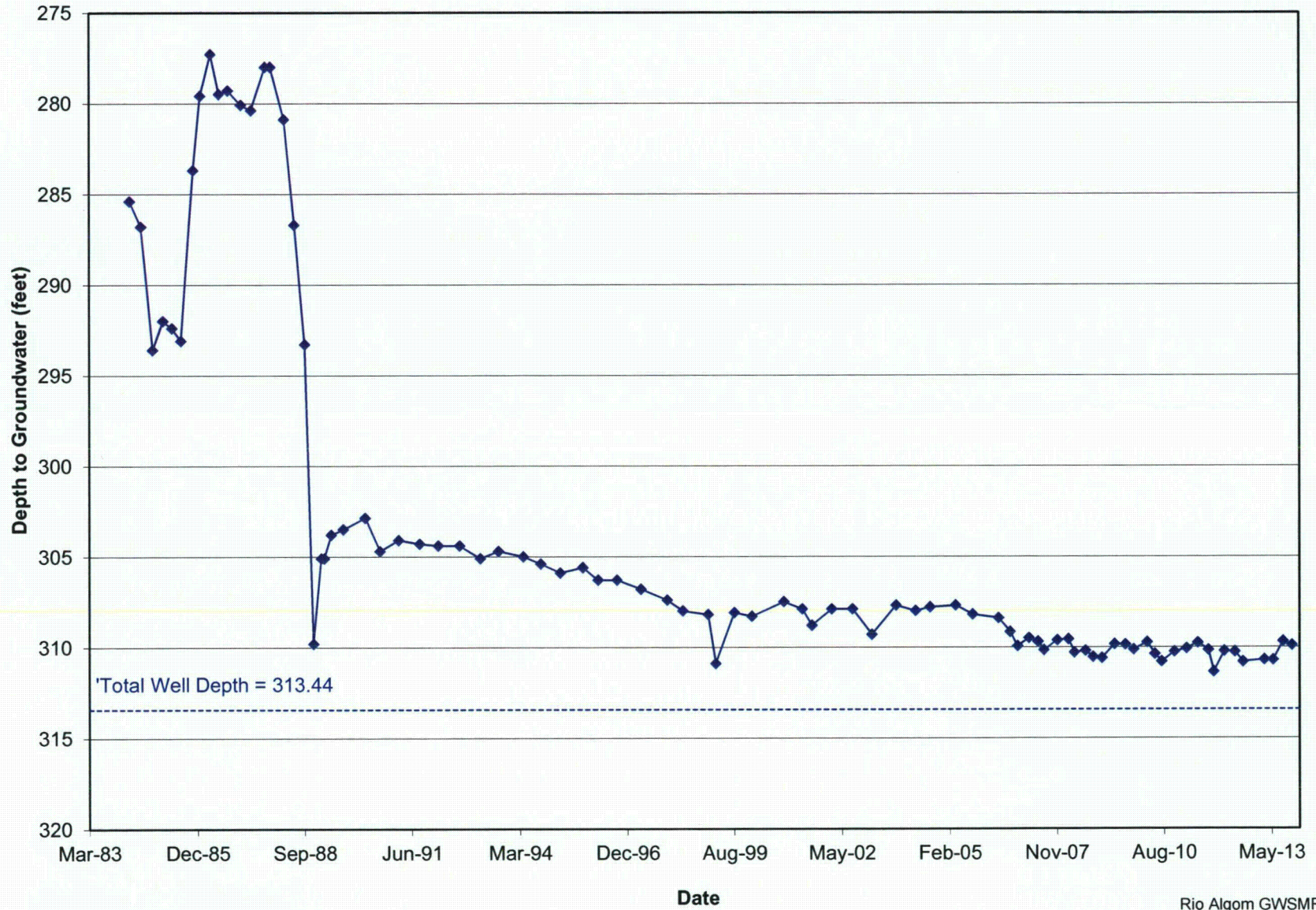


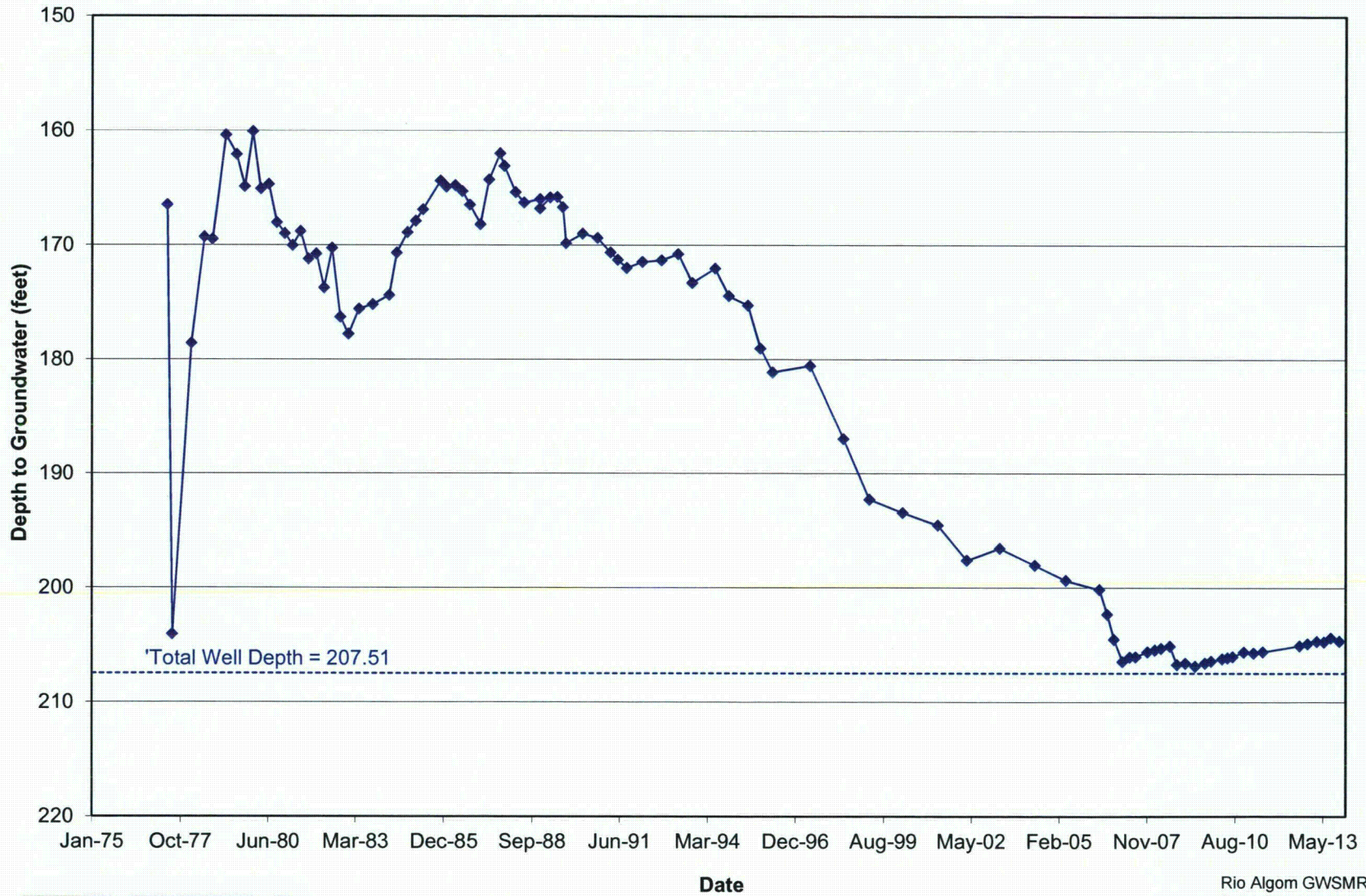
# **APPENDIX 3**

Stability Monitoring Plan  
Hydrographs

### Hydrograph for Dakota Monitoring Well 30-02KD

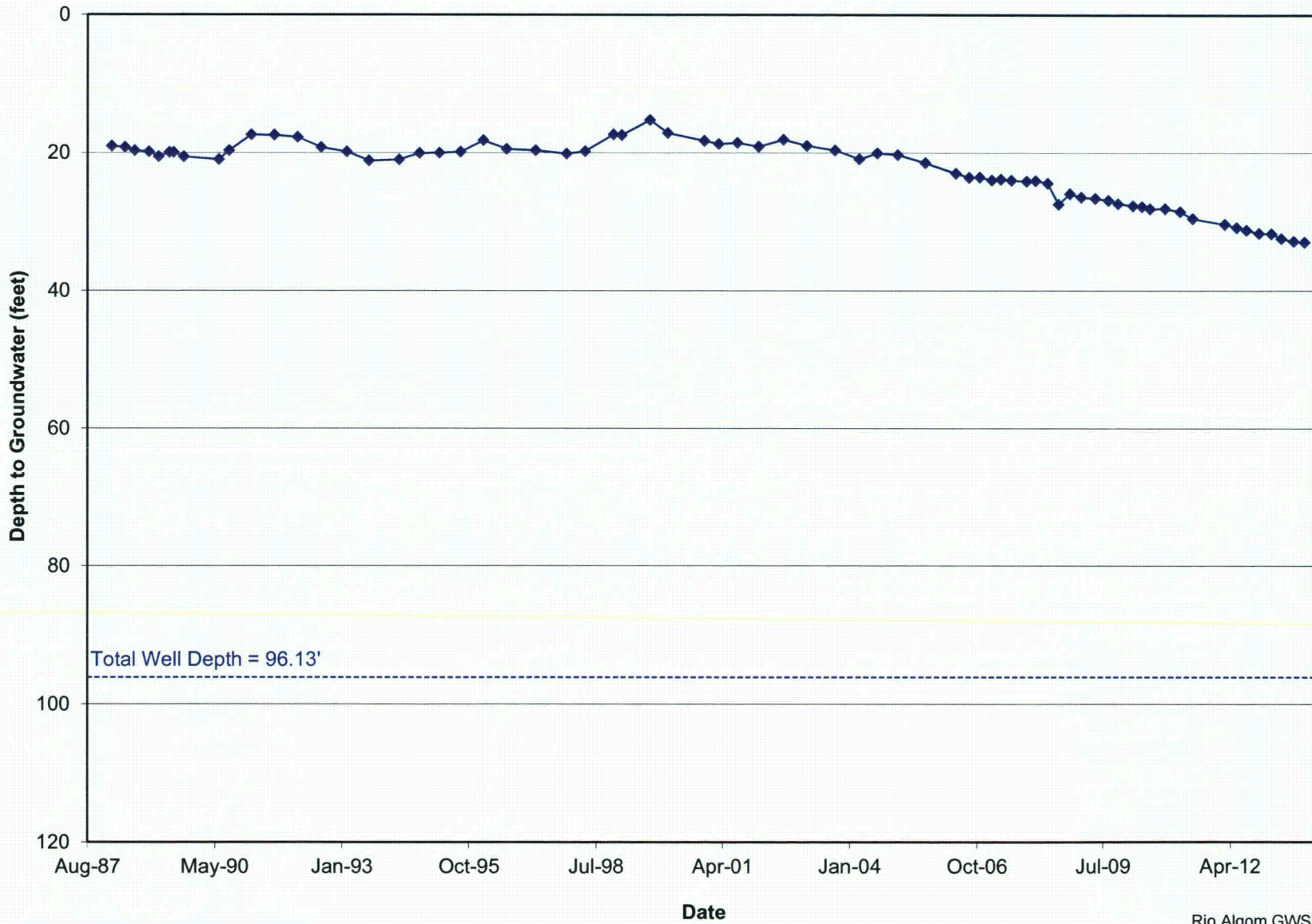


### Hydrograph for TRA Monitoring Well 30-01



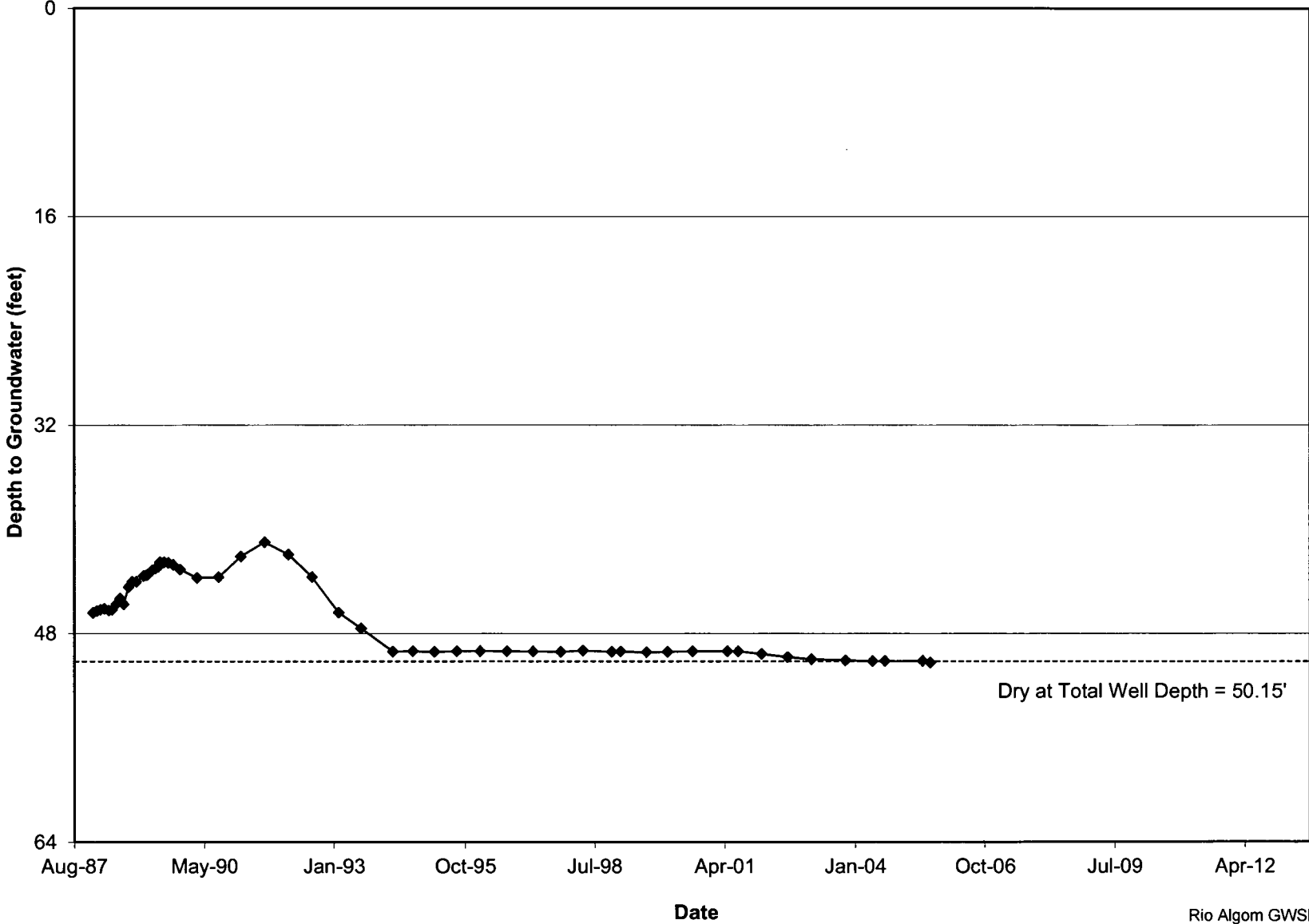


### Hydrograph for TRB Monitoring Well 31-67





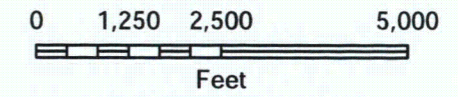
### Hydrograph for Alluvial Monitoring Well MW-24



# **APPENDIX 4**

Stability Monitoring Plan  
Potentiometric Surface Maps





USGS 7.5 Minute Topographic Maps:  
Ambrosia Lake Quadrangle, 1957/rev.1980;  
Contour Interval 20 Feet

**Legend**

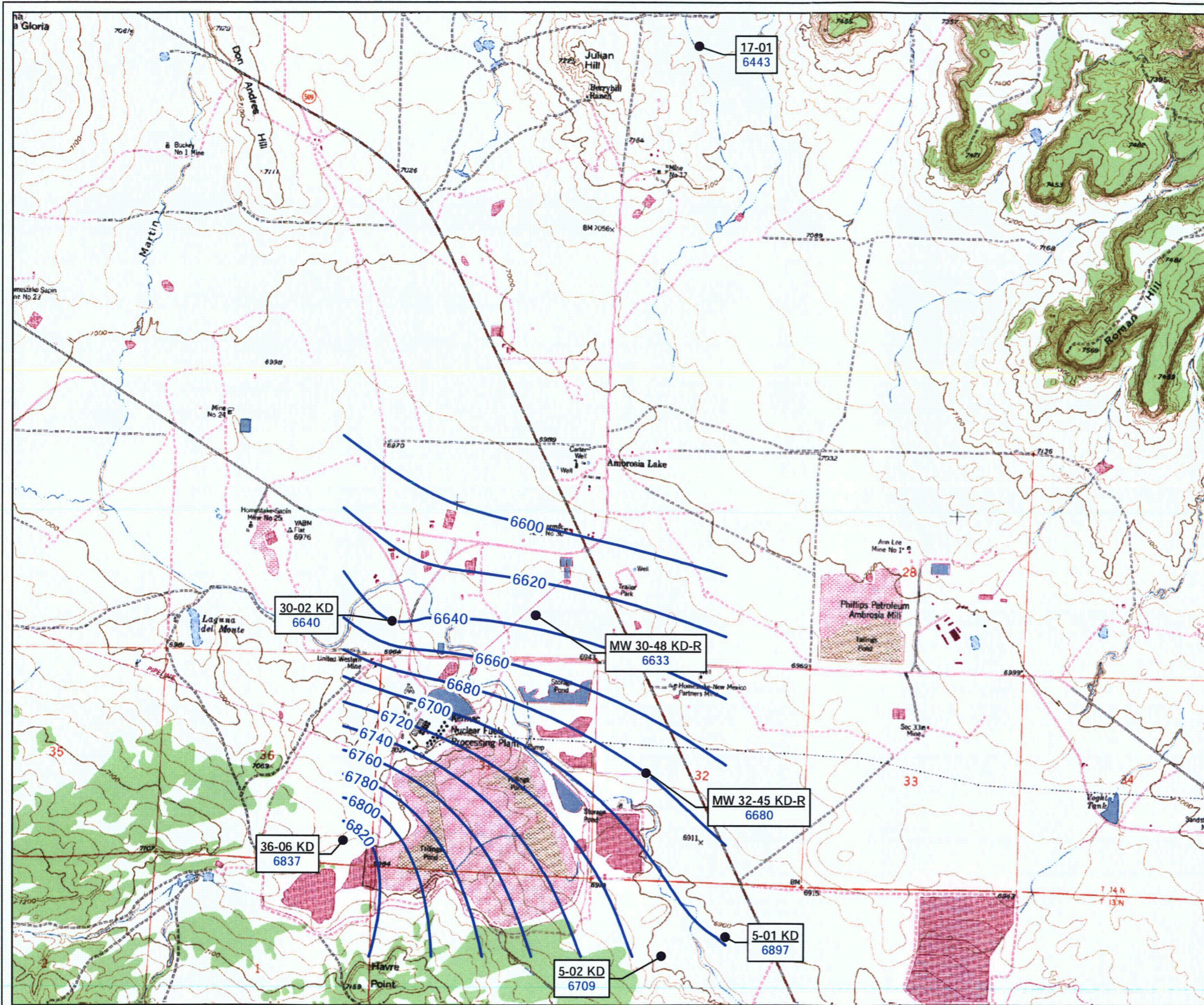
- Dakota Monitoring Well Location
- Dakota Potentiometric Iso-Contours (ft amsl)

**Well ID**

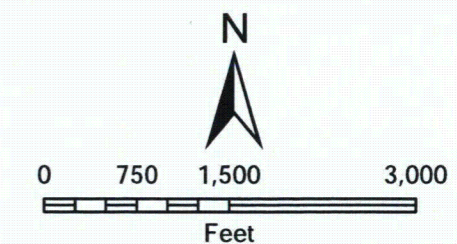
- Groundwater Surface Elevation (ft amsl)

**Gradient calculation:**  
(Difference in Groundwater Elevation Between Point of Compliance Well 36-06 KD and Trend Well 30-02 KD = 6,837 - 6,640 = 197 feet) Divided by (Distance Along a Flow Path Between Point of Compliance Well 36-06 KD and Trend Well 32-02 KD = 6,000 feet)  
= 0.033 feet per foot

2nd Half 2013 Dakota Potentiometric Surface Elevation Iso-Contours  
Rio Algom DP-169 ACL  
Semi-Annual Report







USGS 7.5 Minute Topographic Maps:  
Ambrosia Lake Quadrangle, 1957/rev.1980;  
Contour Interval 20 Feet

**Legend**

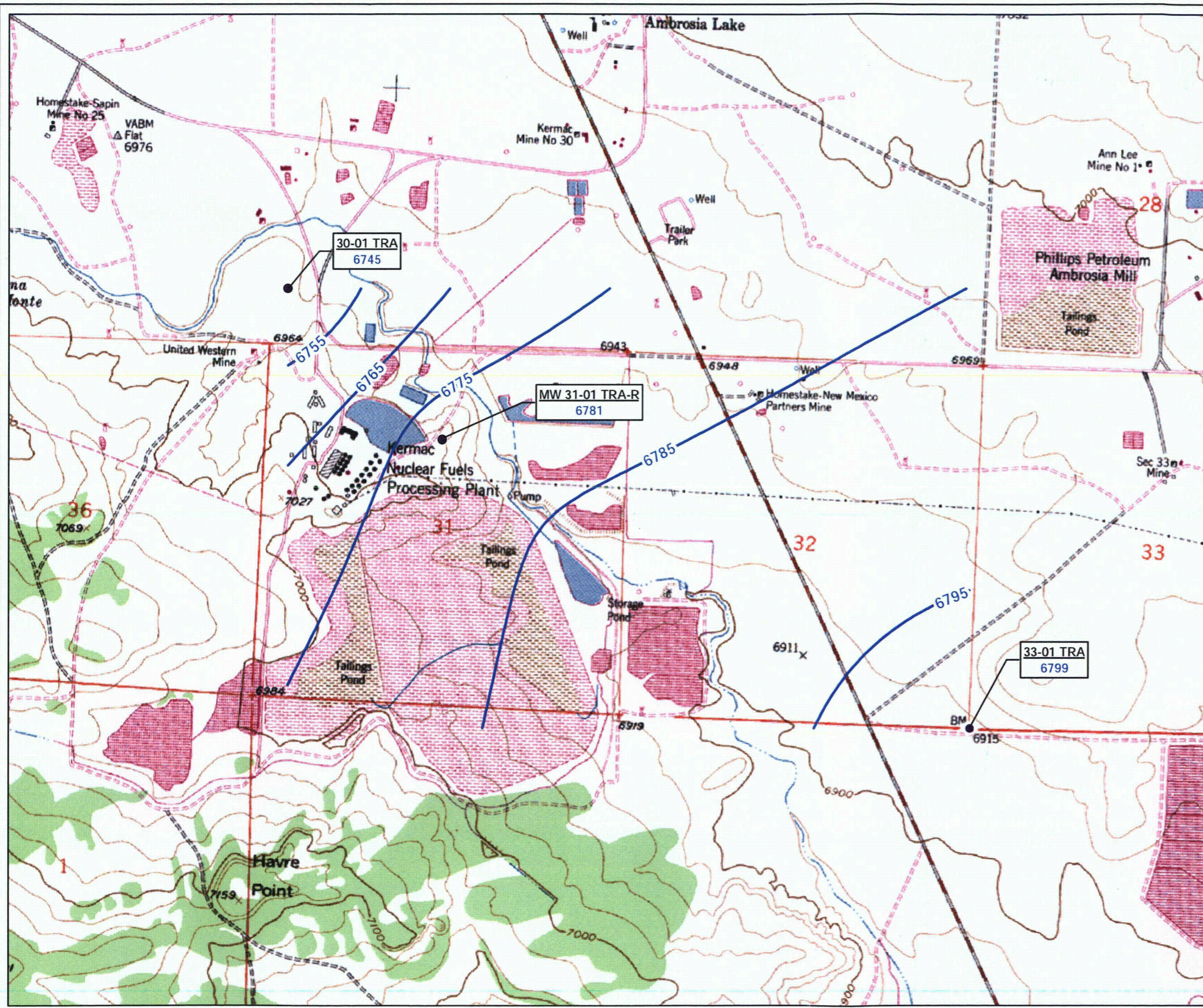
- TRA Monitoring Well Location
- TRA Potentiometric Surface
- Elevation Iso-Contours (ft amsl)

**Well ID**

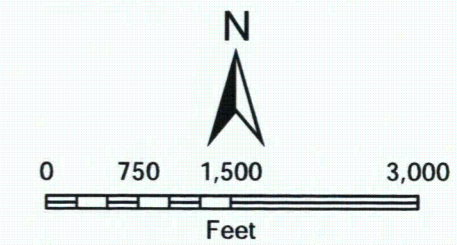
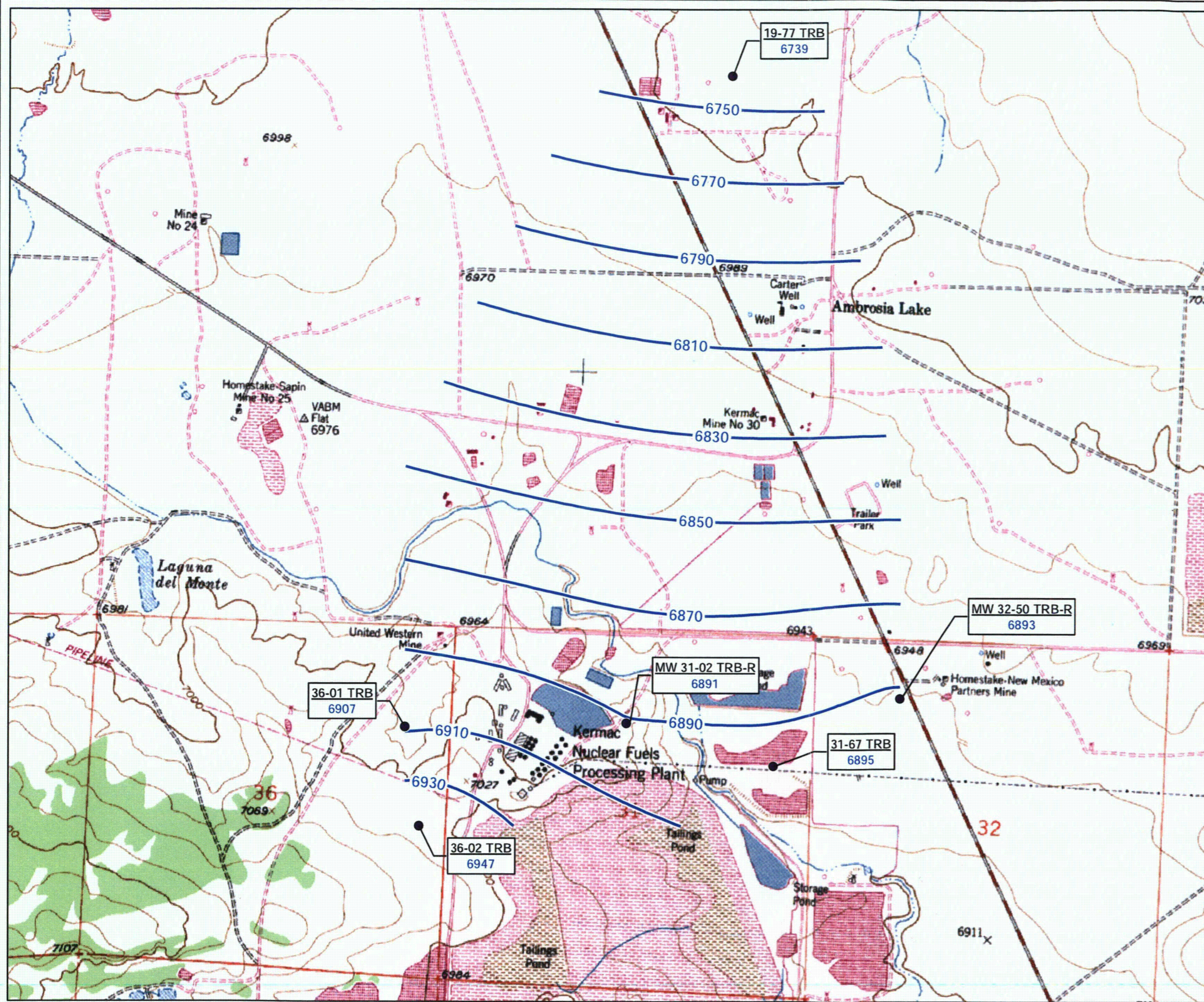
Groundwater Surface Elevation (ft amsl)

**Gradient calculation:**  
(Difference in Groundwater Elevation Between Point of Compliance Well MW 31-01 TRA-R and Trend Well 30-01 = 6,781 - 6,745 = 36 feet) Divided by (Distance Along a Flow Path Between Point of Compliance Well MW 31-01 TRA-R and Trend Well 30-01 = 3,200 feet)  
  
= 0.011 feet per foot

2nd Half 2013 TRA Potentiometric Surface Elevation Iso-Contours  
Rio Algom DP-169 ACL  
Semi-Annual Report







USGS 7.5 Minute Topographic Maps:  
Ambrosia Lake Quadrangle, 1957/rev.1980;  
Contour Interval 20 Feet

**Legend**

- TRB Monitoring Well Location
- TRB Potentiometric Surface Elevations (ft amsl)

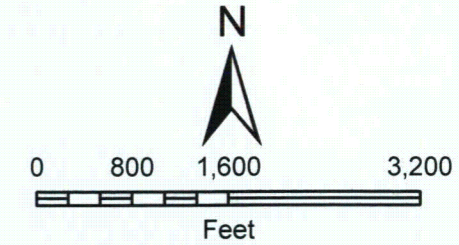
**Well ID**

- Groundwater Surface Elevation (ft amsl)

**Gradient calculation:**  
(Difference in Groundwater Elevation Between Point of Compliance Well MW 31-02 TRB-R and far downgradient Well 19-77 = 6,891 - 6,739 = 152 feet) Divided by (Distance Along a Flow Path Between Point of Compliance Well MW 31-02 TRB-R and far downgradient Well 19-77 = 9,677 feet)  
= 0.016 feet per foot

2nd Half 2013 TRB Potentiometric Surface Elevation Iso-Contours  
Rio Algom DP-169 ACL  
Semi-Annual Report





USGS 7.5 Minute Topographic Maps:  
Ambrosia Lake Quadrangle, 1957/rev.1980;  
Contour Interval 20 Feet

**Legend**

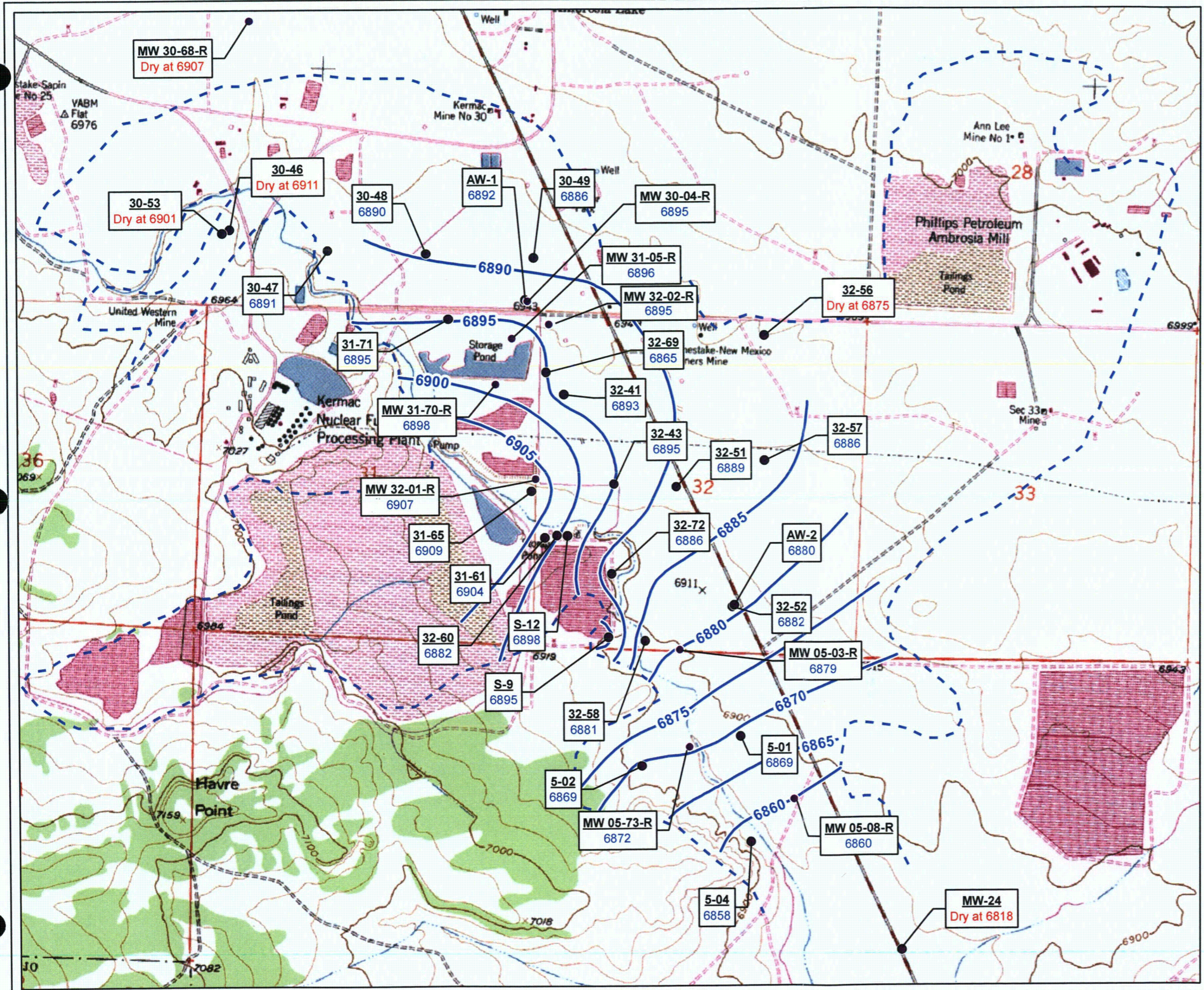
- Alluvial Monitoring Well Location
- Alluvial Groundwater Surface Elevation (ft amsl)
- - - 1998 Boundary of Saturated Alluvium

**Well ID**

- Groundwater Surface Elevation (ft amsl)

**Gradient calculation:**  
(Difference in Groundwater Elevation Between Point of Compliance Well 31-61 and Trend Well MW 05-08-R = 6,904 - 6,860 = 44 feet) Divided by (Distance Along a Flow Path Between Point of Compliance Well 31-61 and Trend Well 5-08 = 6,875 feet)  
**= 0.006 feet per foot**

2nd Half 2013 Alluvial Groundwater Surface Elevation Iso-Contours  
Rio Algom DP-169 ACL  
Semi-Annual Report

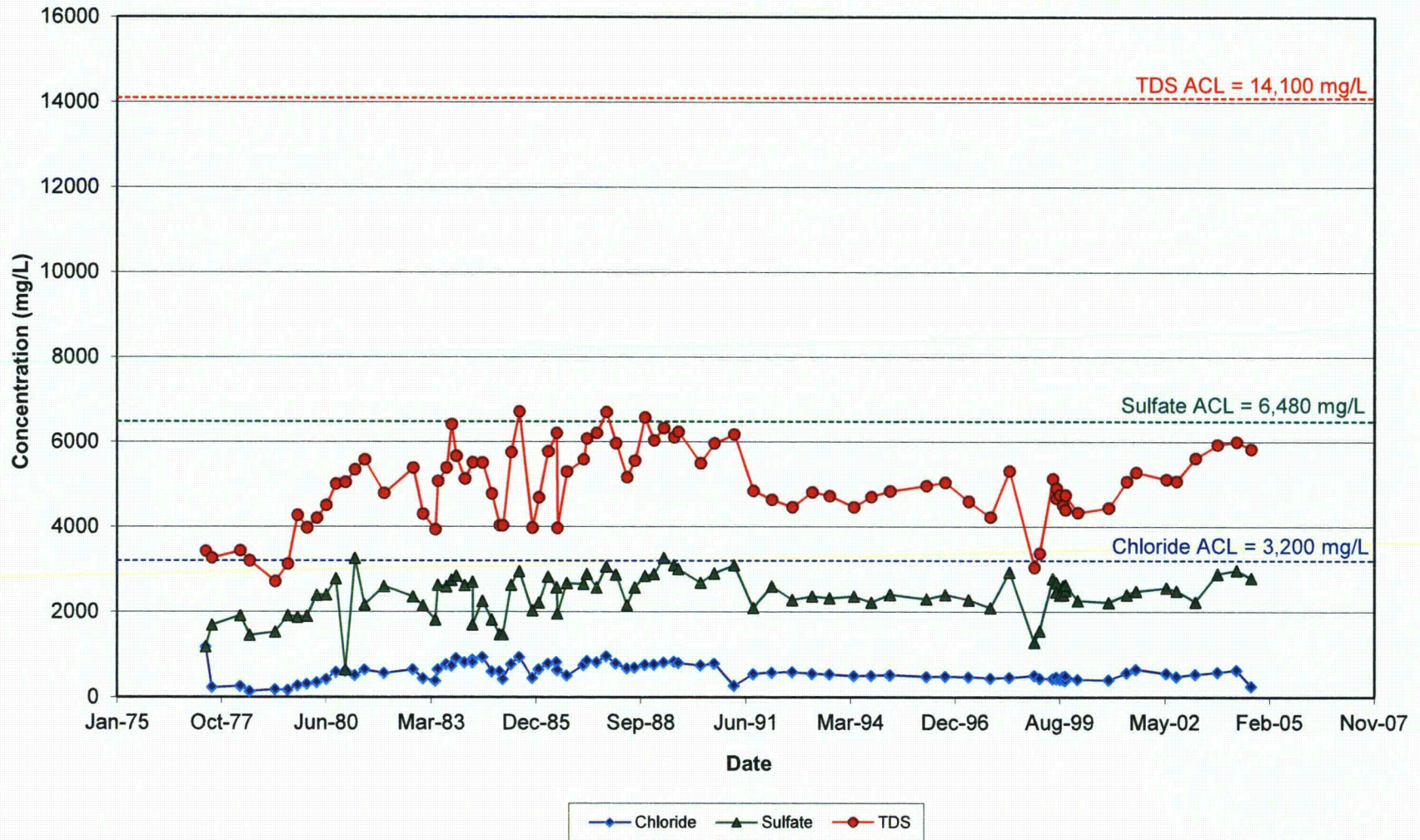




# **APPENDIX 5**

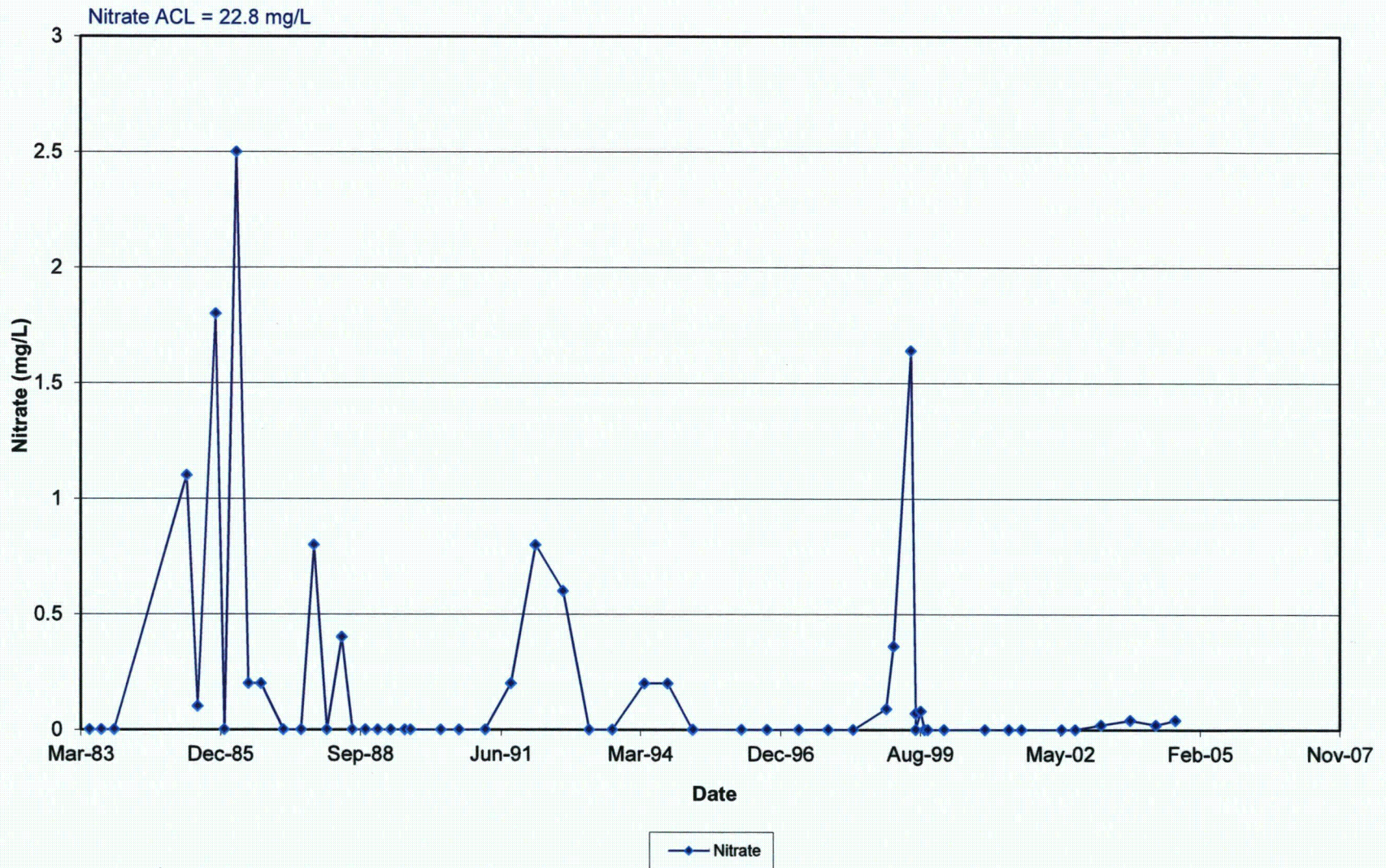
Stability Monitoring Plan  
Time Versus Concentration Plots  
Discontinued Wells

### Anions and TDS in Monitoring Well 30-48KD



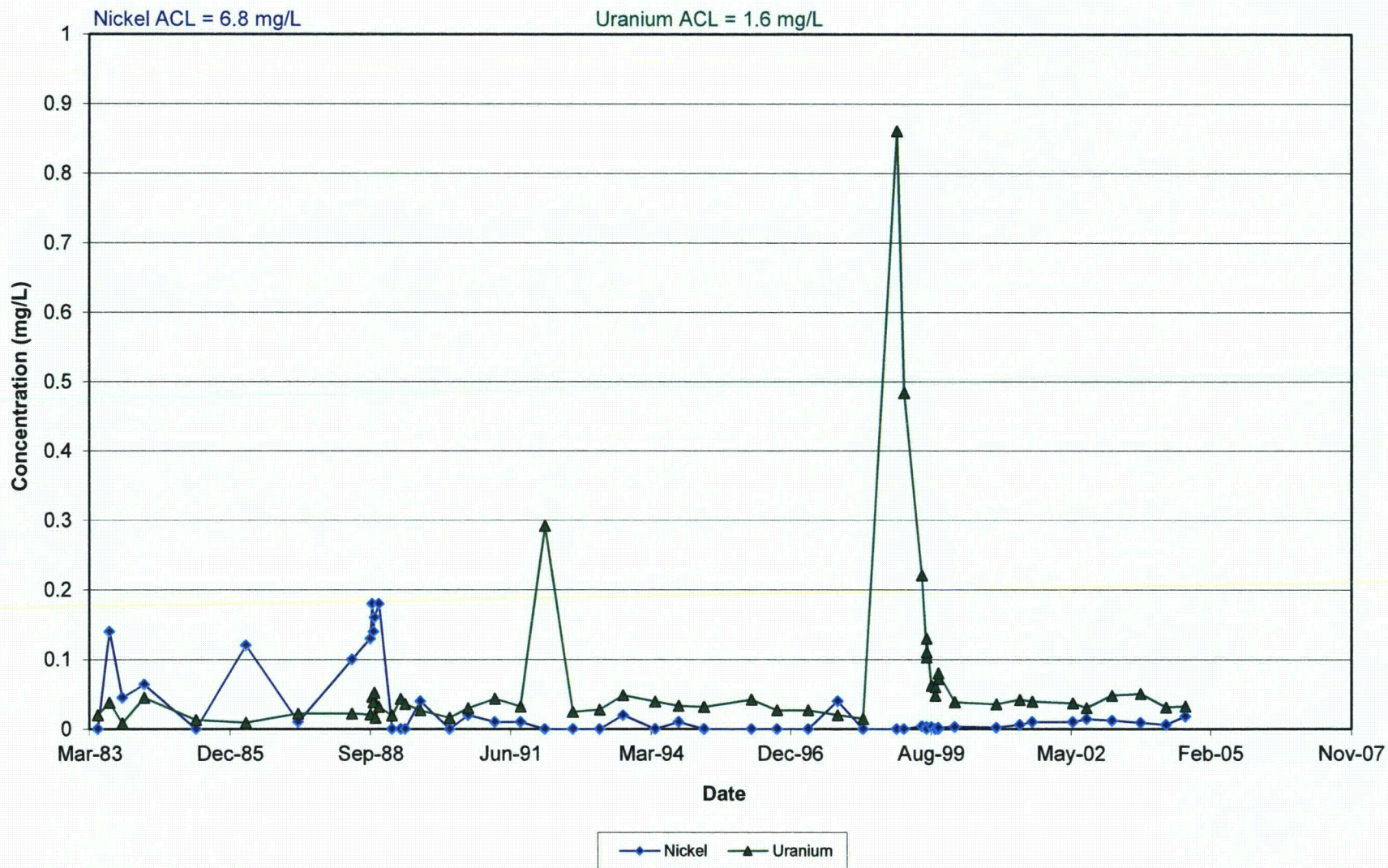


### Nitrate in Monitoring Well 30-48KD



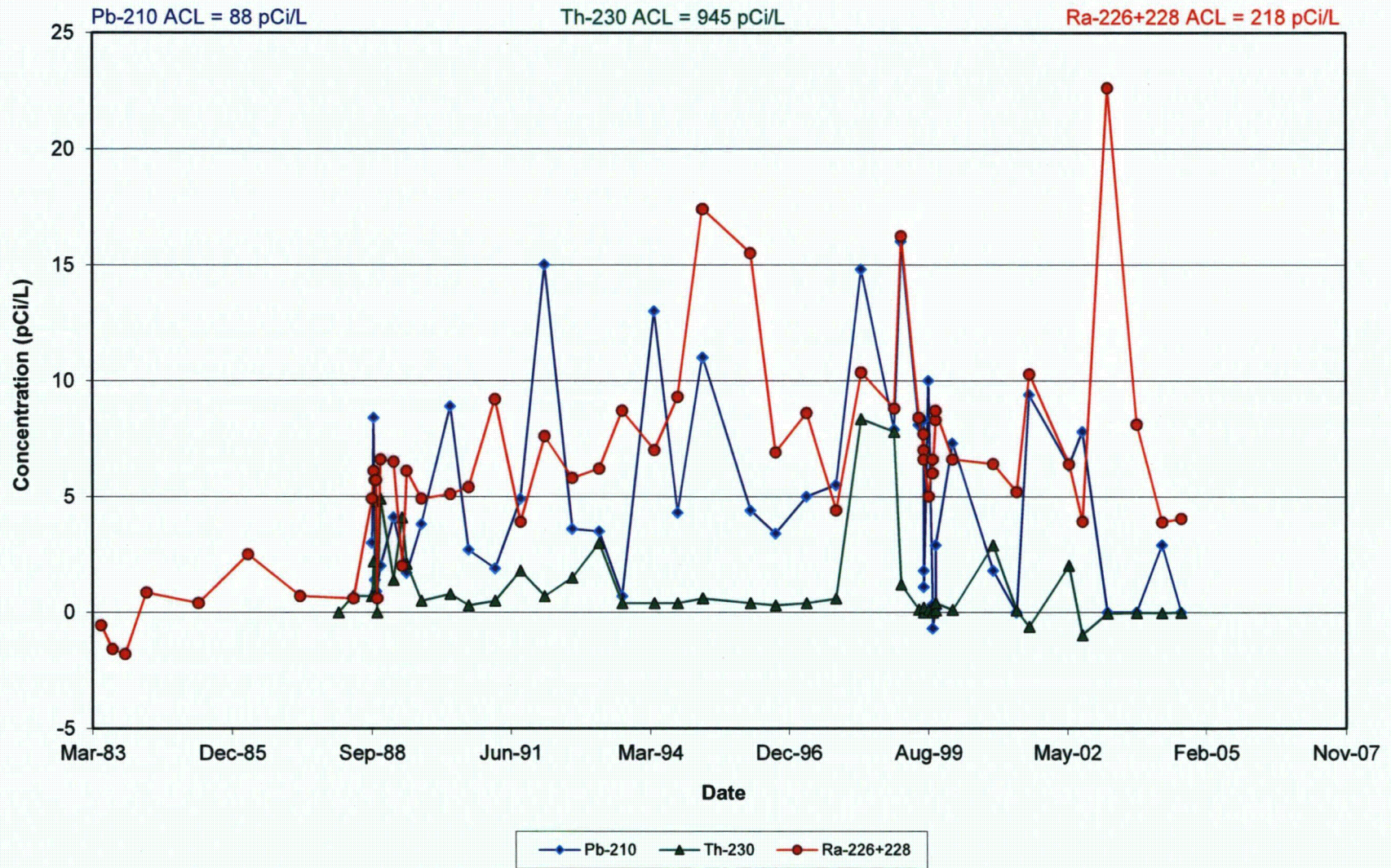


### Metals in Monitoring Well 30-48KD



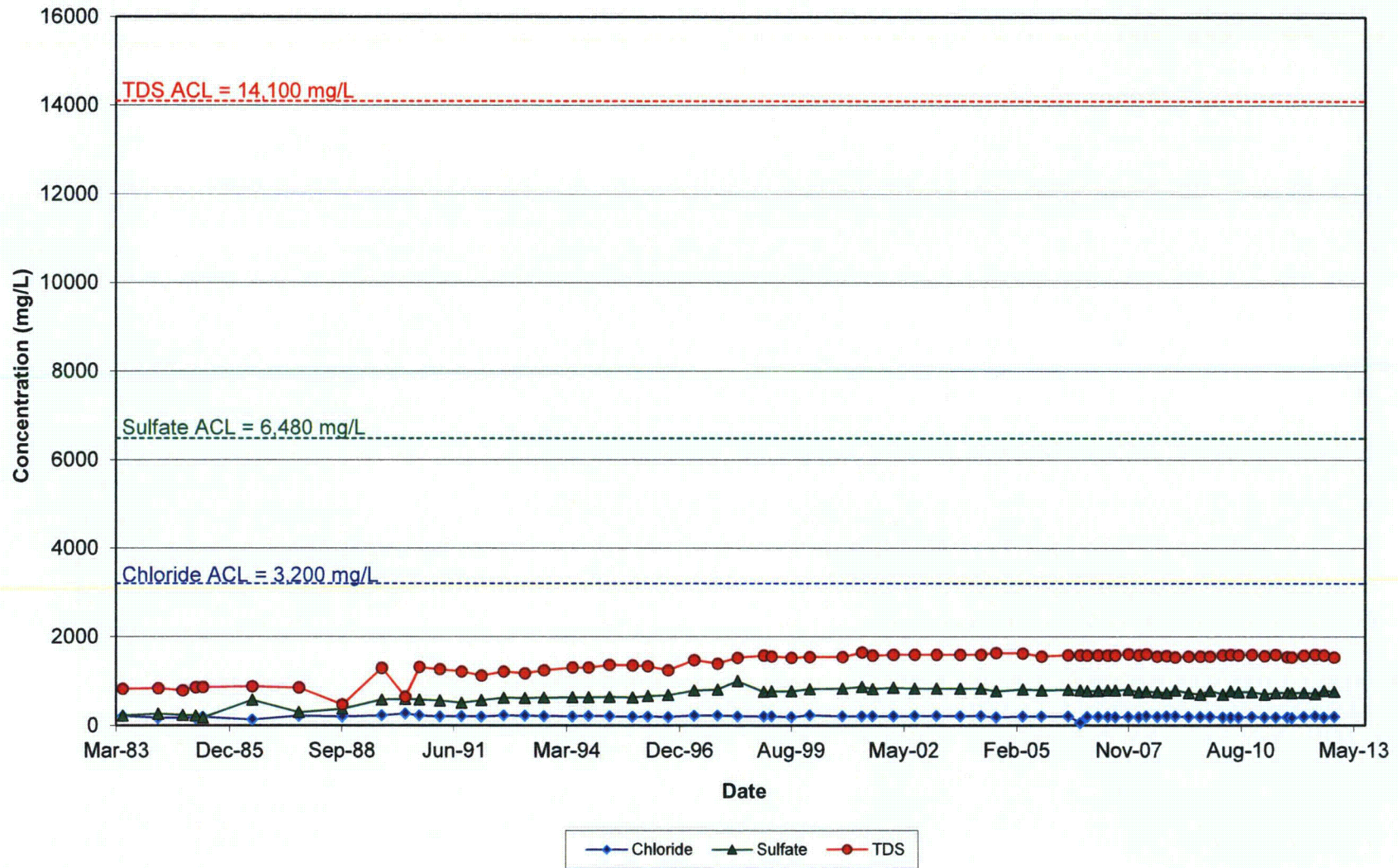


### Radionuclides in Monitoring Well 30-48 KD



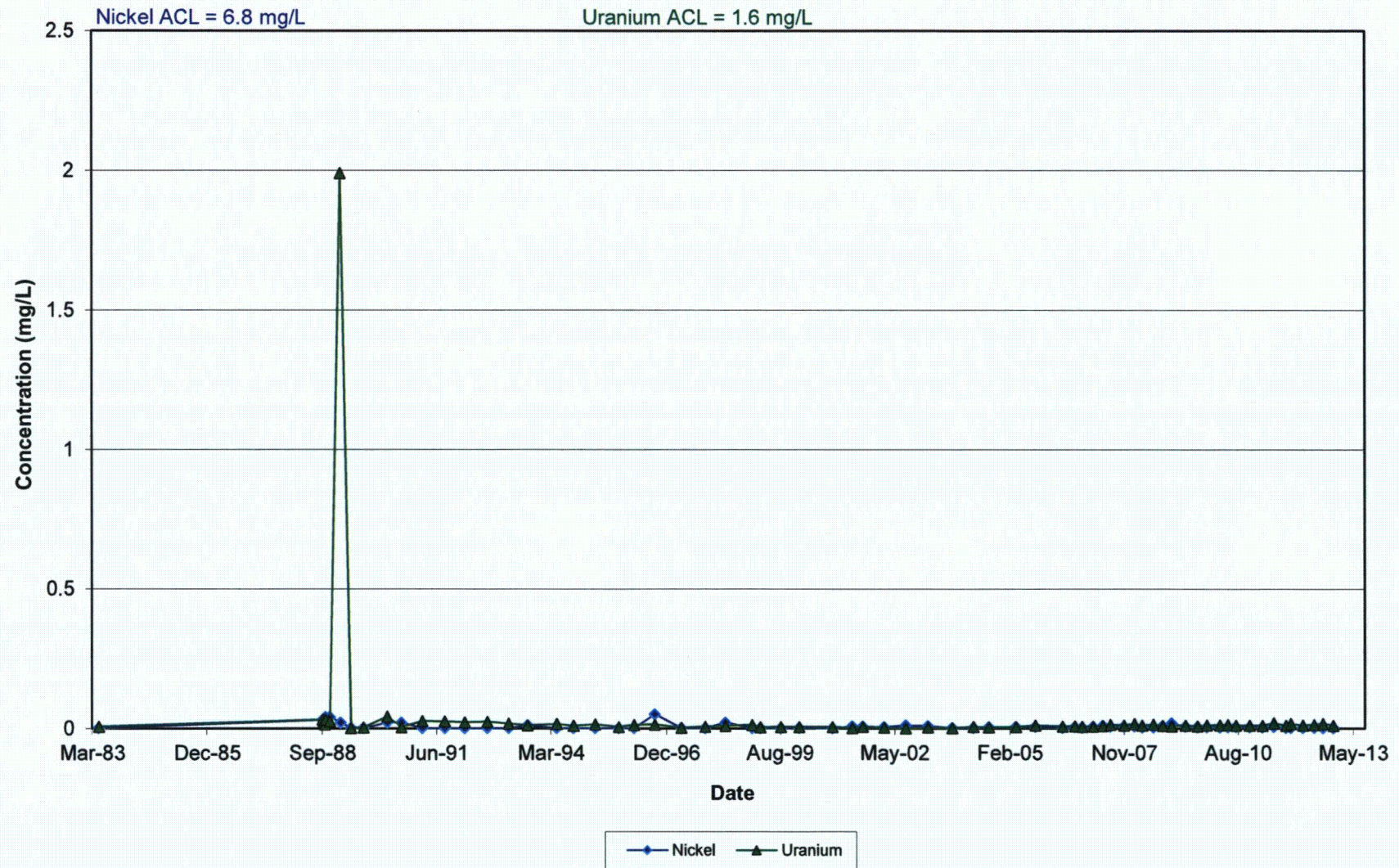


### Anions and TDS in Monitoring Well 32-45KD



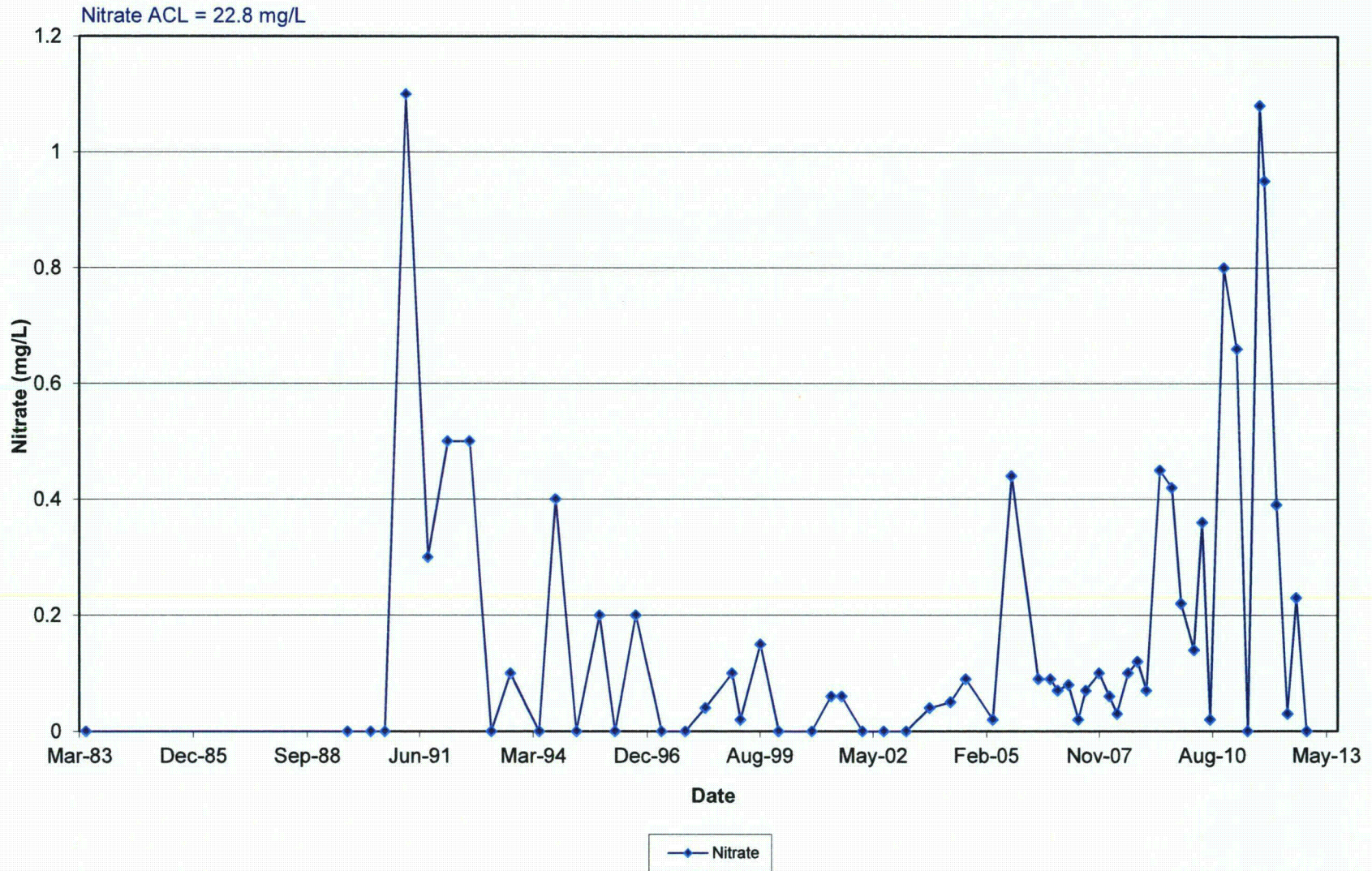


### Metals in Monitoring Well 32-45KD

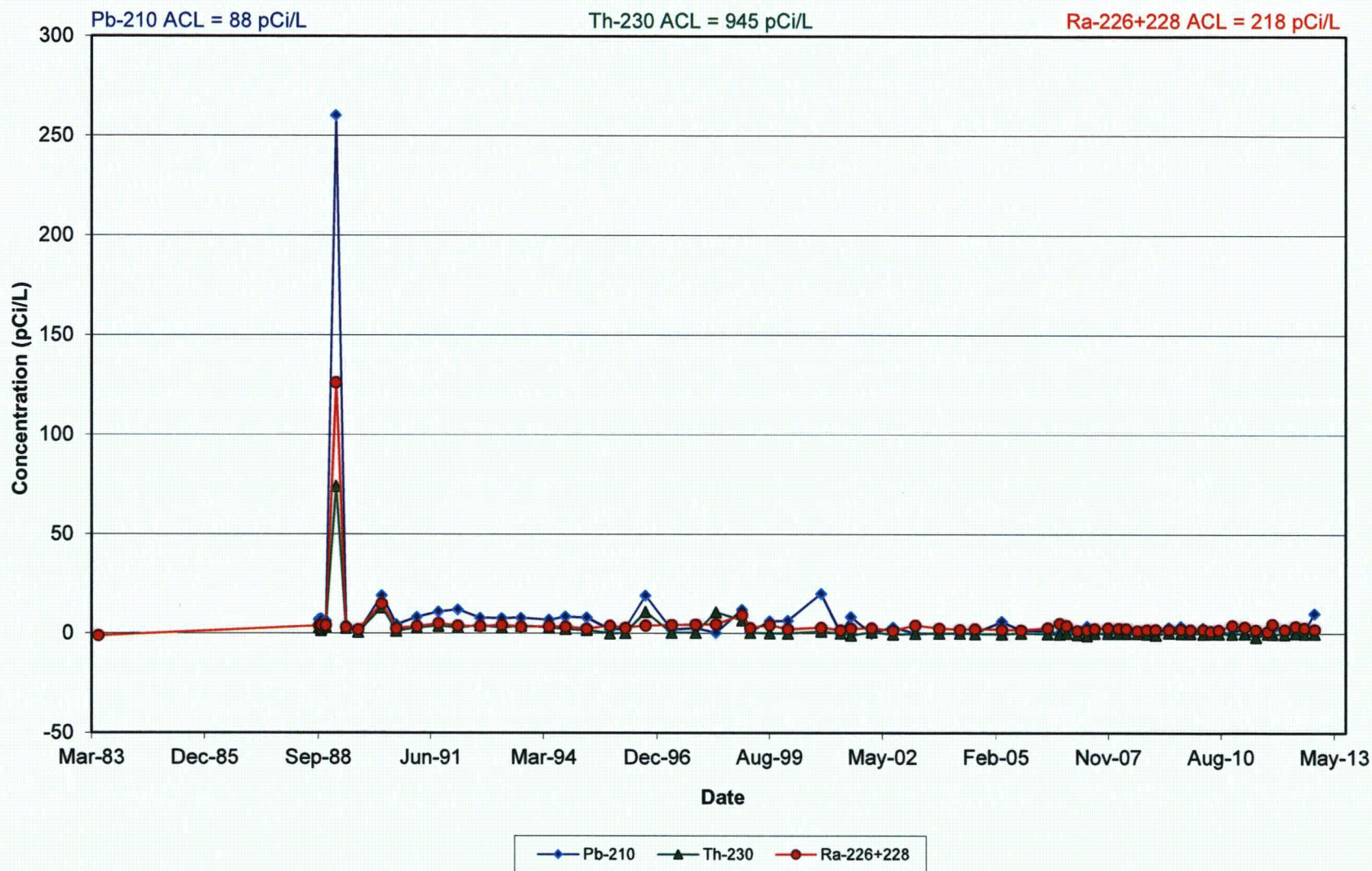




### Nitrate in Monitoring Well 32-45KD

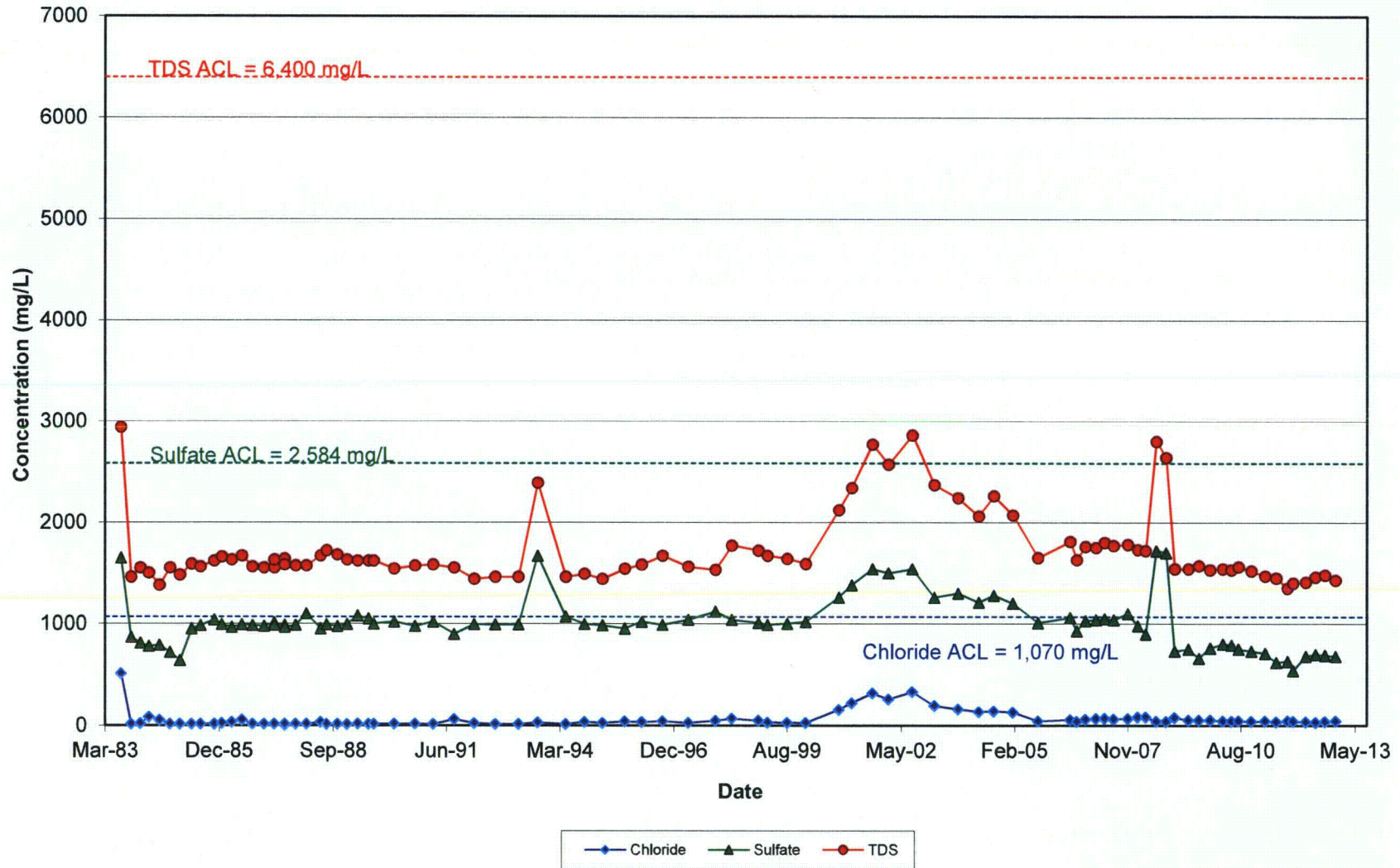


### Radionuclides in Monitoring Well 32-45KD



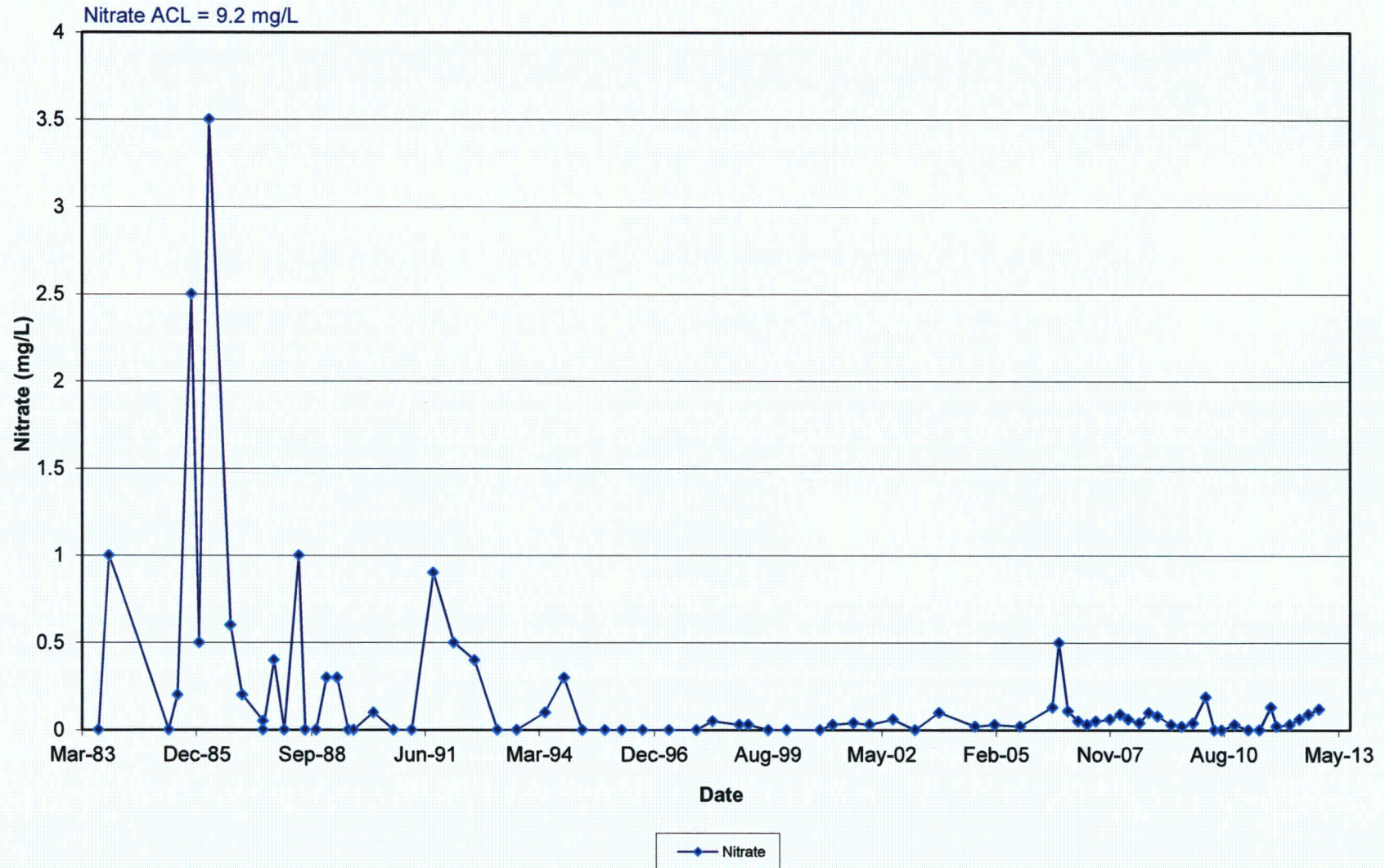


### Anions and TDS in Monitoring Well 31-01 TRA



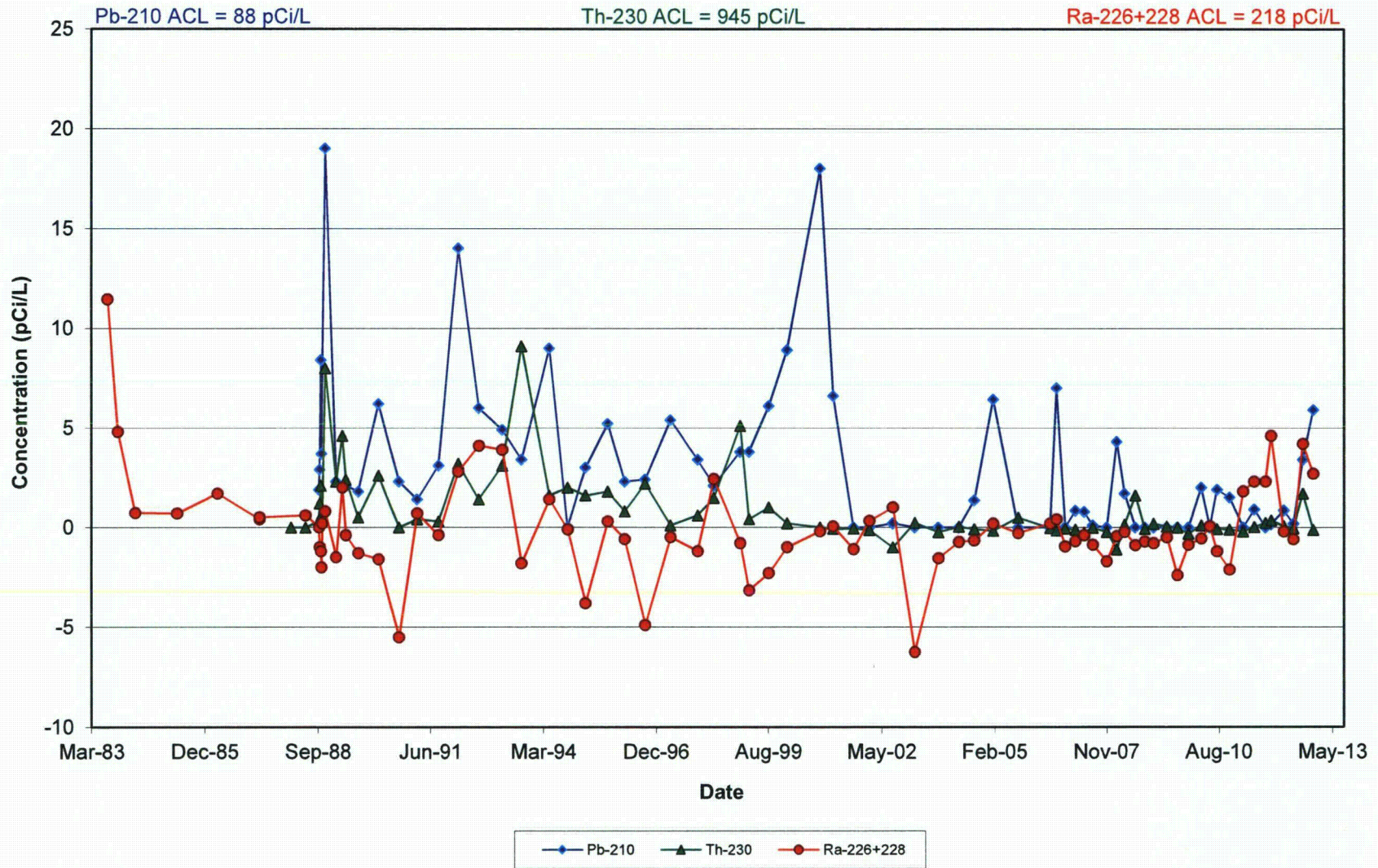


### Nitrate in Monitoring Well 31-01 TRA



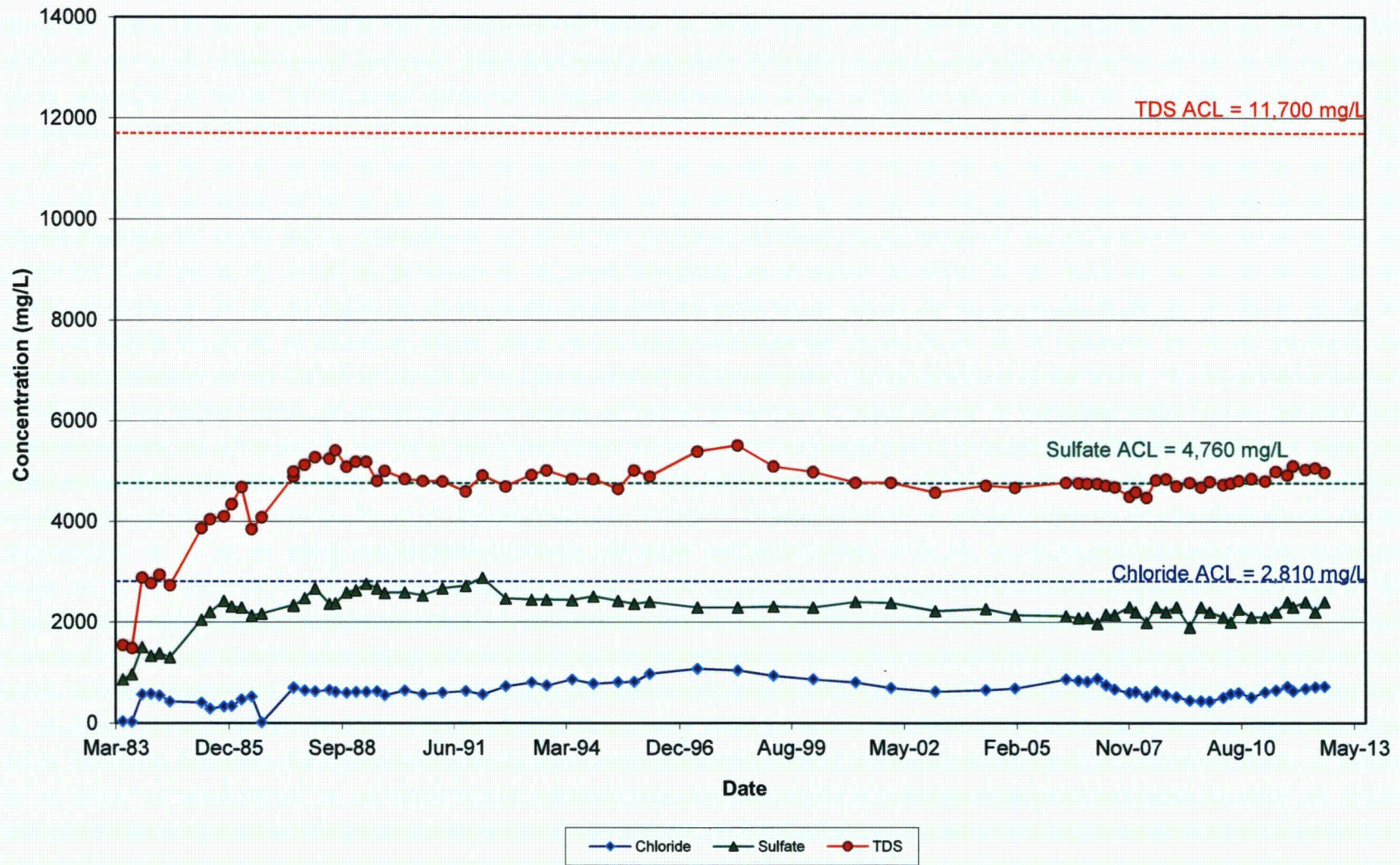


# Radionuclides in Well 31-01TRA



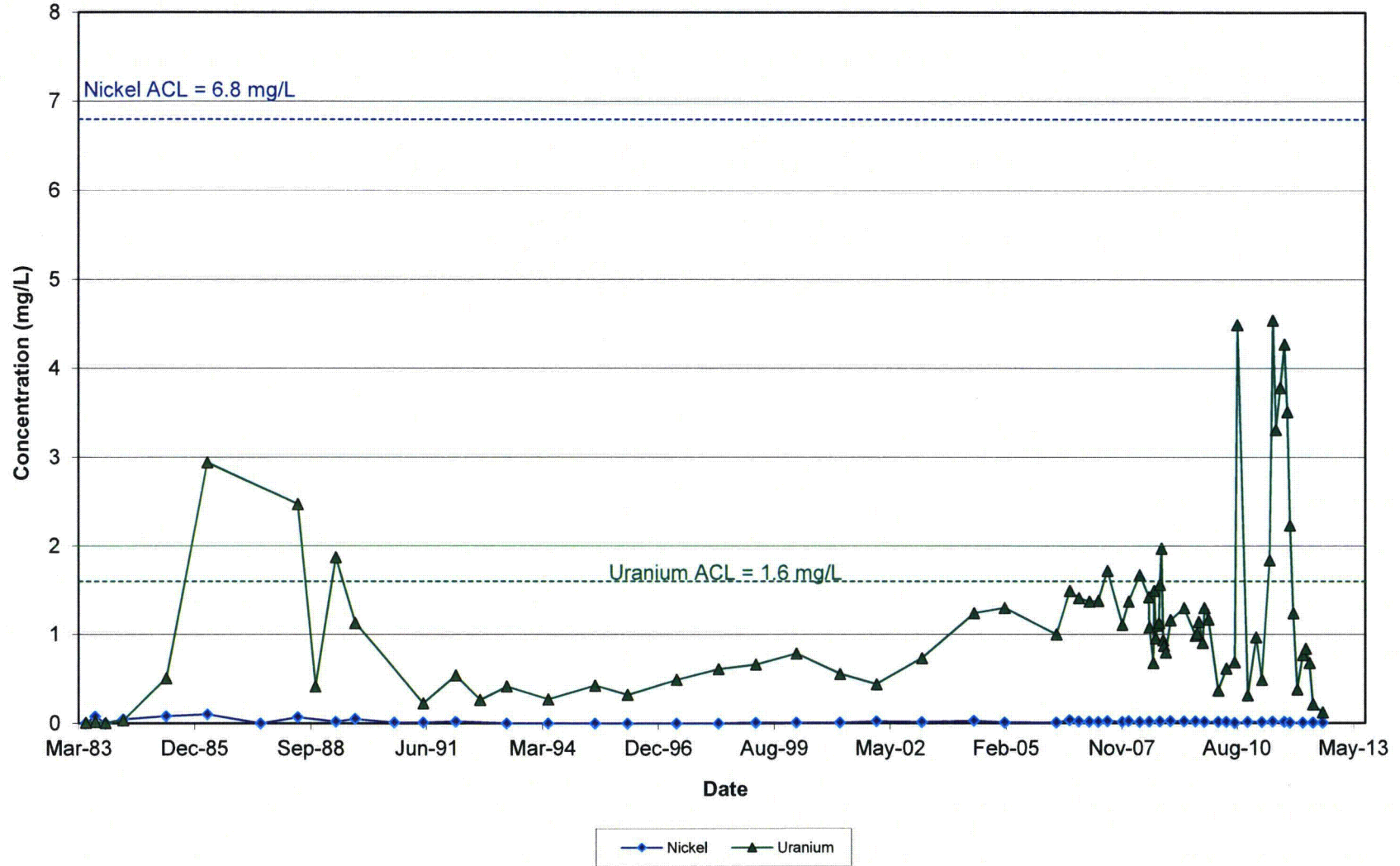


### Anions and TDS in Monitoring Well 31-02



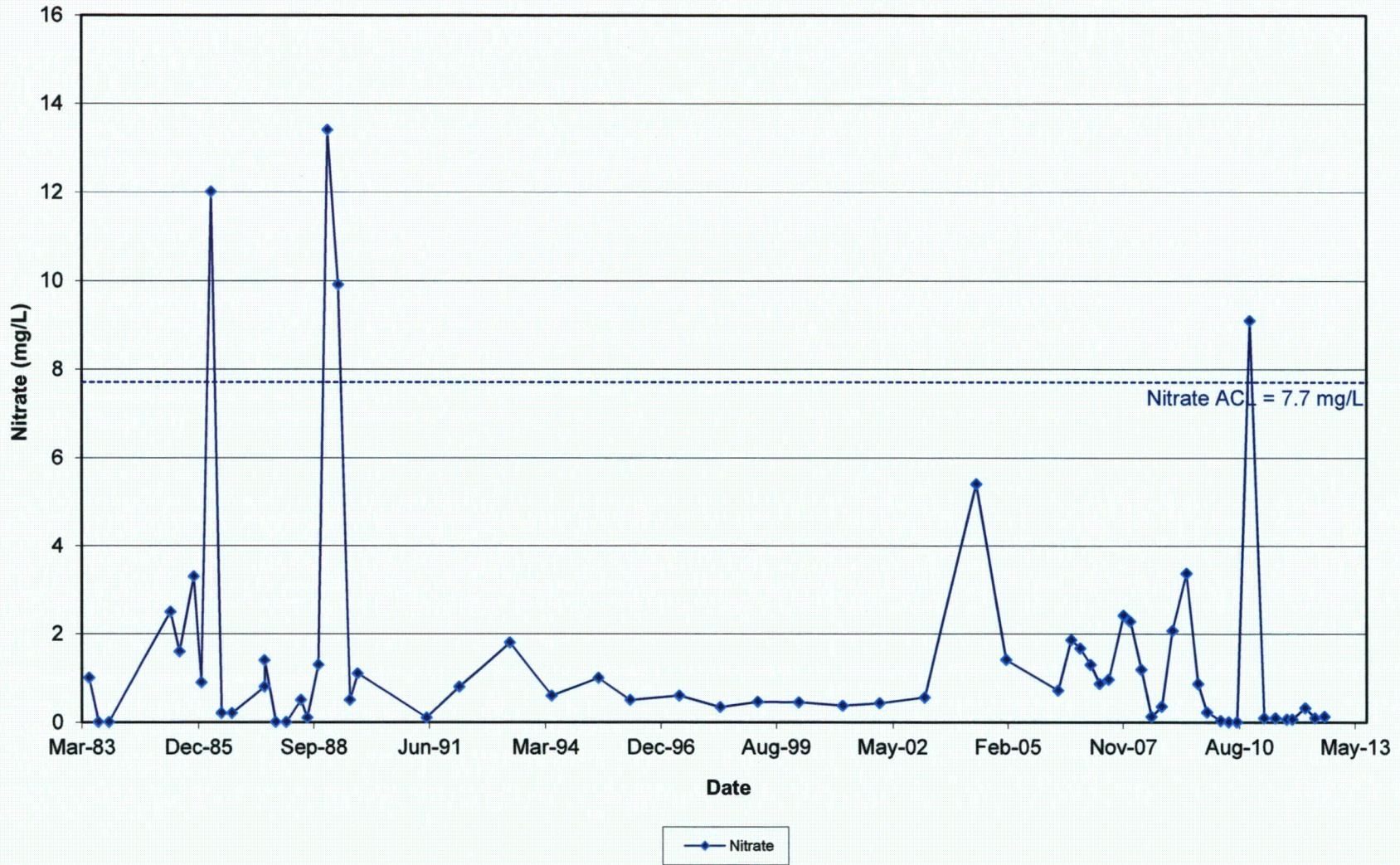


### Metals in Monitoring Well 31-02



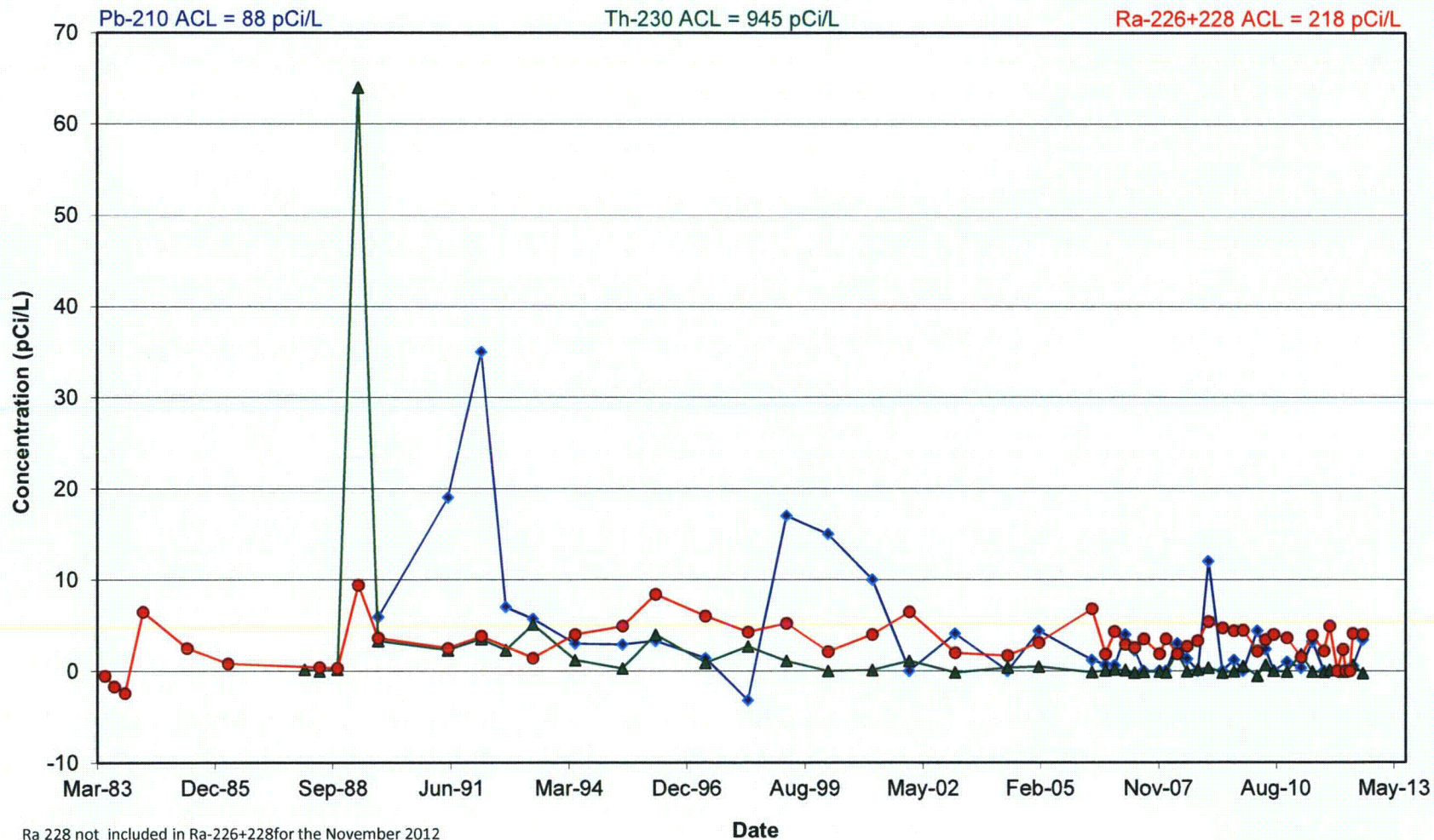


### Nitrate in Monitoring Well 31-02

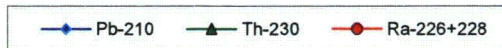




### Radionuclides in Monitoring Well 31-02

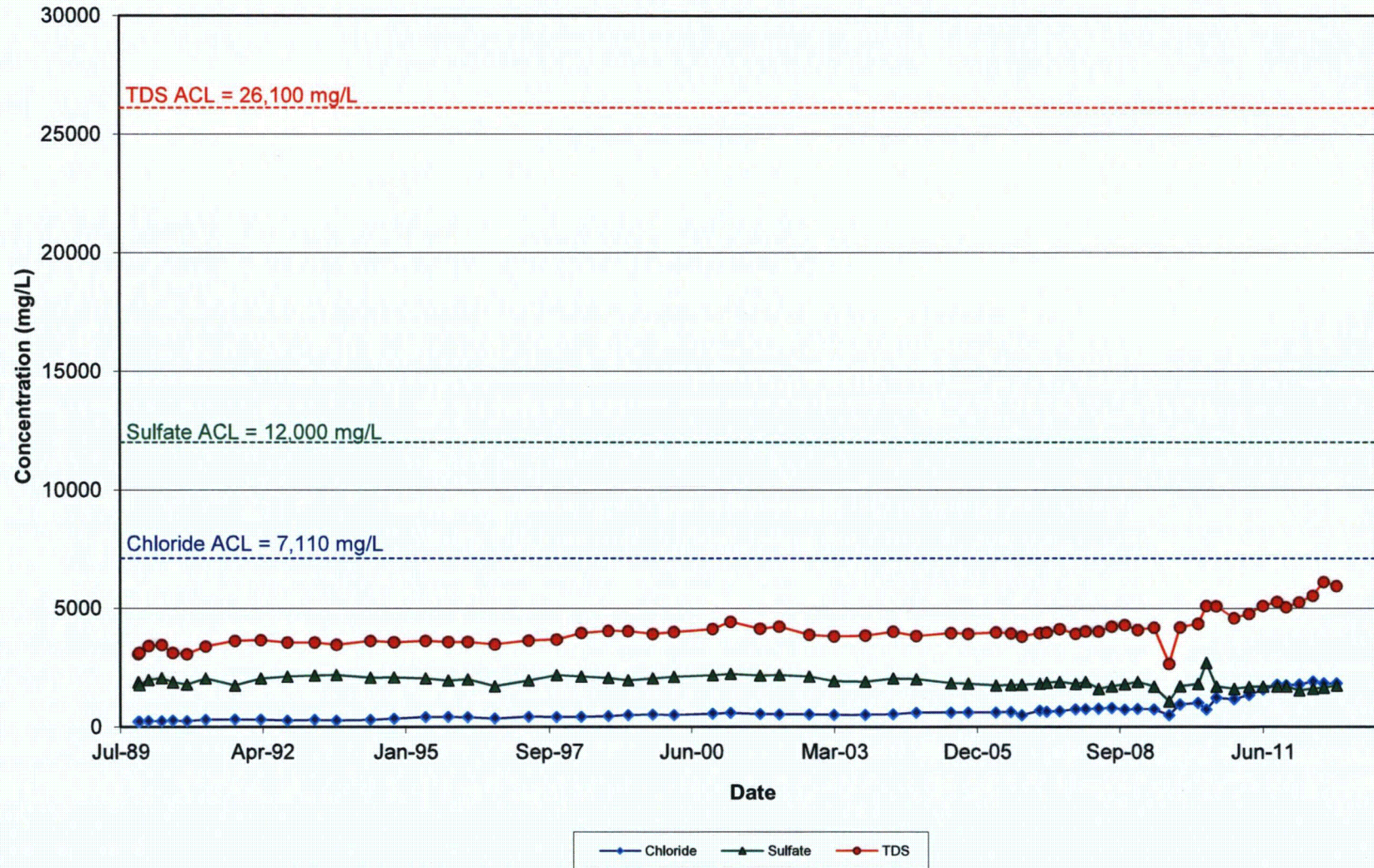


Ra 228 not included in Ra-226+228 for the November 2012 sample (Ra-228 was not analyzed due to insufficient sample volume)



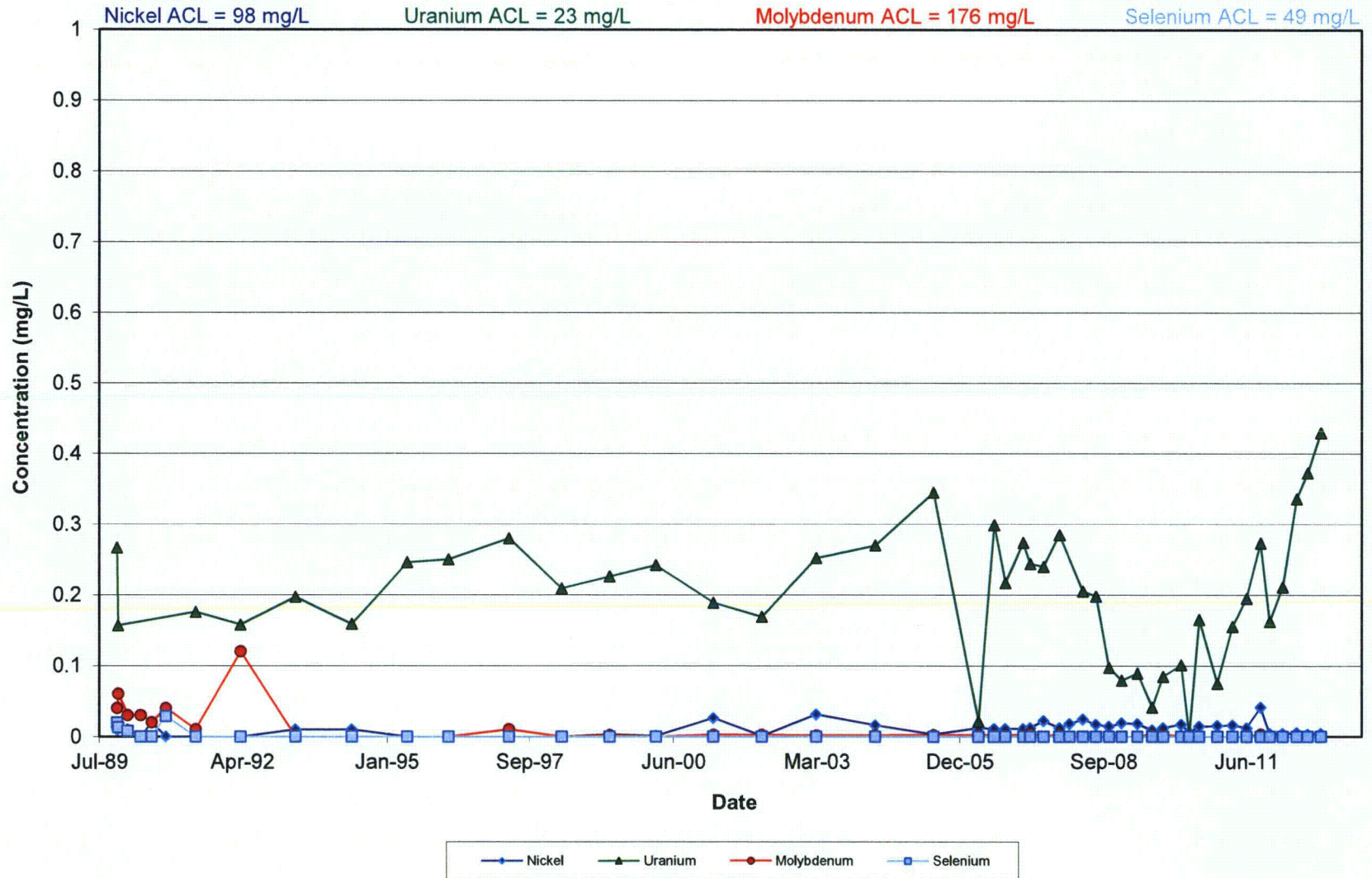


### Anions and TDS in Monitoring Well 5-73



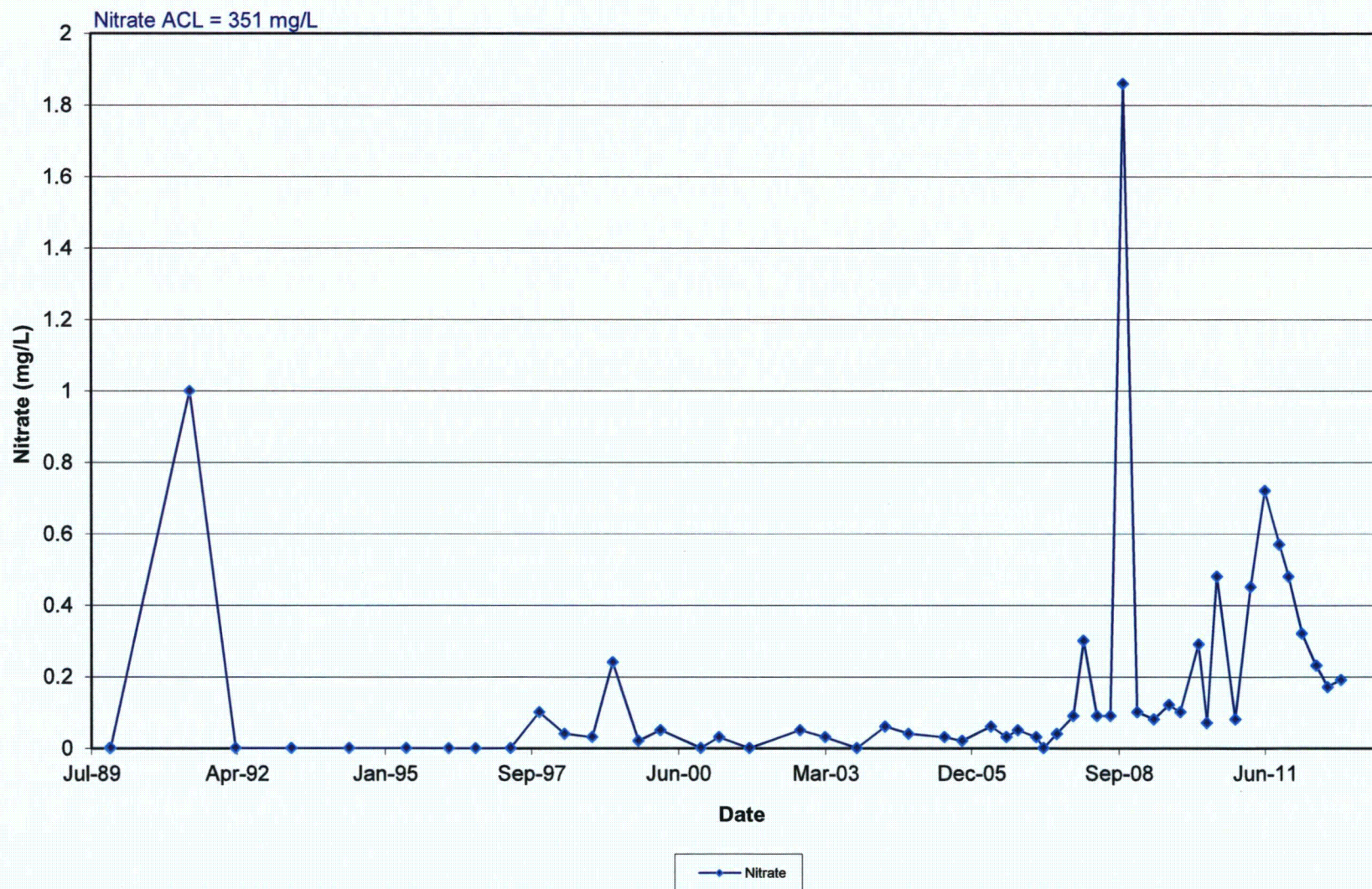


### Metals in Monitoring Well 5-73



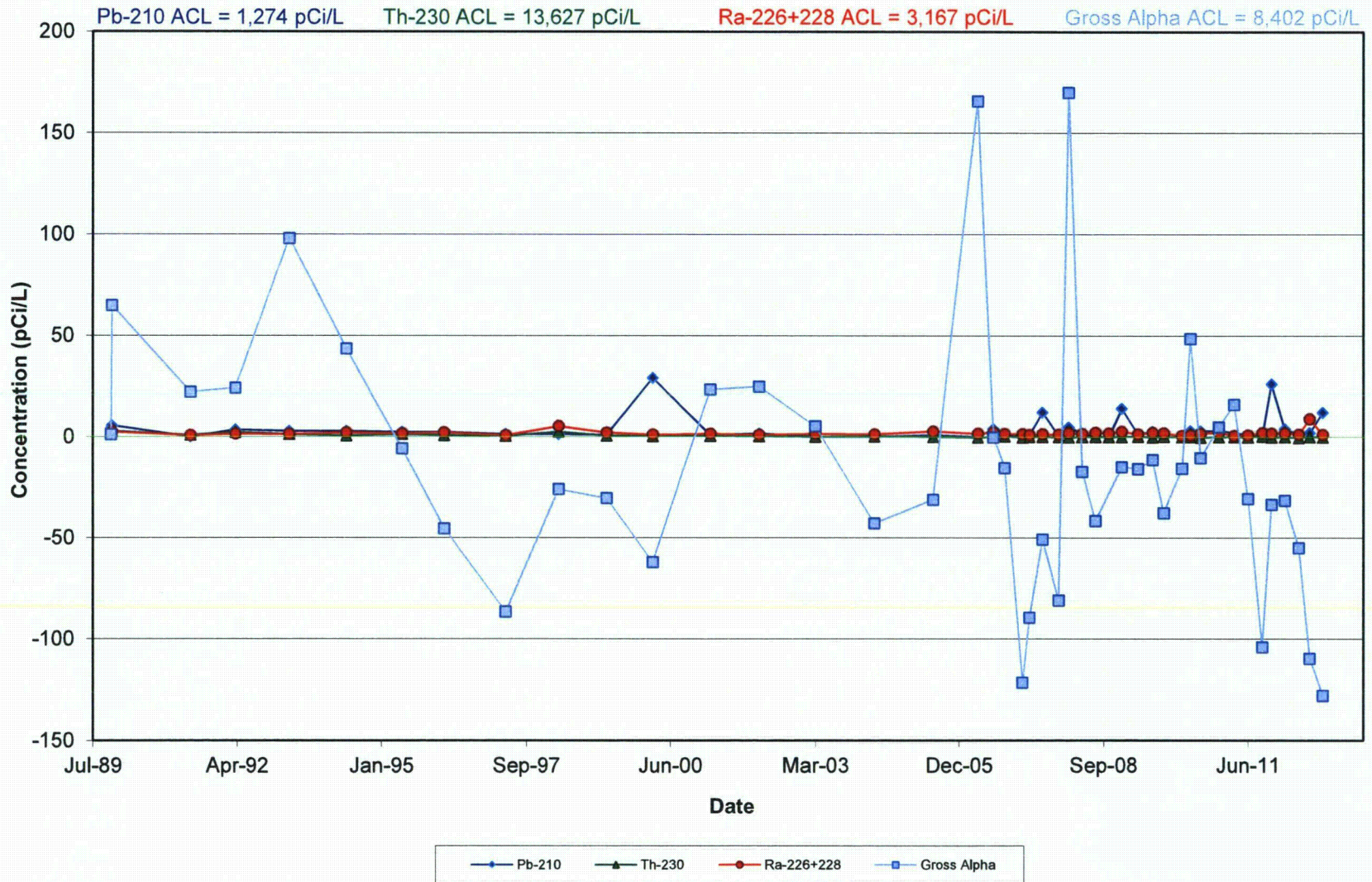


### Nitrate in Monitoring Well 5-73



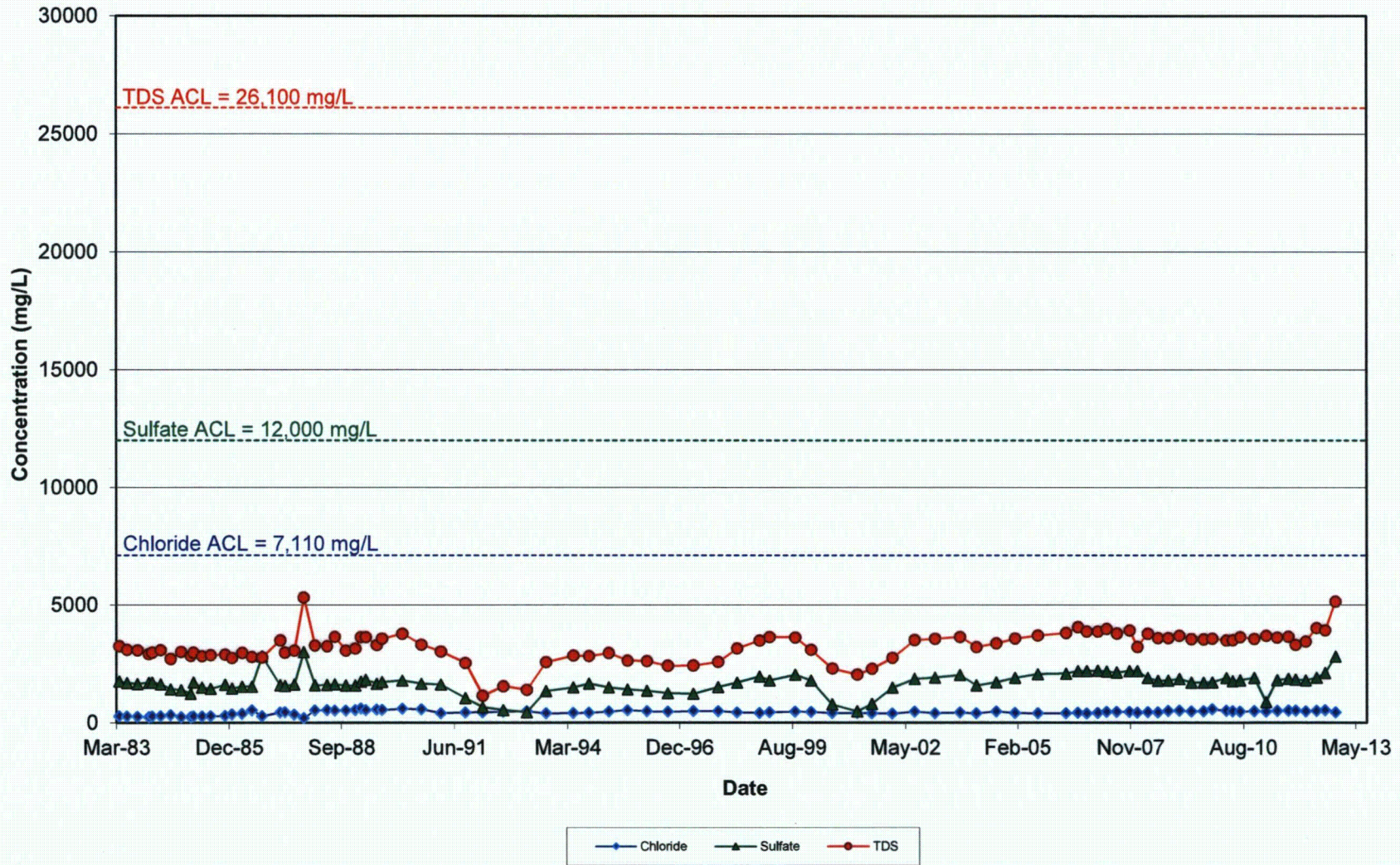


### Radionuclides in Monitoring Well 5-73



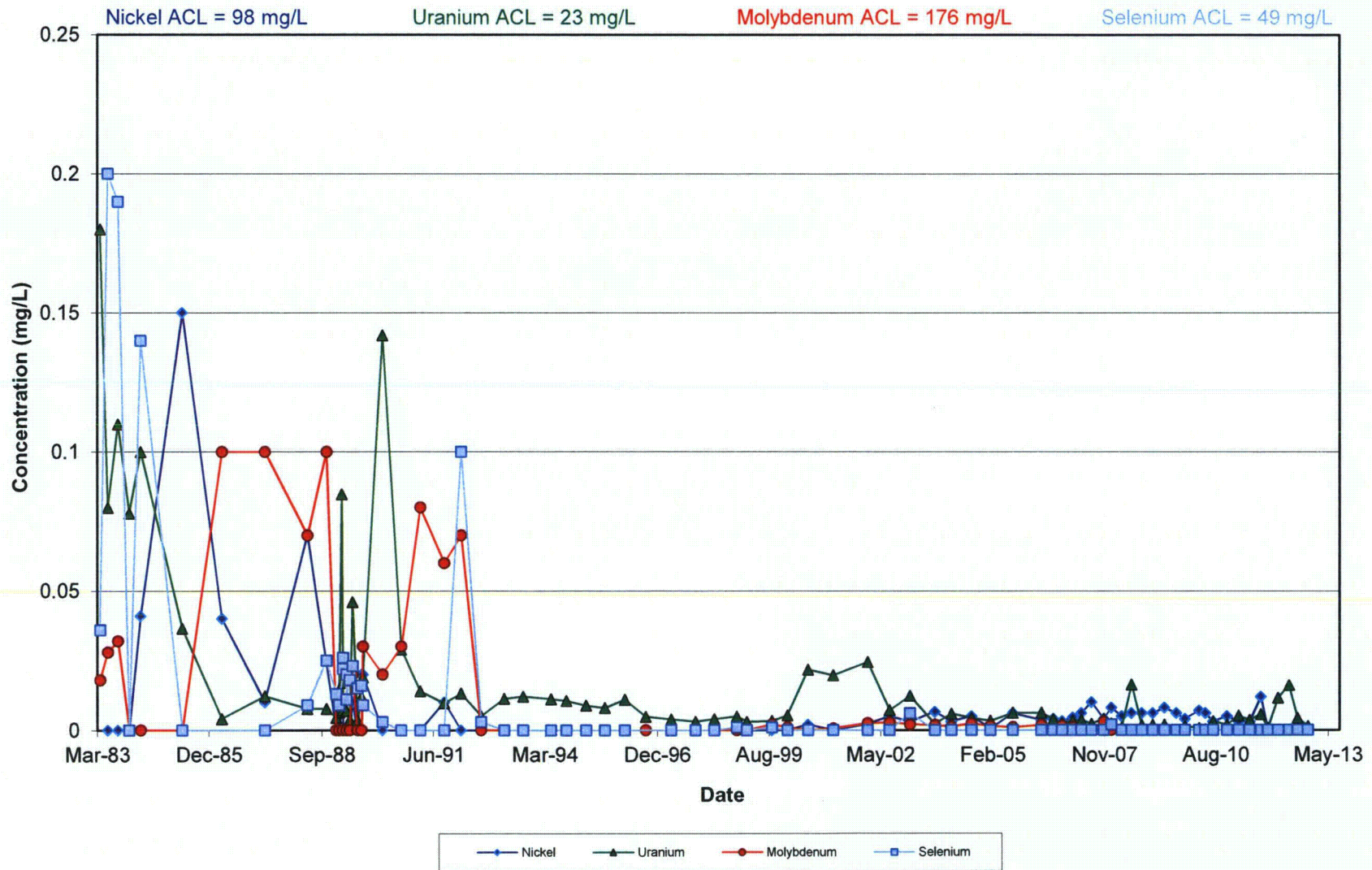


### Anions and TDS in Monitoring Well 5-03



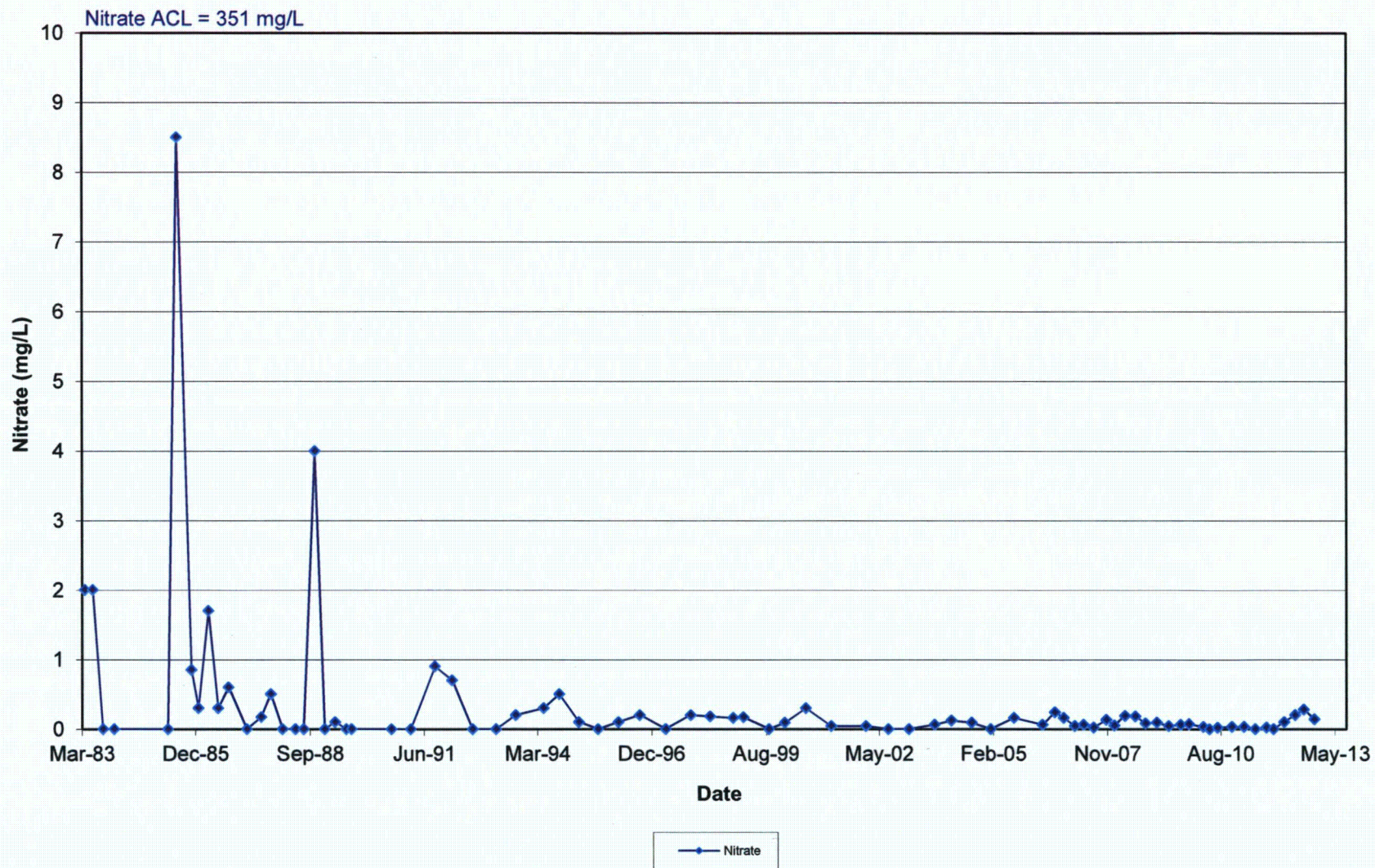


### Metals in Monitoring Well 5-03



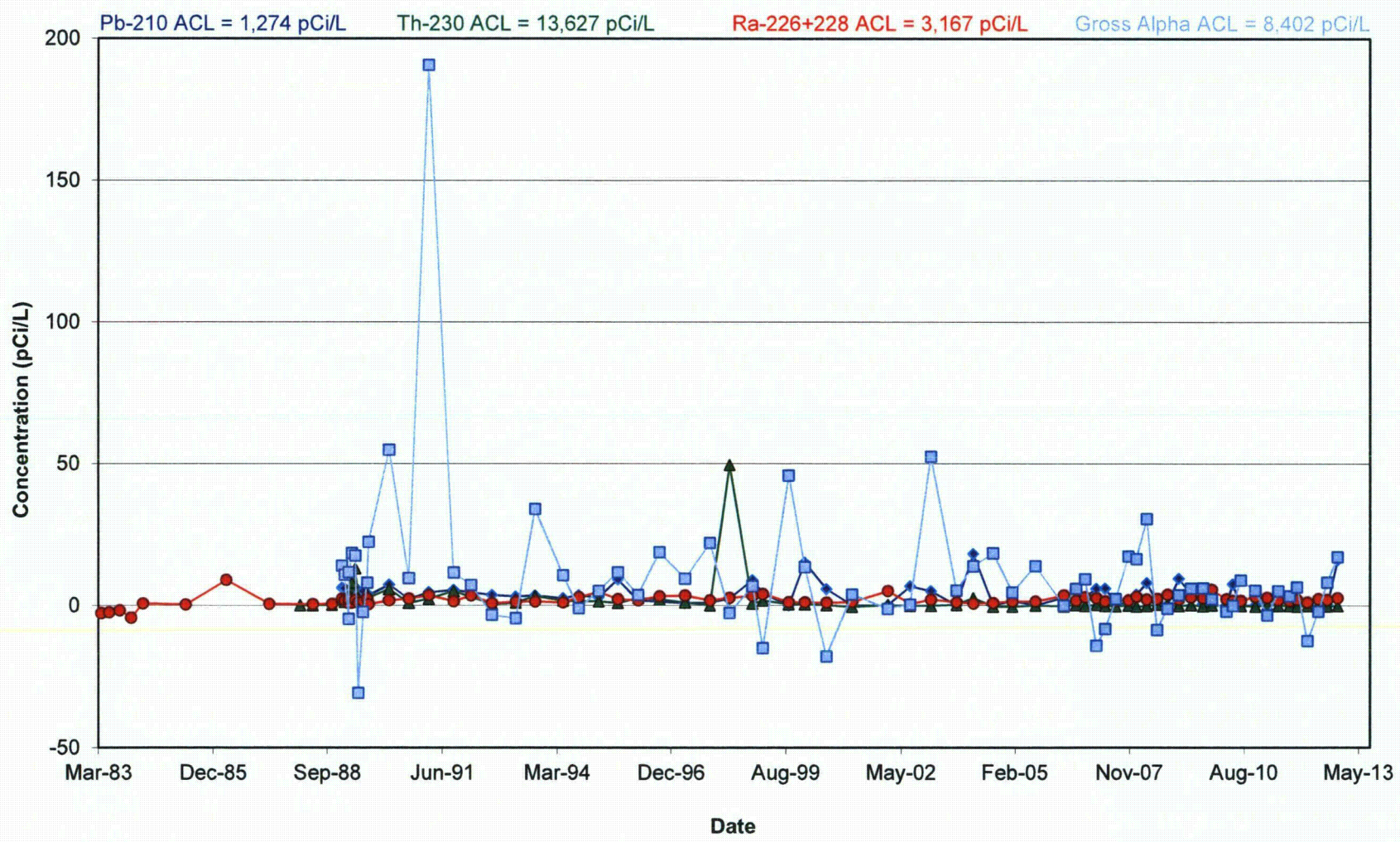


### Nitrate in Monitoring Well 5-03



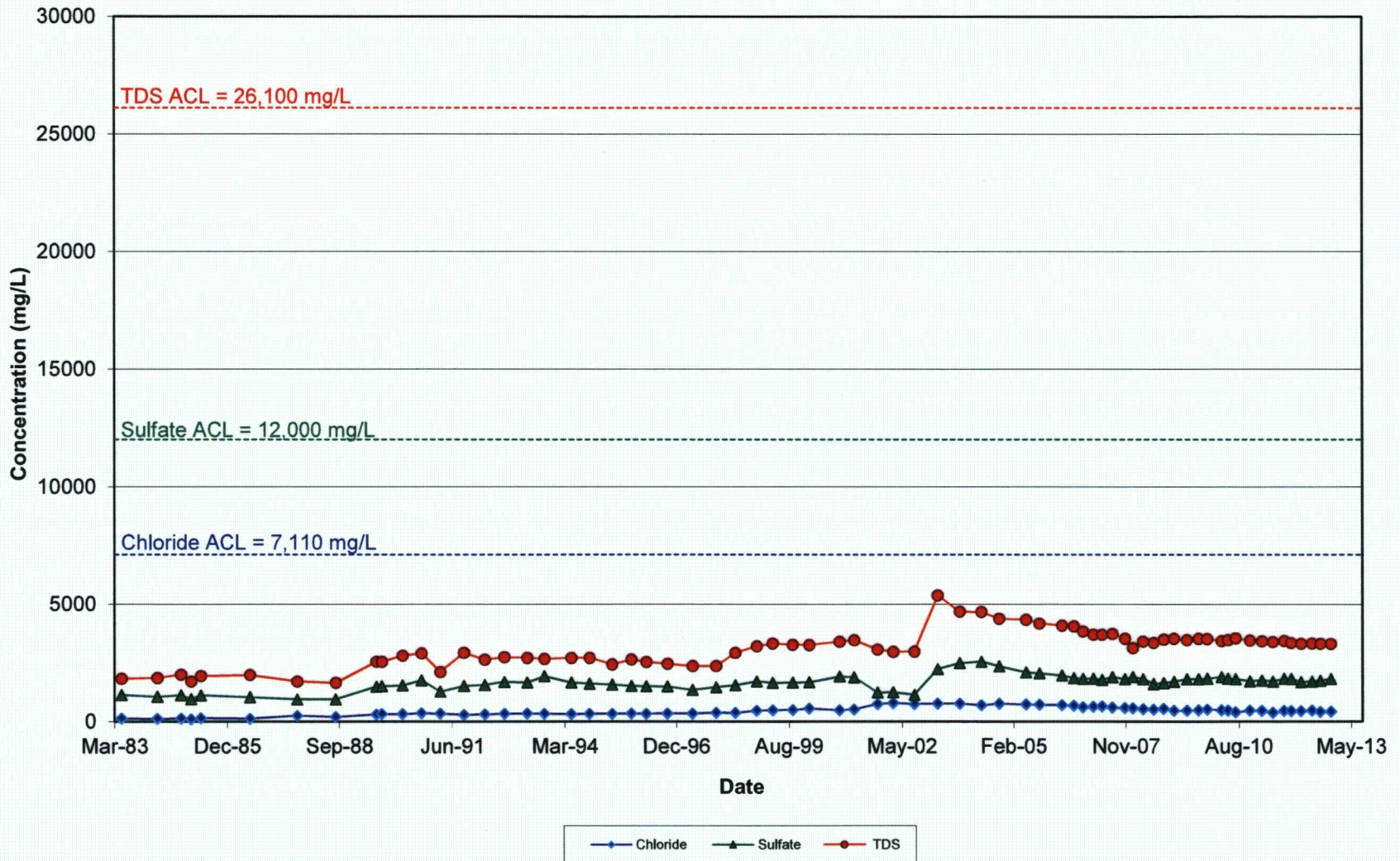


### Radionuclides in Monitoring Well 5-03



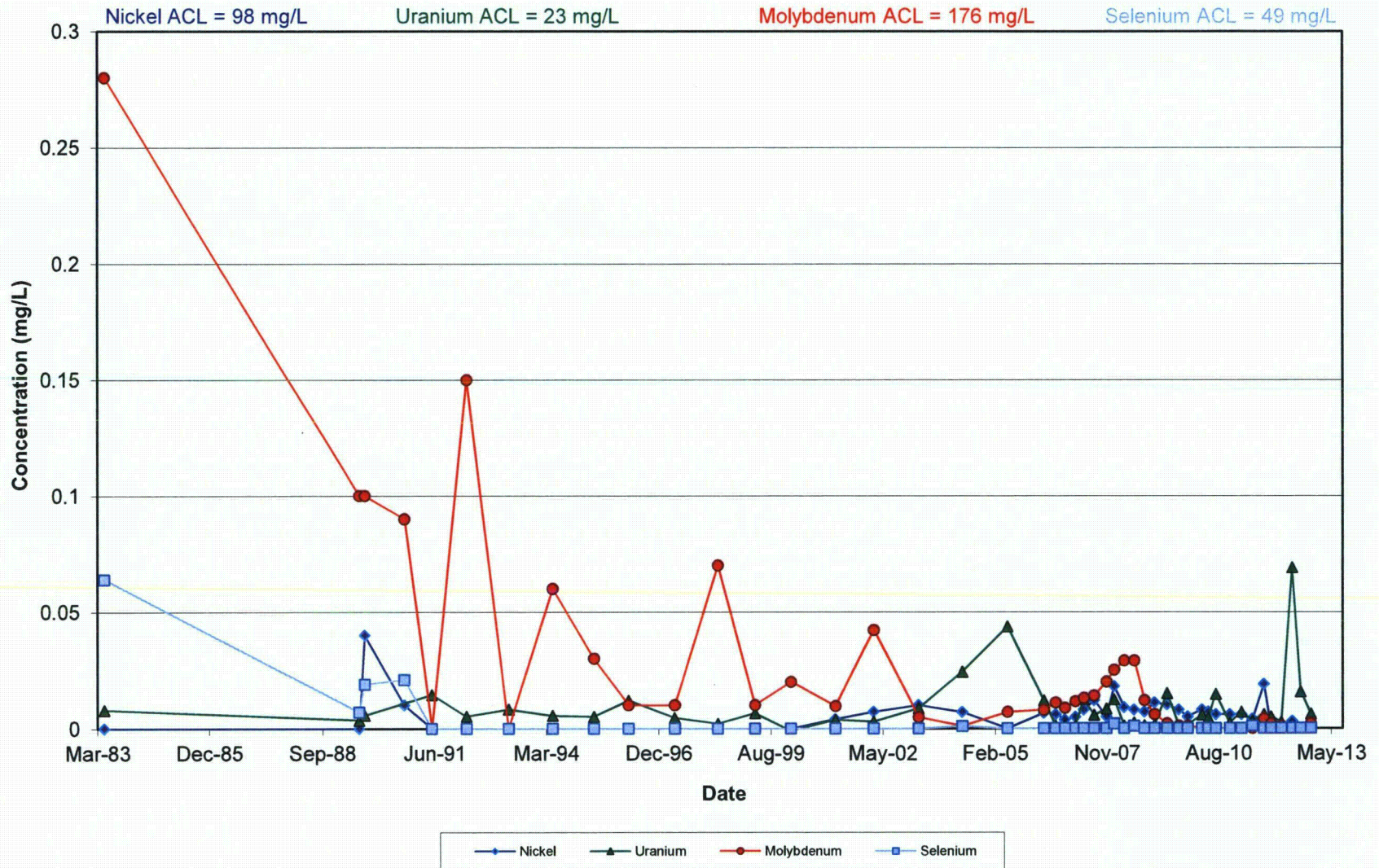


### Anions and TDS in Monitoring Well 5-08



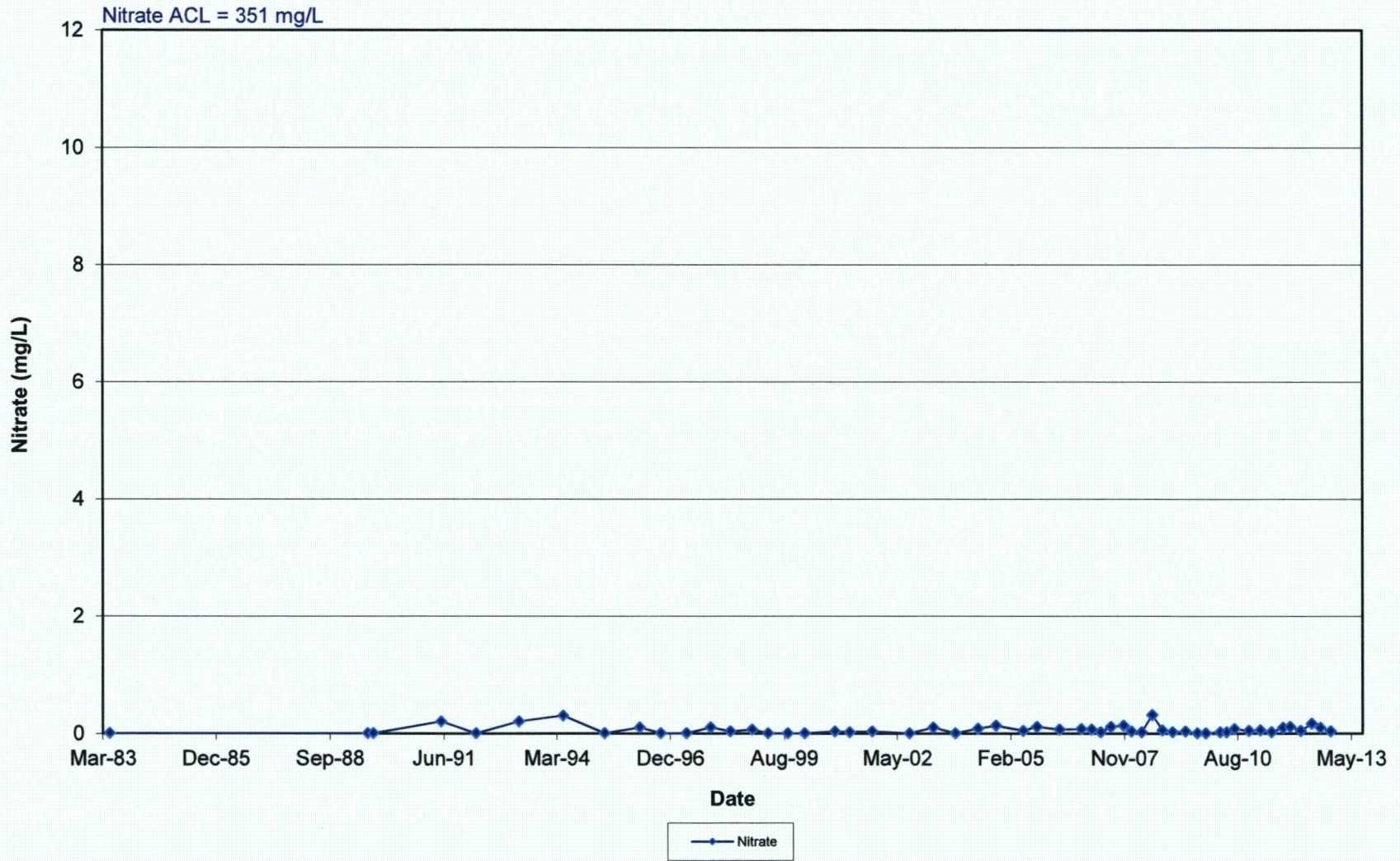


### Metals in Monitoring Well 5-08



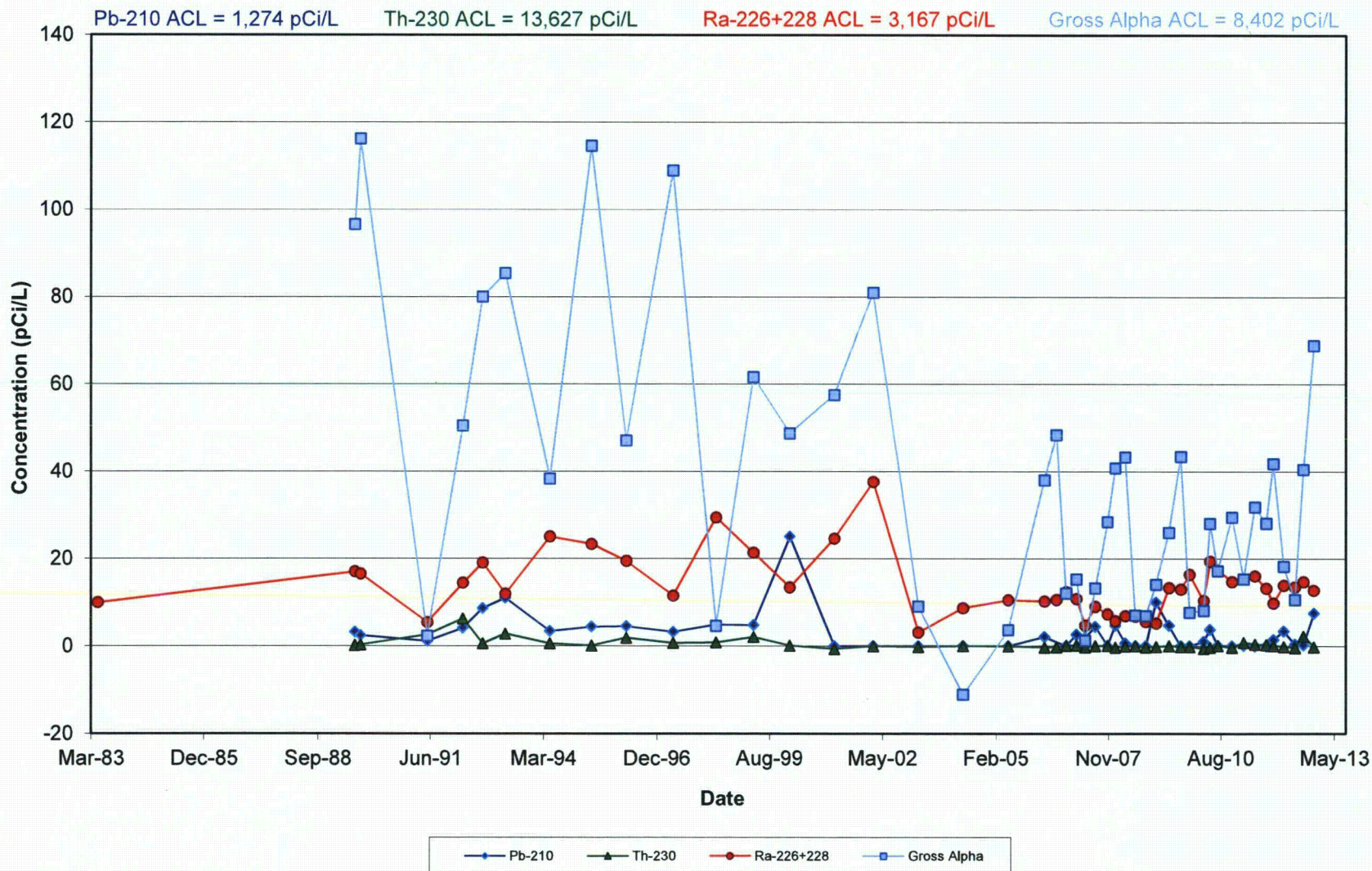


### Nitrate in Monitoring Well 5-08





### Radionuclides in Monitoring Well 5-08

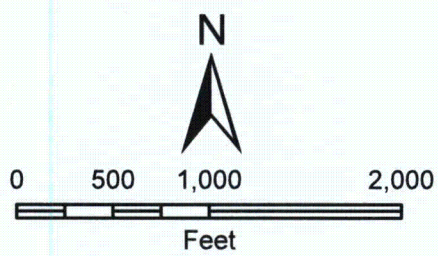
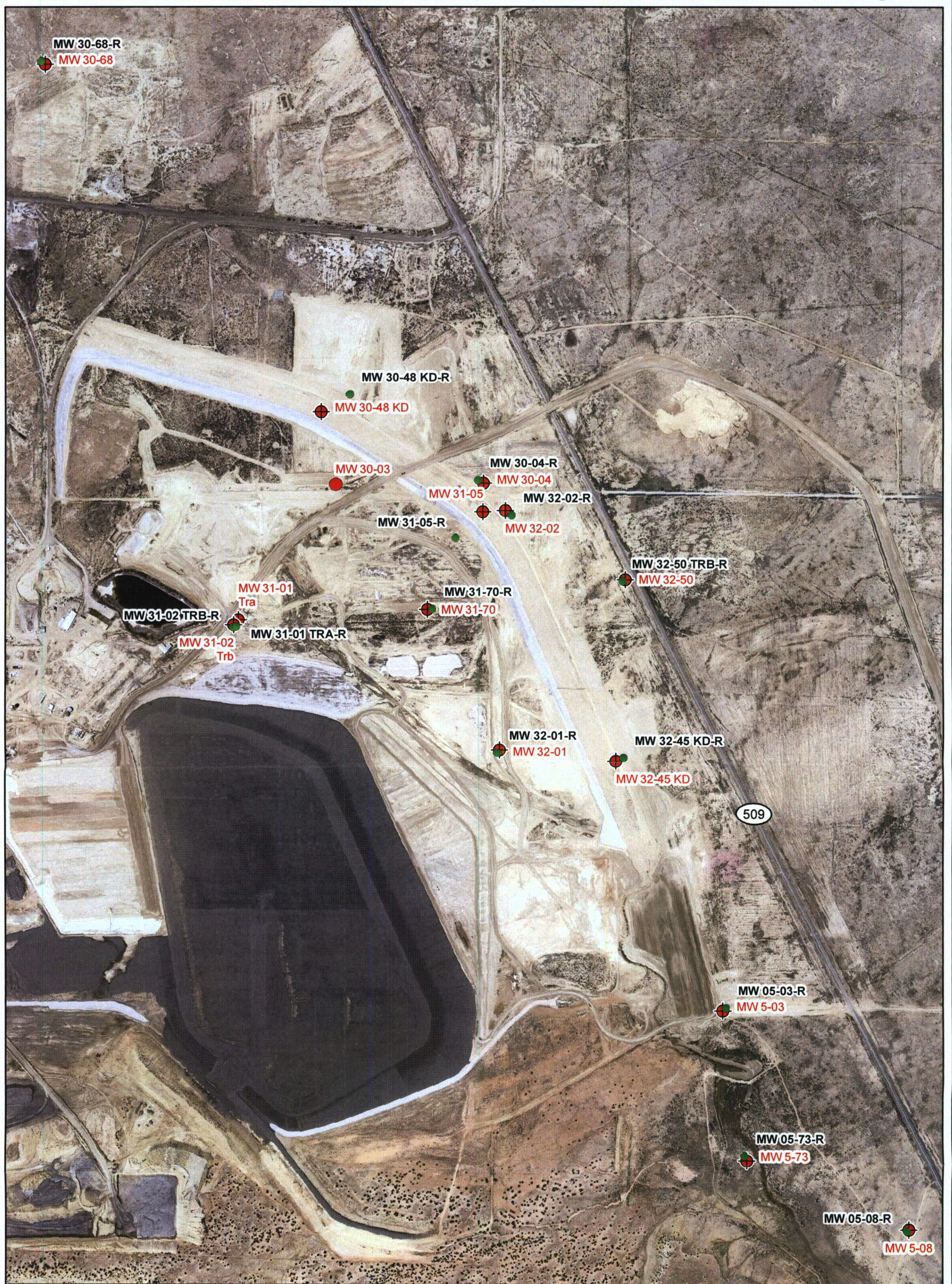




# **APPENDIX 6**

Stability Monitoring Plan  
Replacement Well Map





Legend	
<span style="color: green;">●</span>	Replacement Monitoring Well
<span style="color: red;">●</span>	Monitoring Well, Plug and Abandon
<span style="color: red;">⊕</span>	Monitoring Well, Plug and Replace

Note: "R" in well name denotes replacement well.

2nd Half 2013  
Replacement Well Map  
Rio Algom DP-169 ACL  
Semi-Annual Report

**INTERA** Sources: Aerial – RGIS website, dated 2009;  
Point locations – Rio Algom, Bowman, 3/20/2013