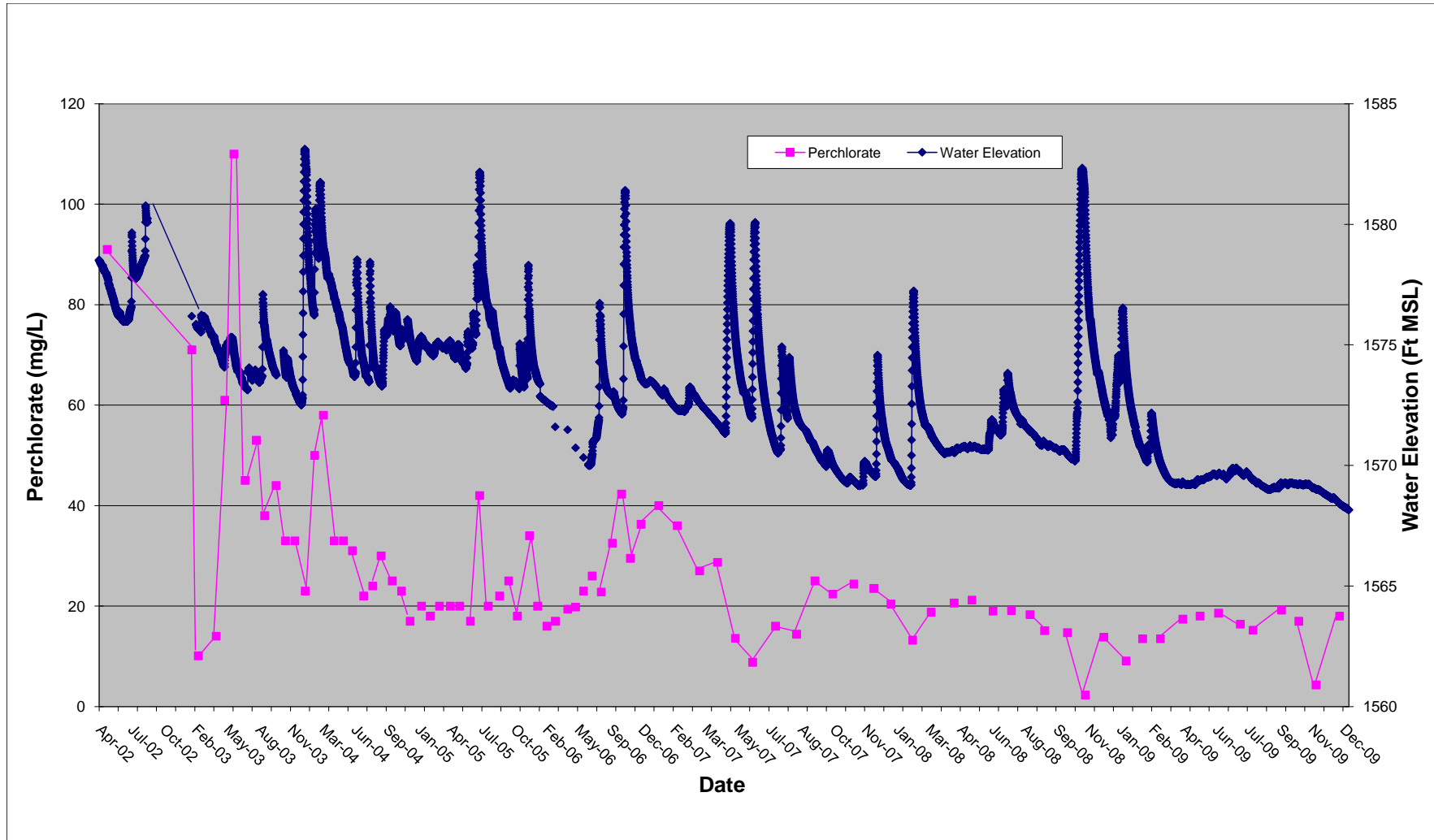
**FIGURE 20A**

**City of Henderson WRF Well Line Perchlorate Concentration Trend Graph, November 2008 – December 2009**

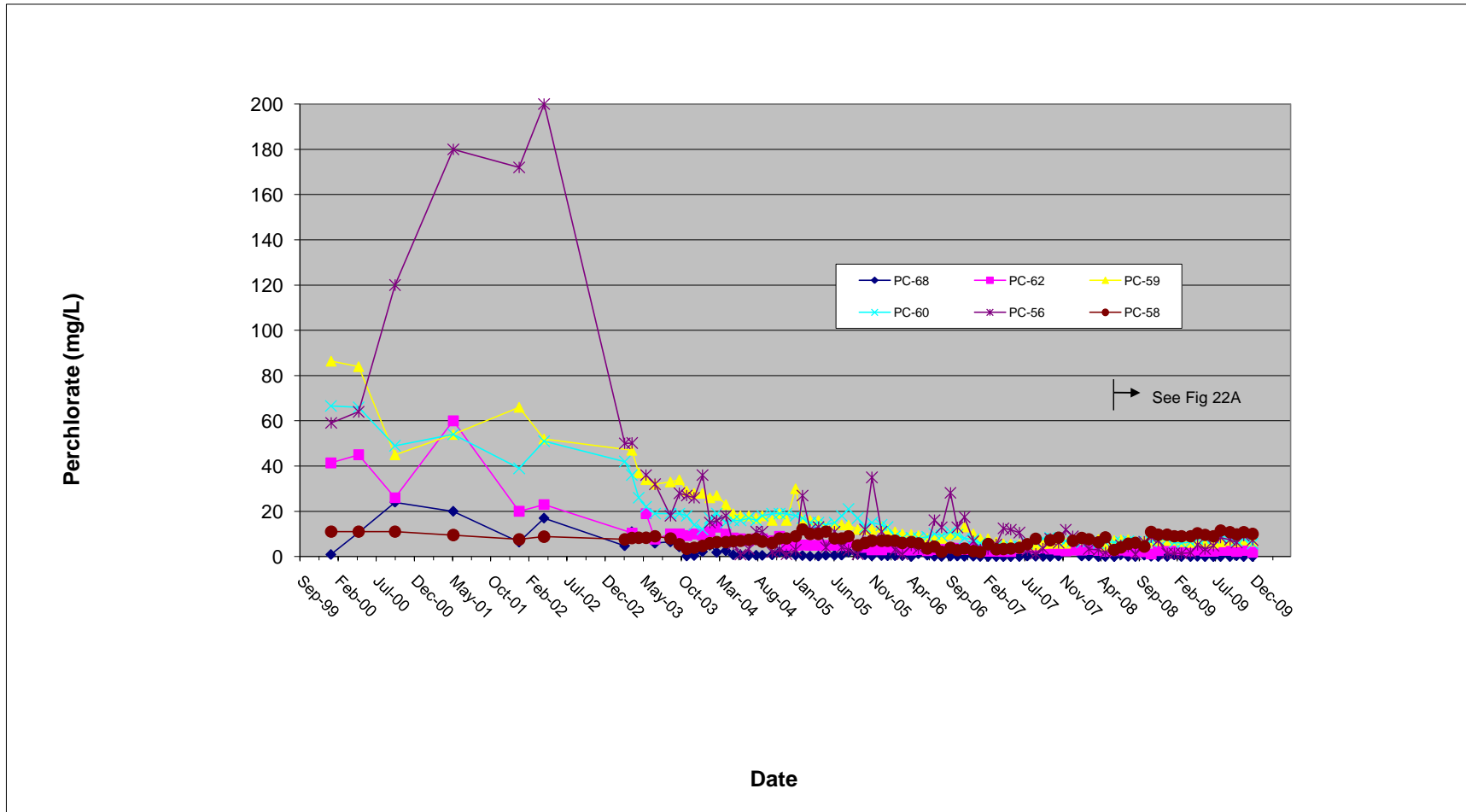




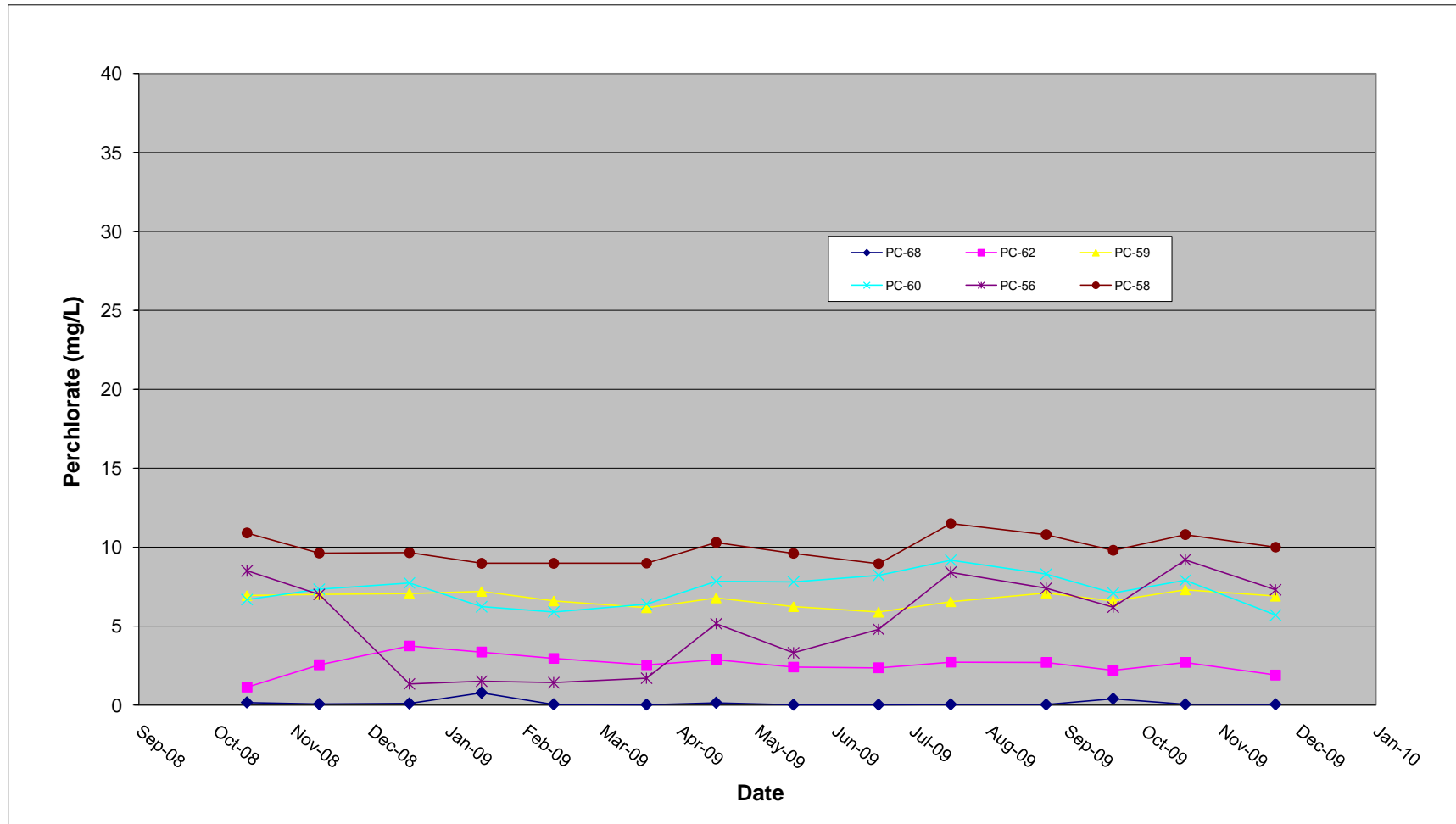
**FIGURE 21**  
**Well PC-98R Perchlorate vs. Water Elevation Trend Graph**



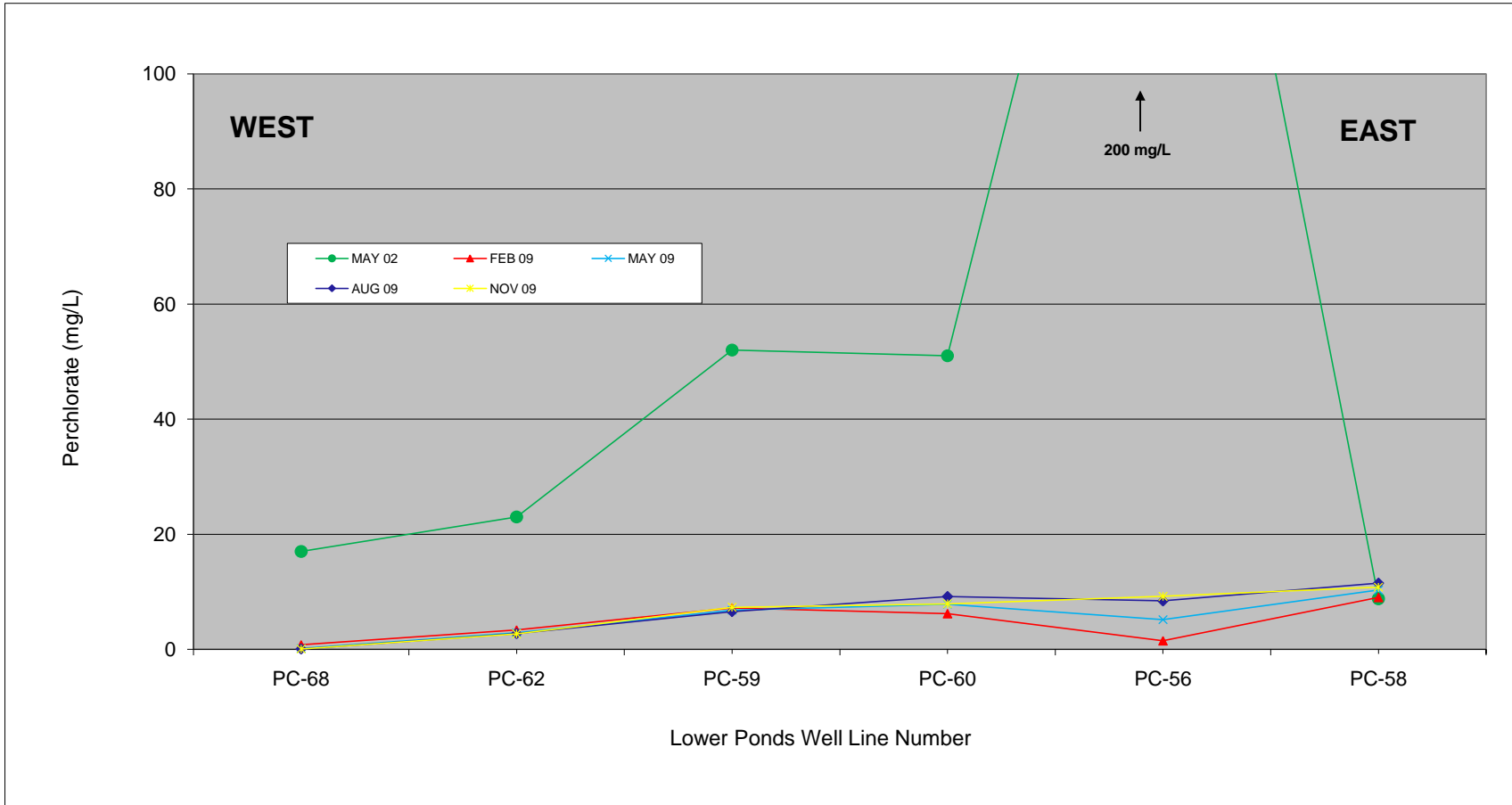
**FIGURE 22**  
**Lower Ponds Well Line Perchlorate Concentration Trend Graph**



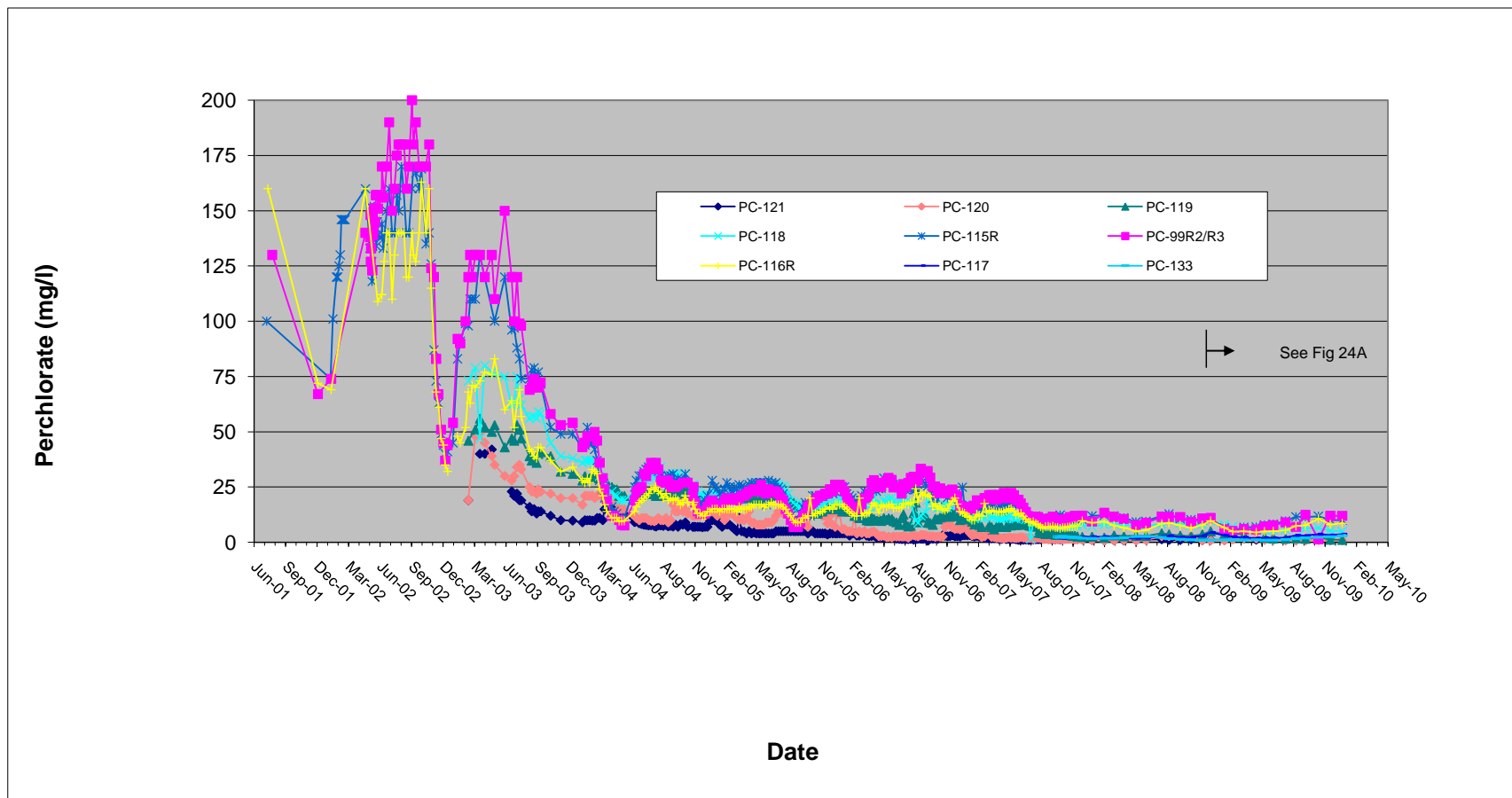
**FIGURE 22A**  
**Lower Ponds Well Line Perchlorate Concentration Trend Graph, November 2008 – December 2009**



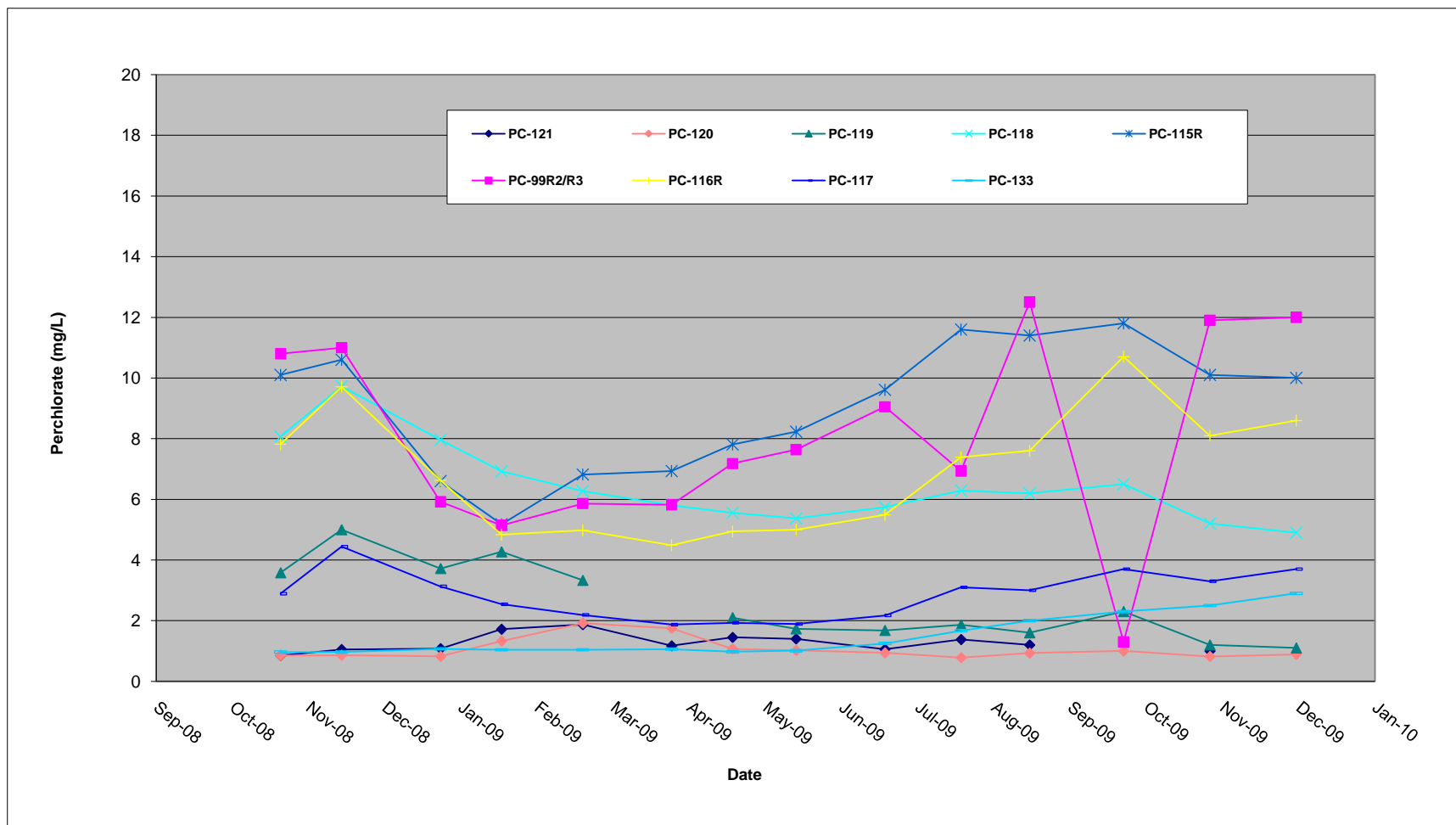
**FIGURE 23**  
**Lower Ponds Well Line Perchlorate Concentration Section Graph**



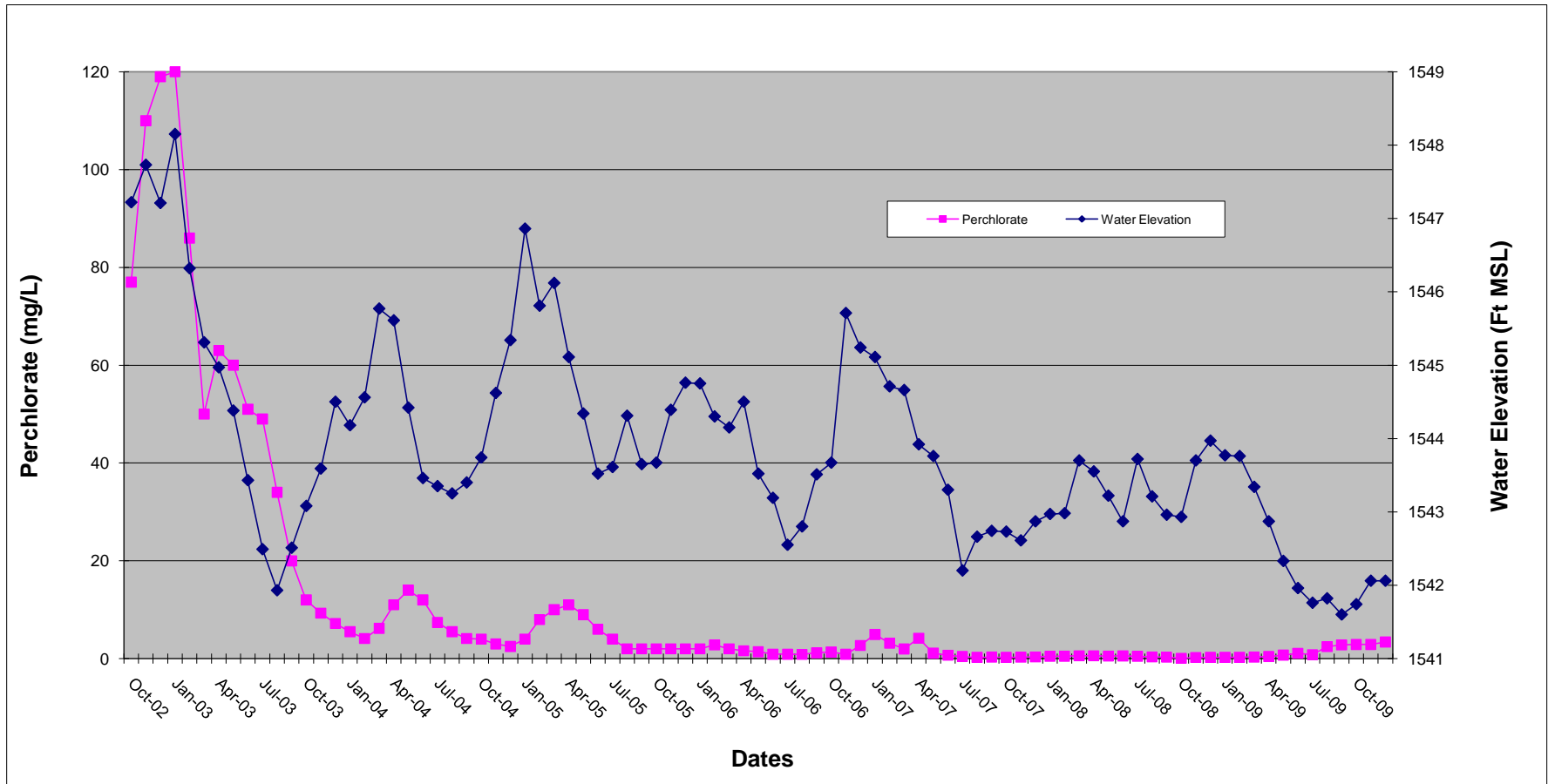
**FIGURE 24**  
**Seep Well Field Perchlorate Concentration Trend Graph**



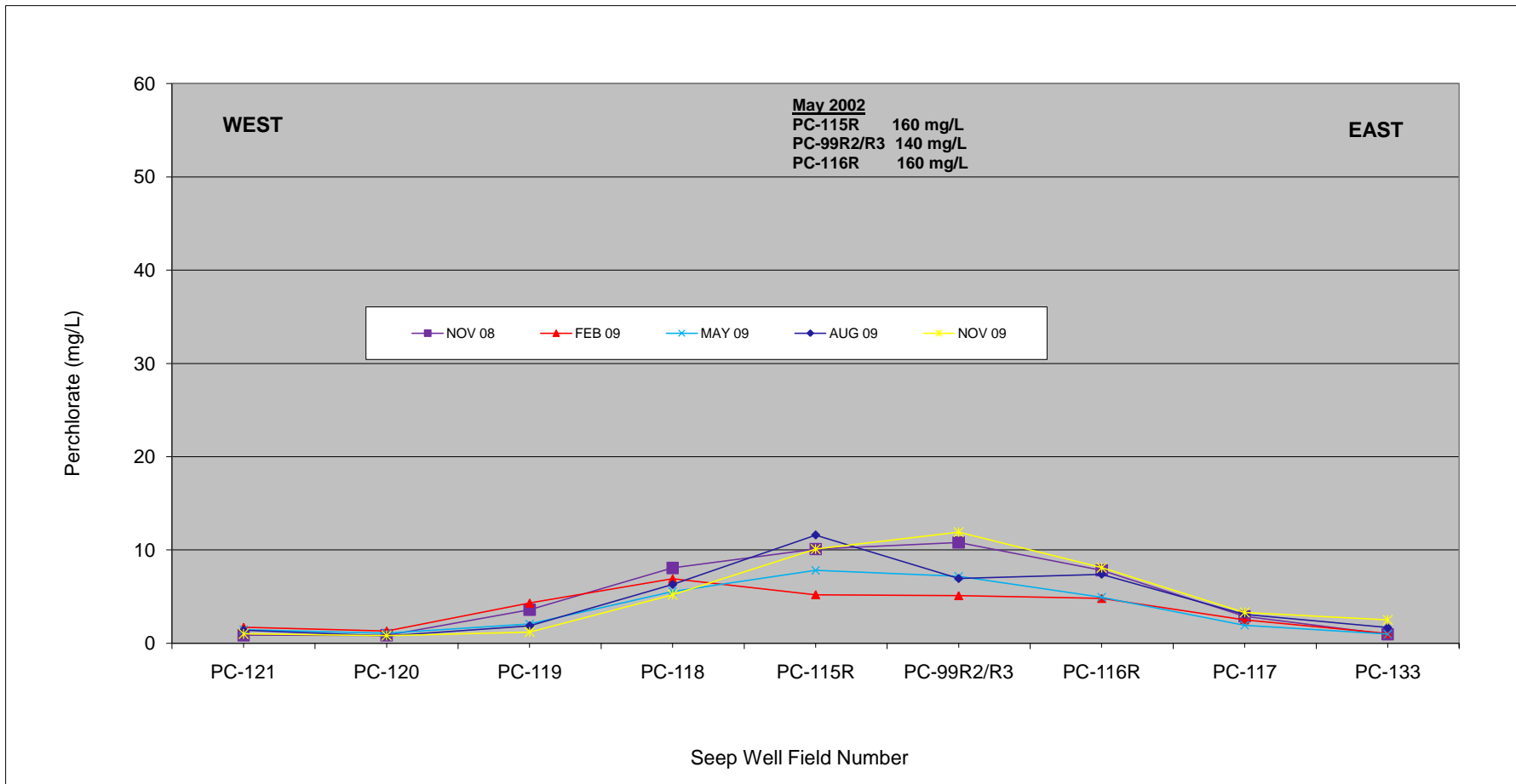
**FIGURE 24A**  
**Seep Well Field Perchlorate Concentration Trend Graph, November 2008 – December 2009**



**FIGURE 25**  
**Well PC-97 Perchlorate vs. Water Elevation Trend Graph**

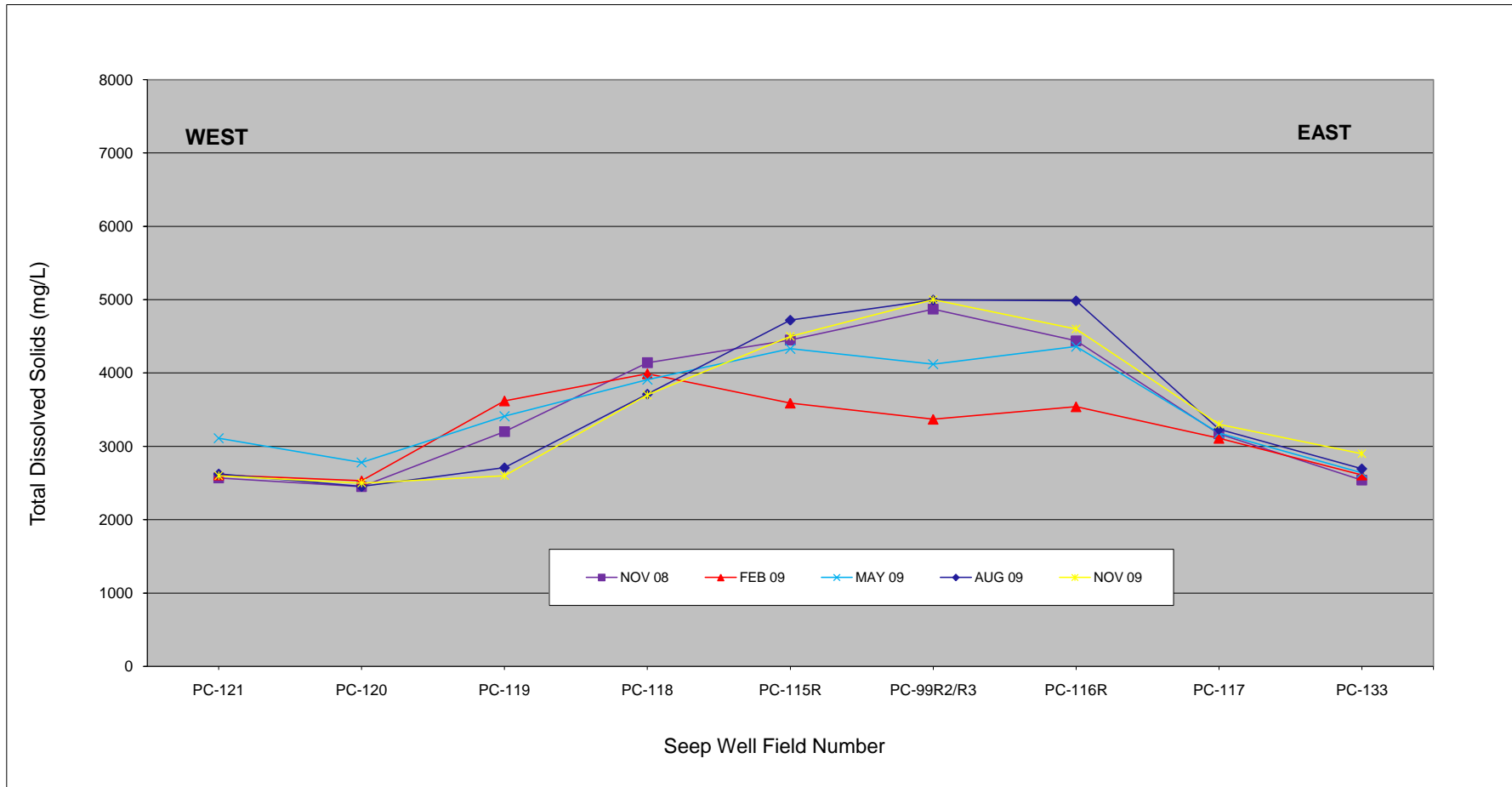


**FIGURE 26**  
**Seep Well Field Perchlorate Concentration Section Graph**





**FIGURE 27**  
**Seep Well Field Total Dissolved Solids Section Graph**



**FIGURE 28**  
**Seep Area Average Perchlorate Concentration and Mass Removed**

