

FIGURE 20
Uranium Concentration in Well 0509 D
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

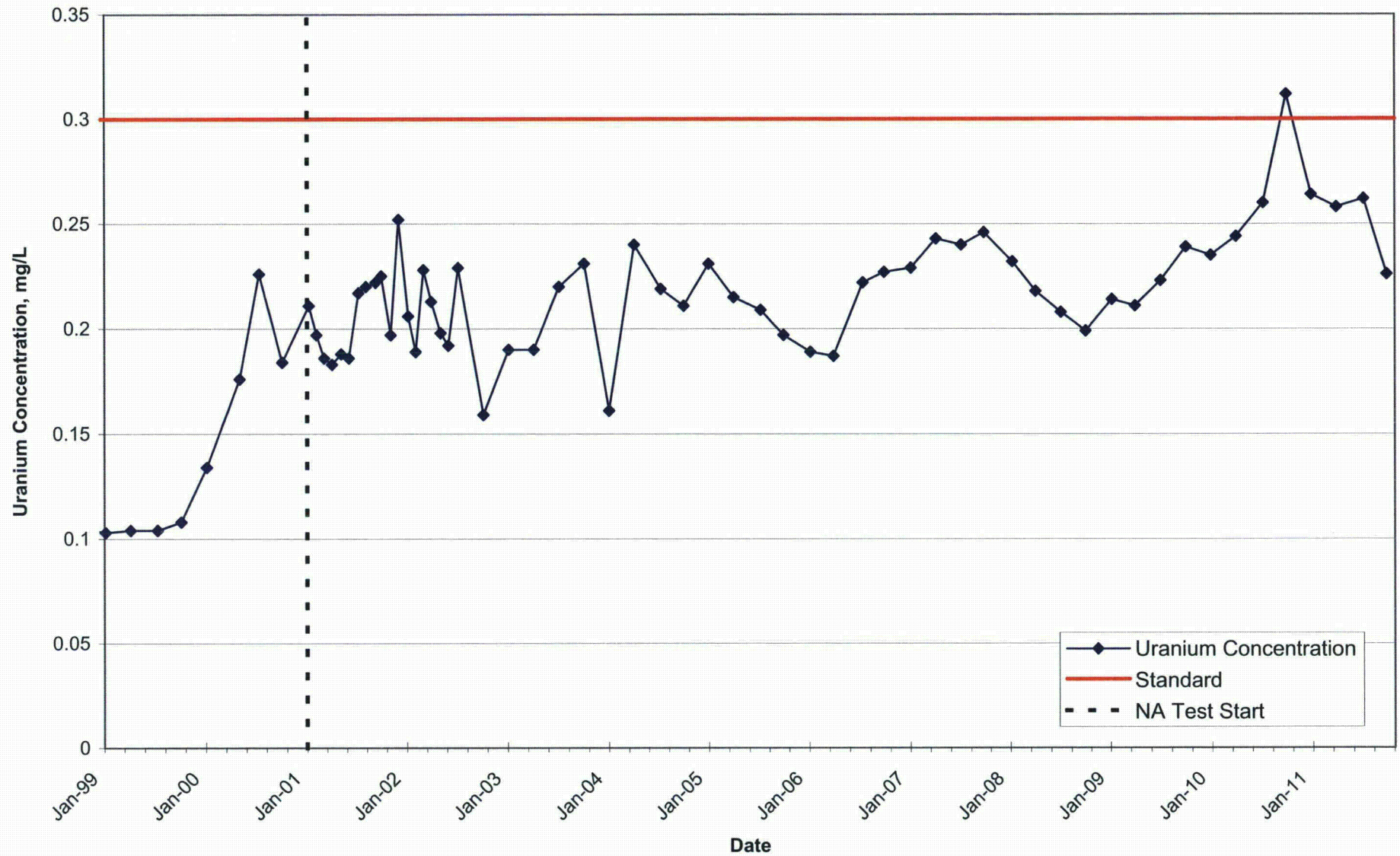


FIGURE 21
Uranium Concentration in Well 0801
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

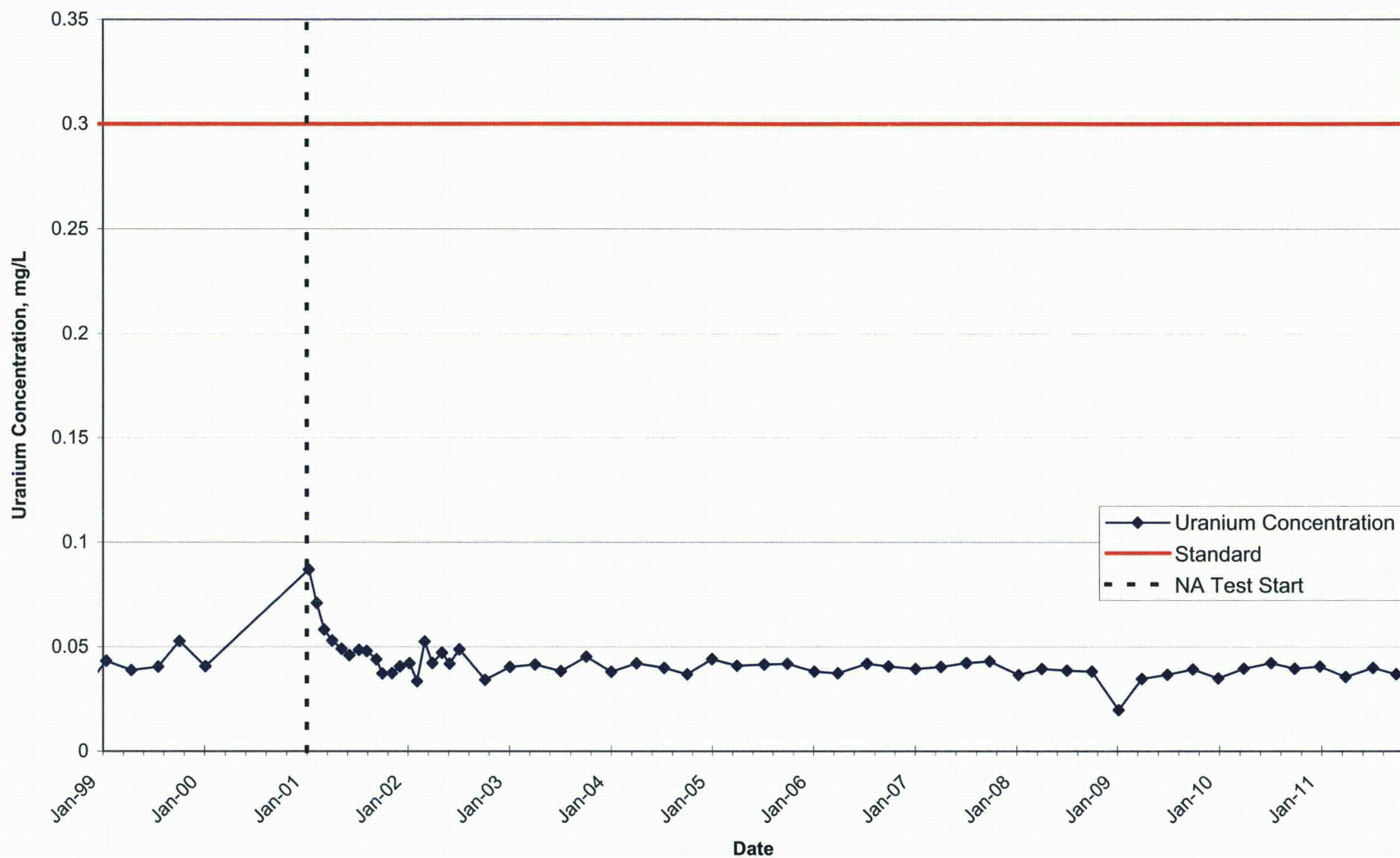


FIGURE 22
Uranium Concentration in Well 0802
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

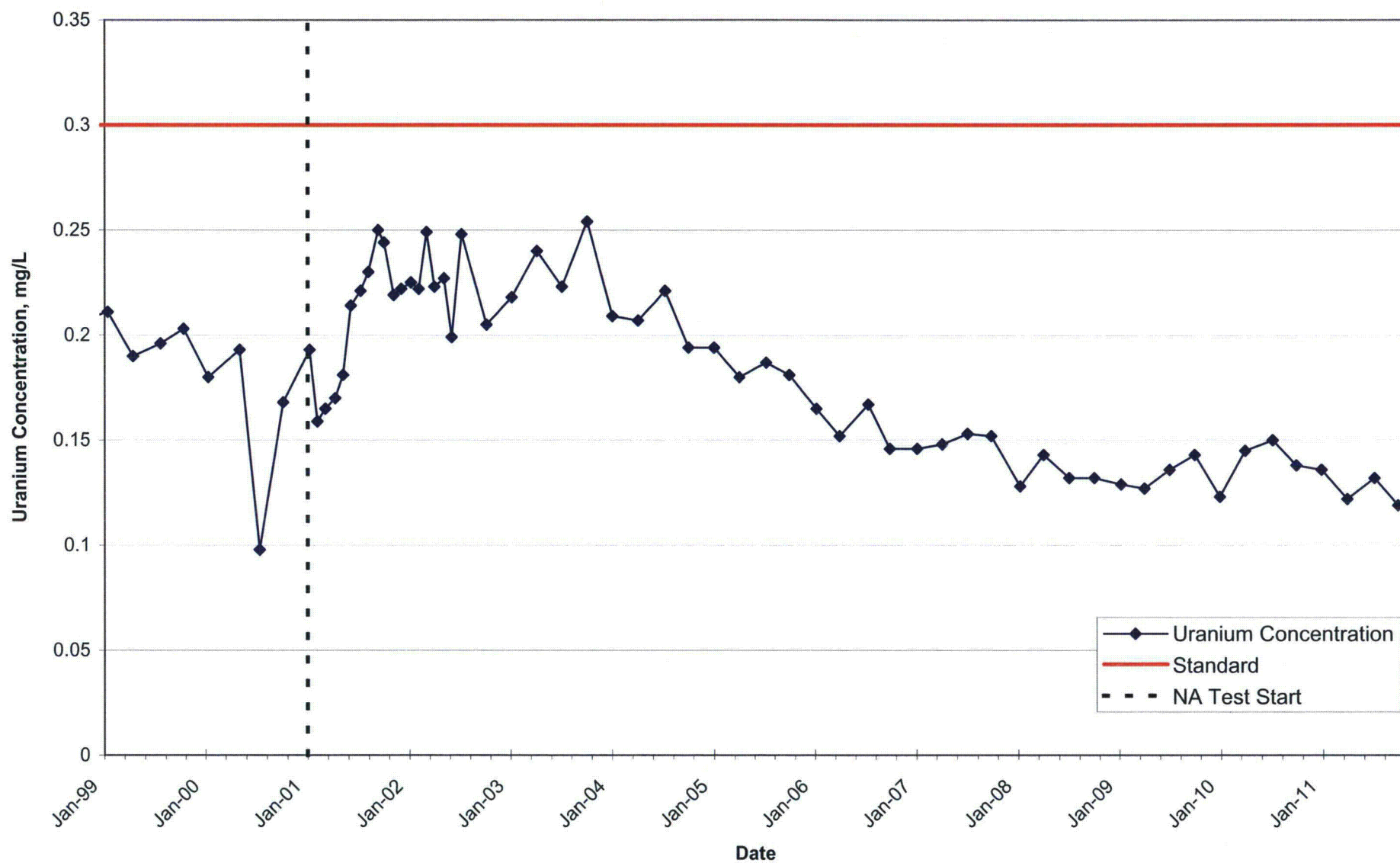


FIGURE 23
Uranium Concentration in Well 0803
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

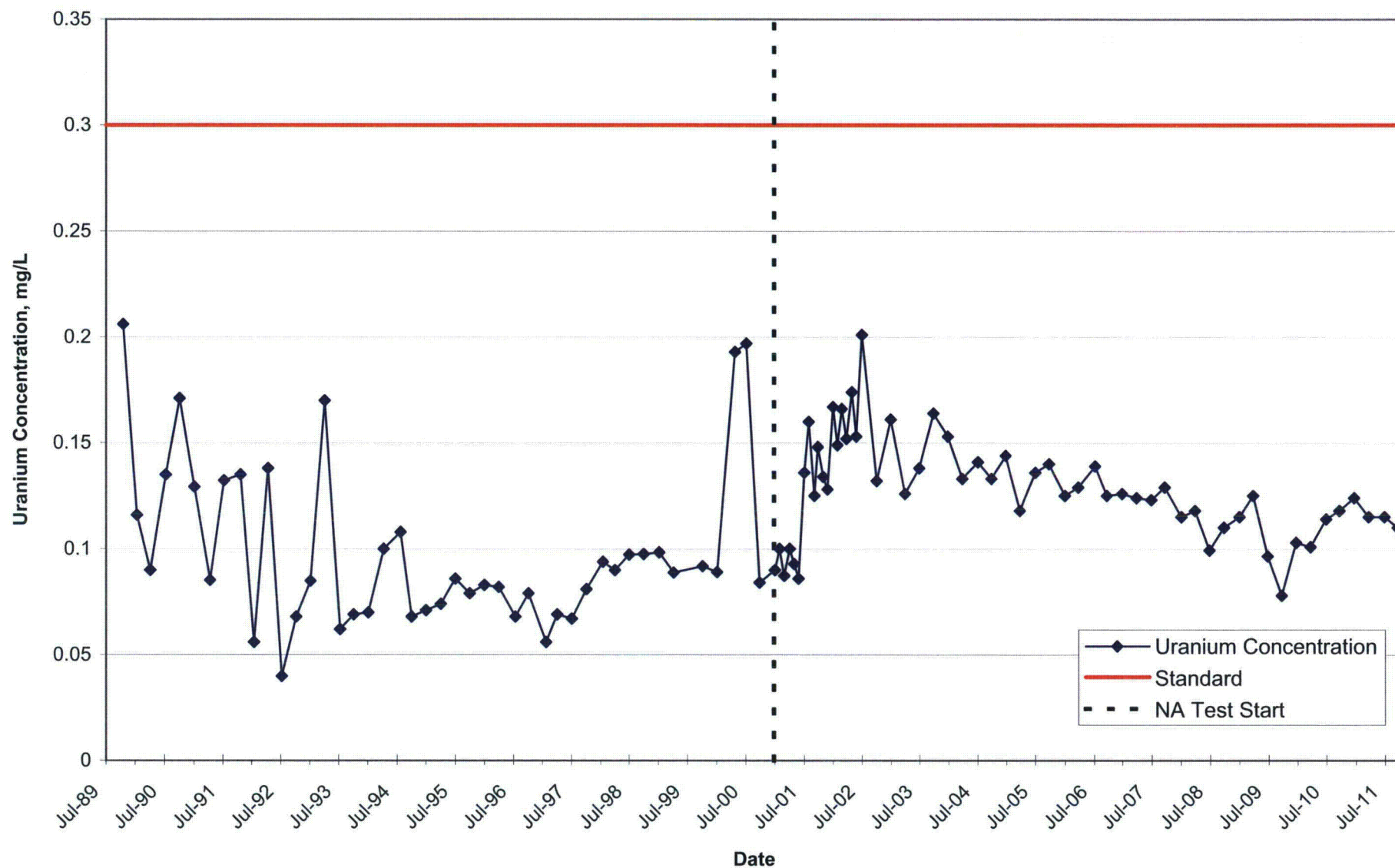


FIGURE 24
 Uranium and Bicarbonate Concentrations in Well GW 1
 United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

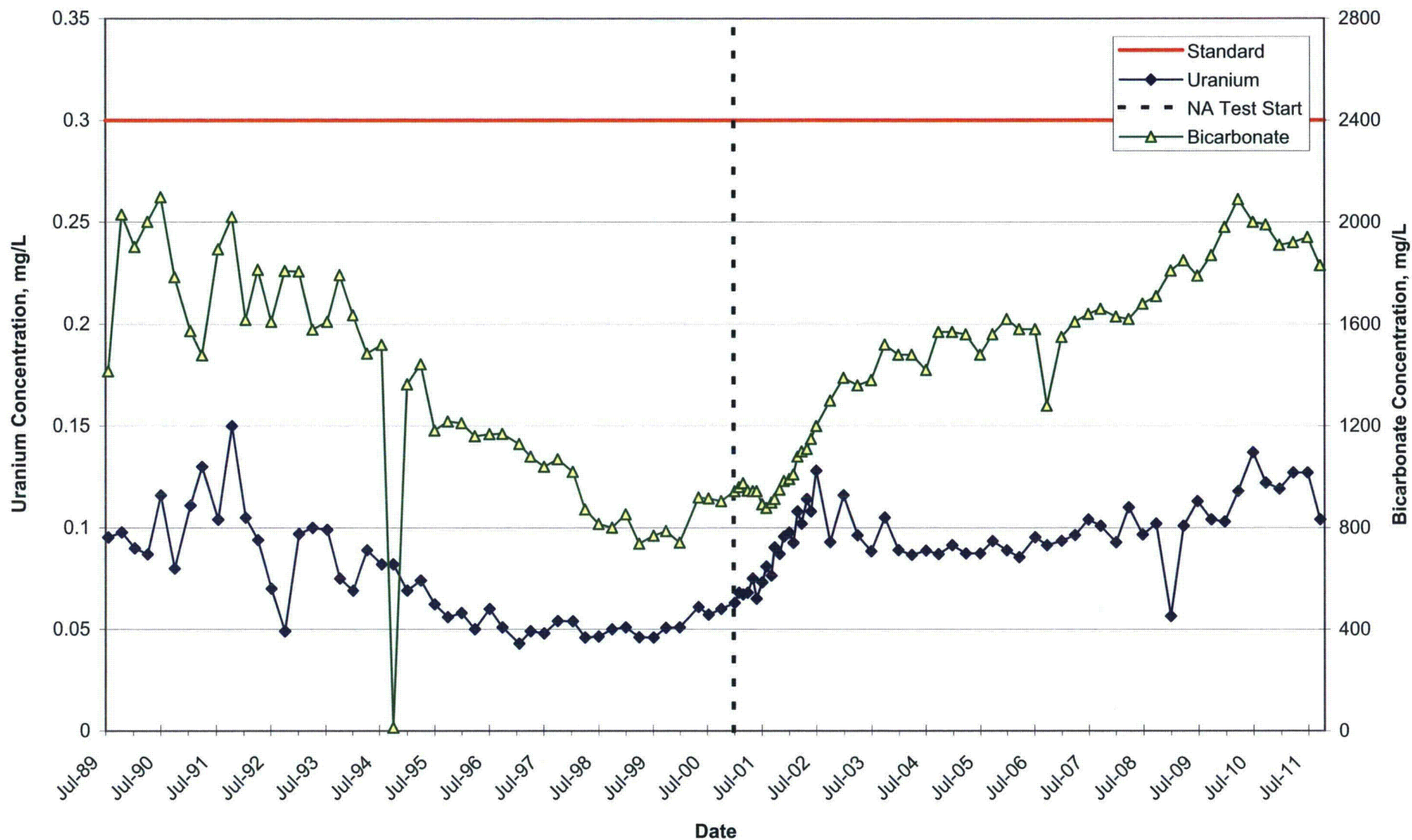


FIGURE 25
Uranium Concentration in Well GW 2
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

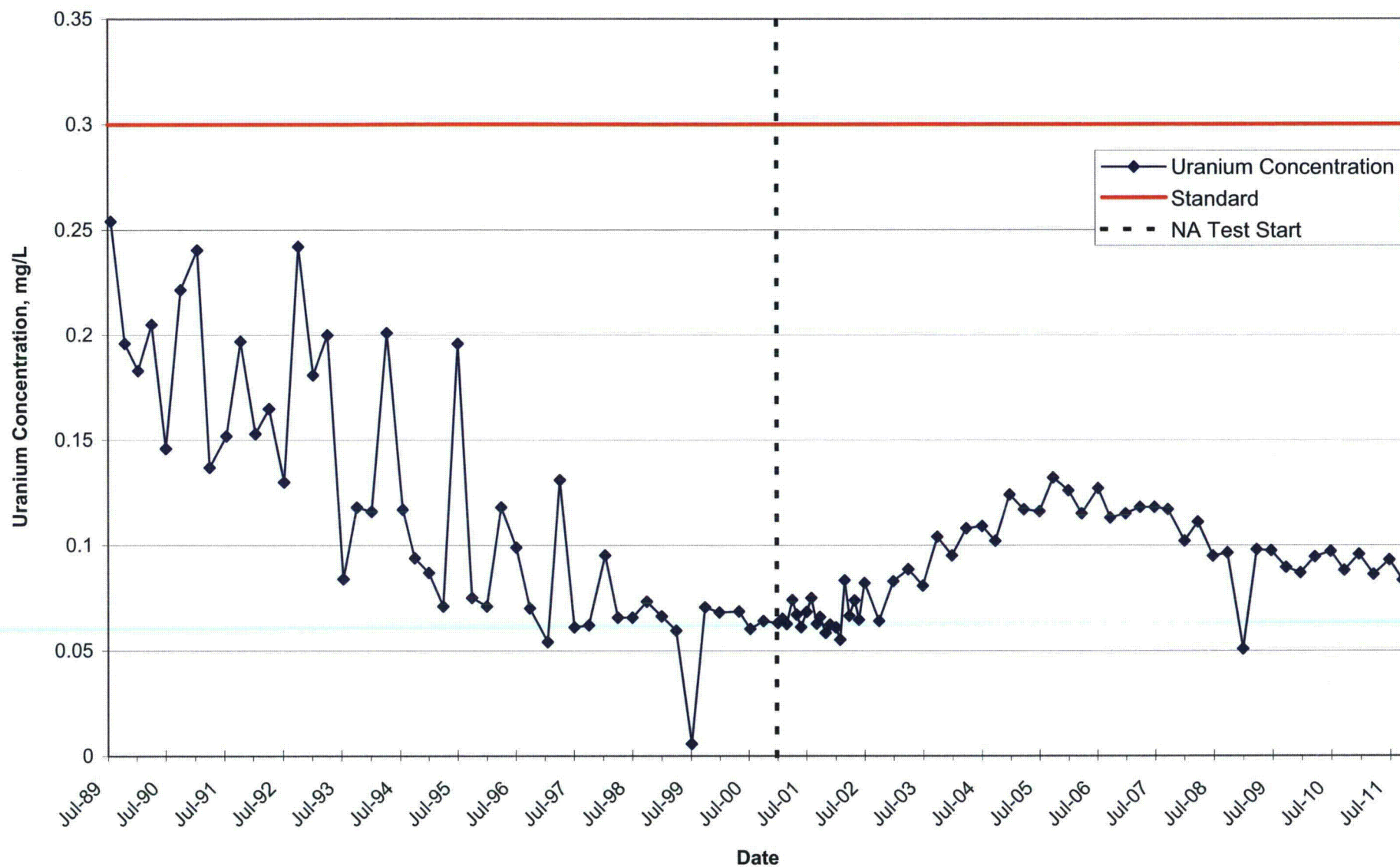


FIGURE 26
Uranium Concentration in Well GW 3
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

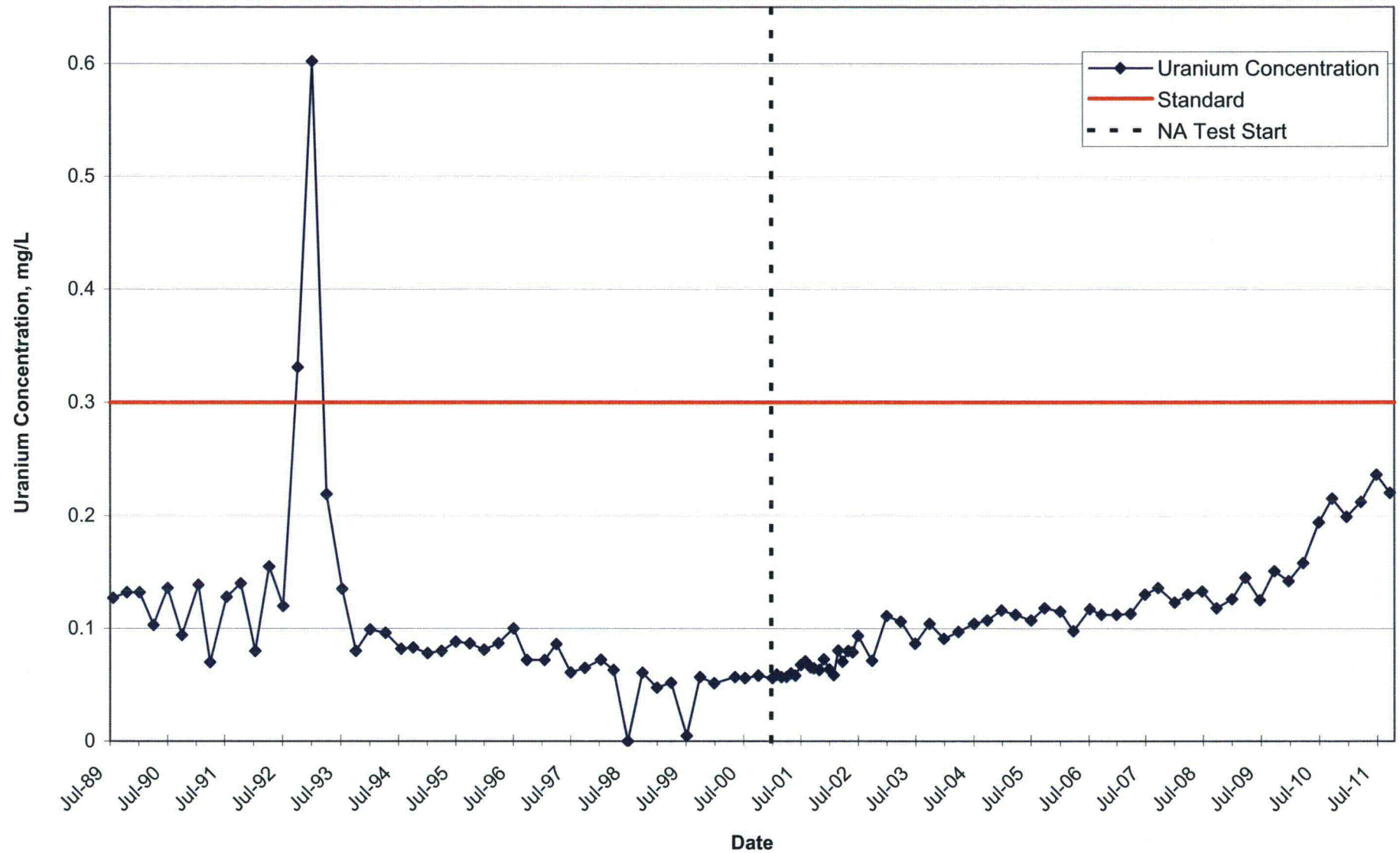


FIGURE 27
 Uranium and Bicarbonate Concentrations in Well 0624
 United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

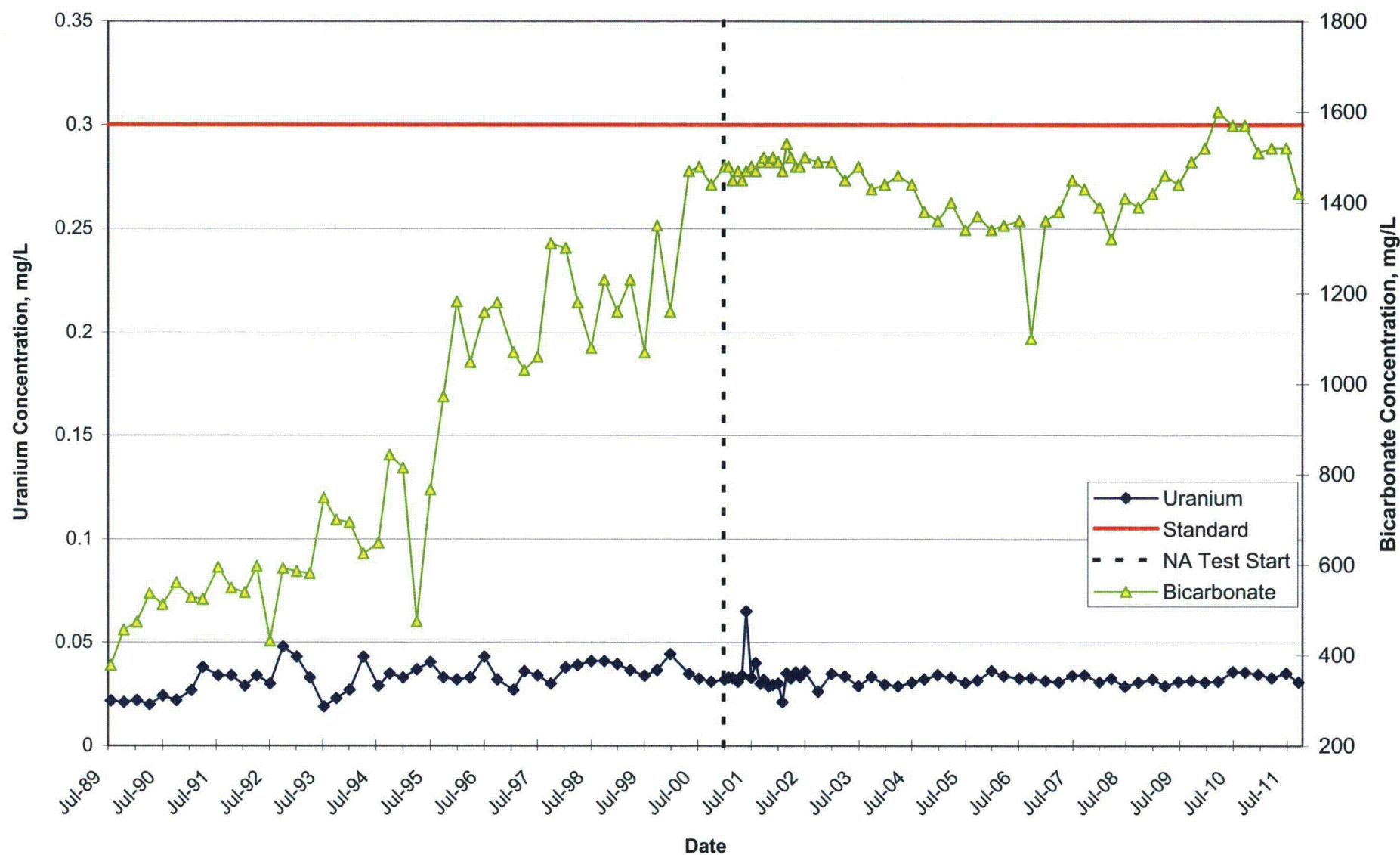


FIGURE 28
Uranium Concentration in Well 0632
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

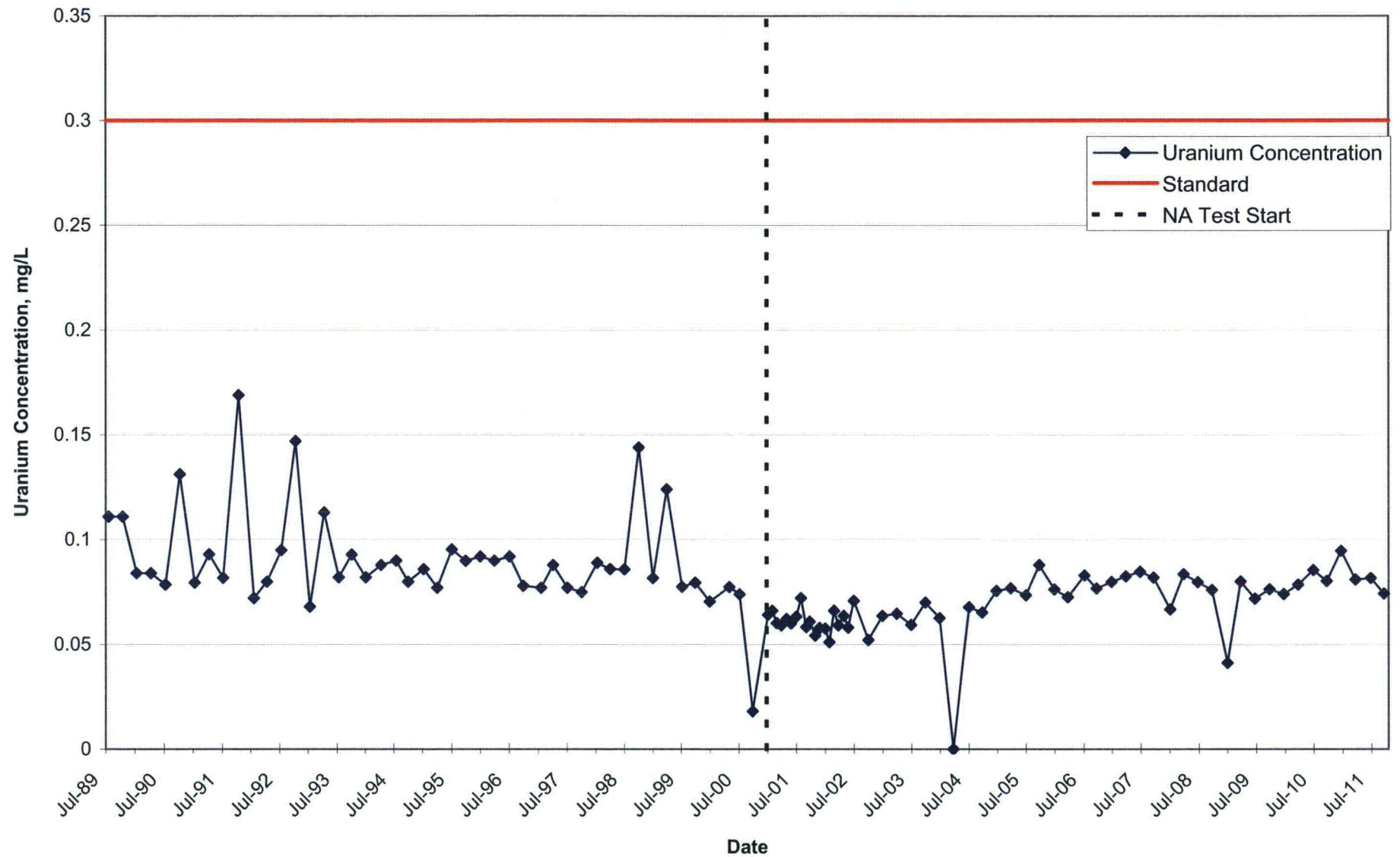


FIGURE 29
Uranium Concentration in Well 0627
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

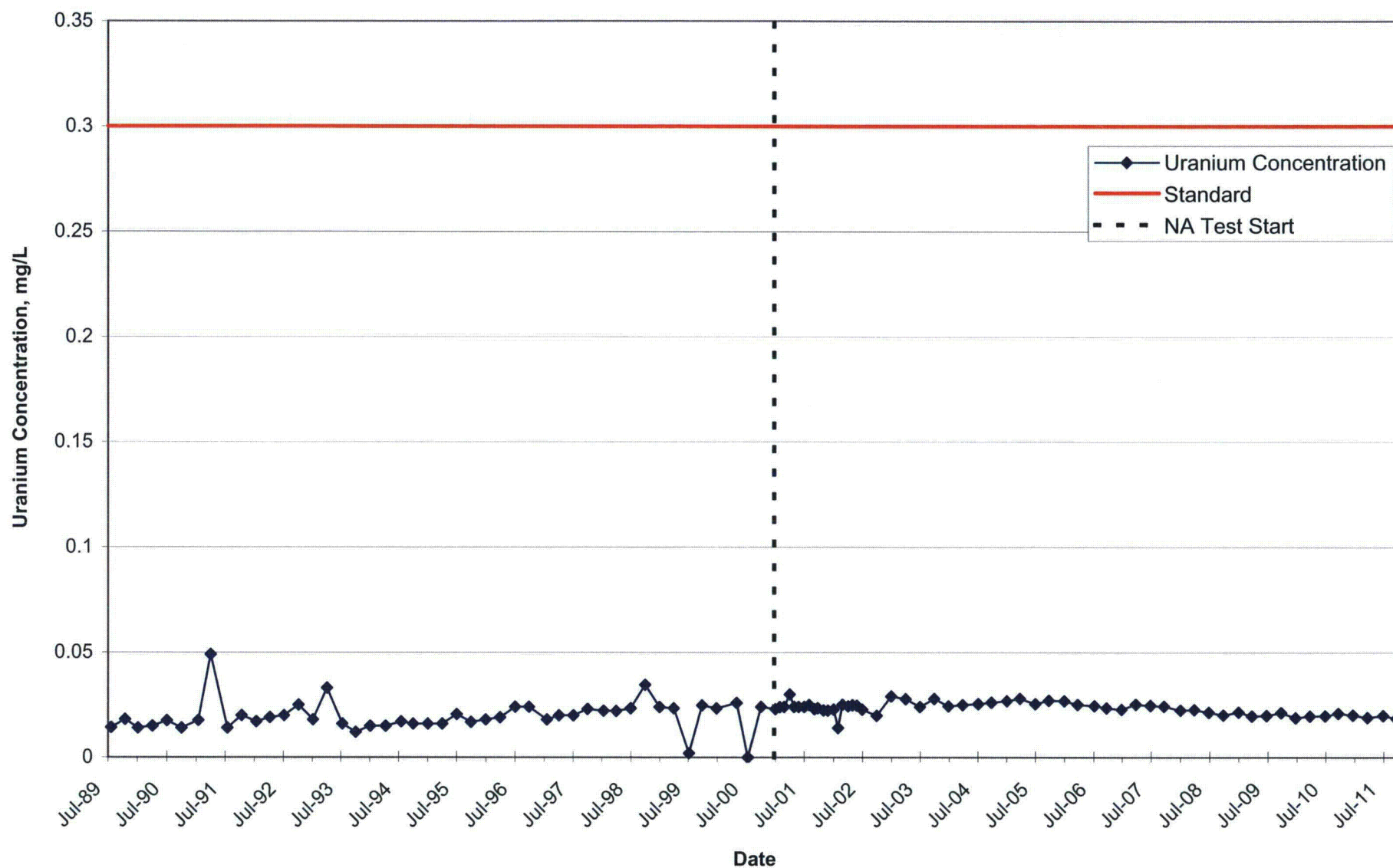


FIGURE 30
Uranium Concentration in Well 0808
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

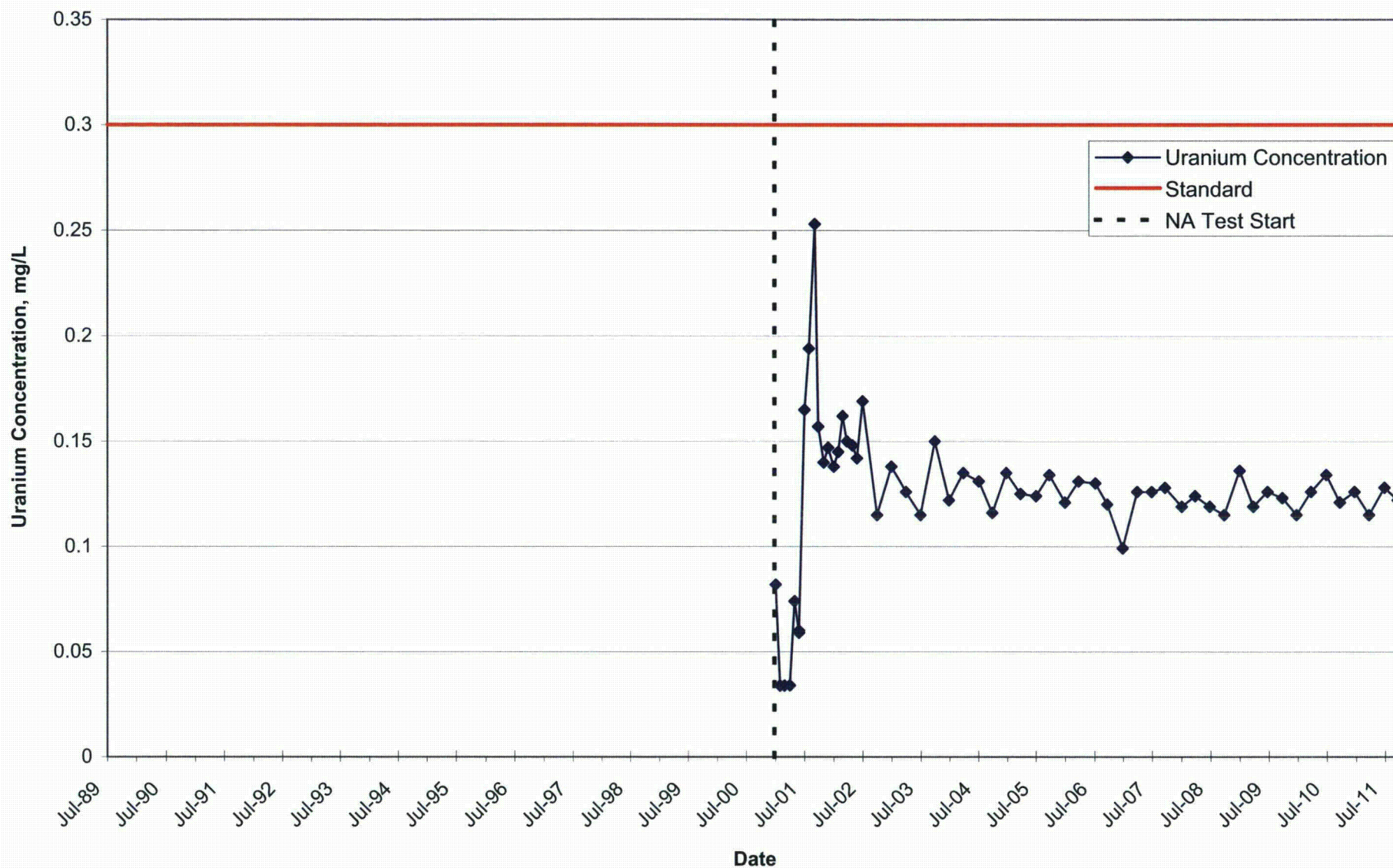


FIGURE 31
Uranium Concentration in Well EPA 23
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

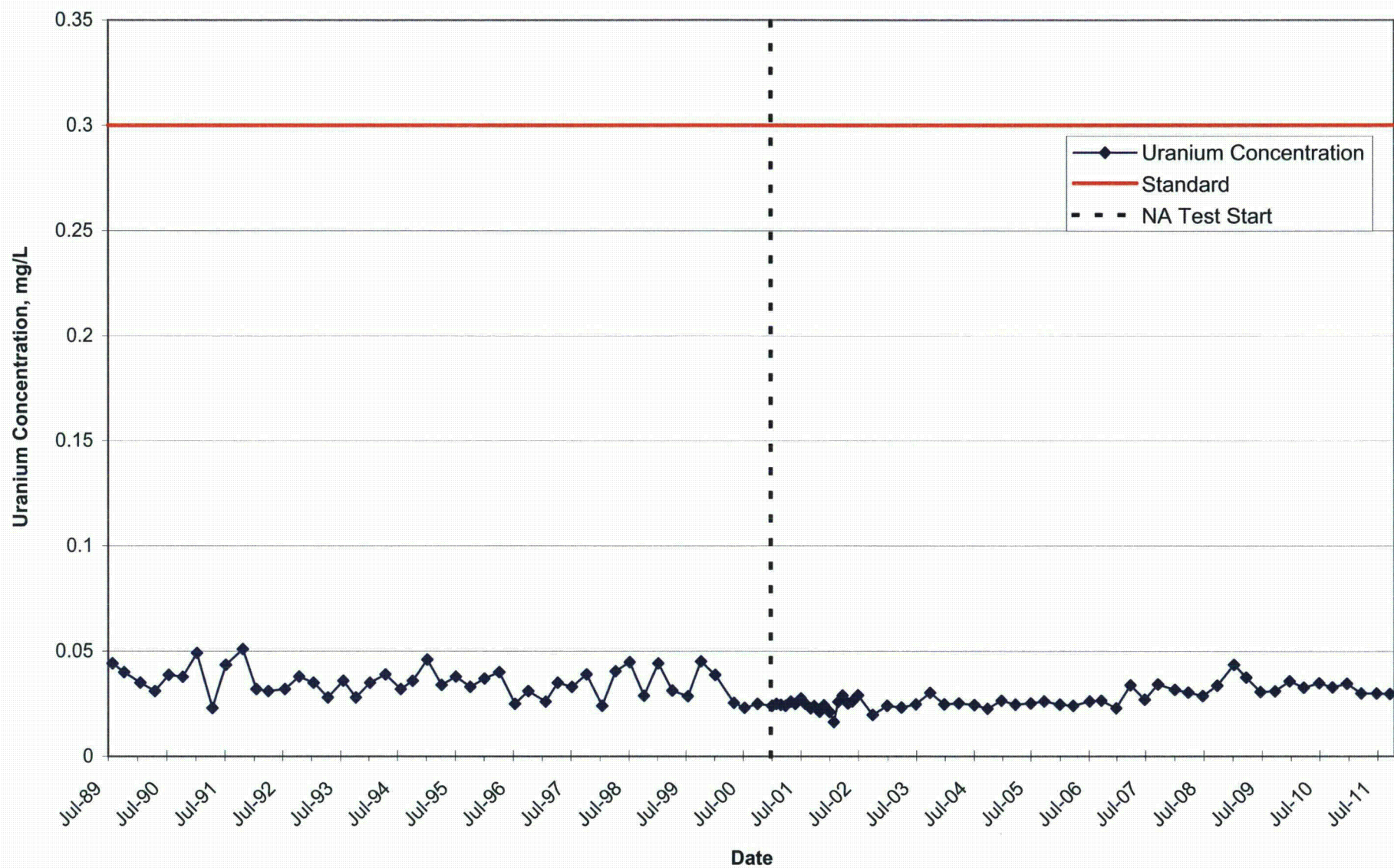


FIGURE 32
Uranium and Bicarbonate Concentrations in Well EPA 25
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

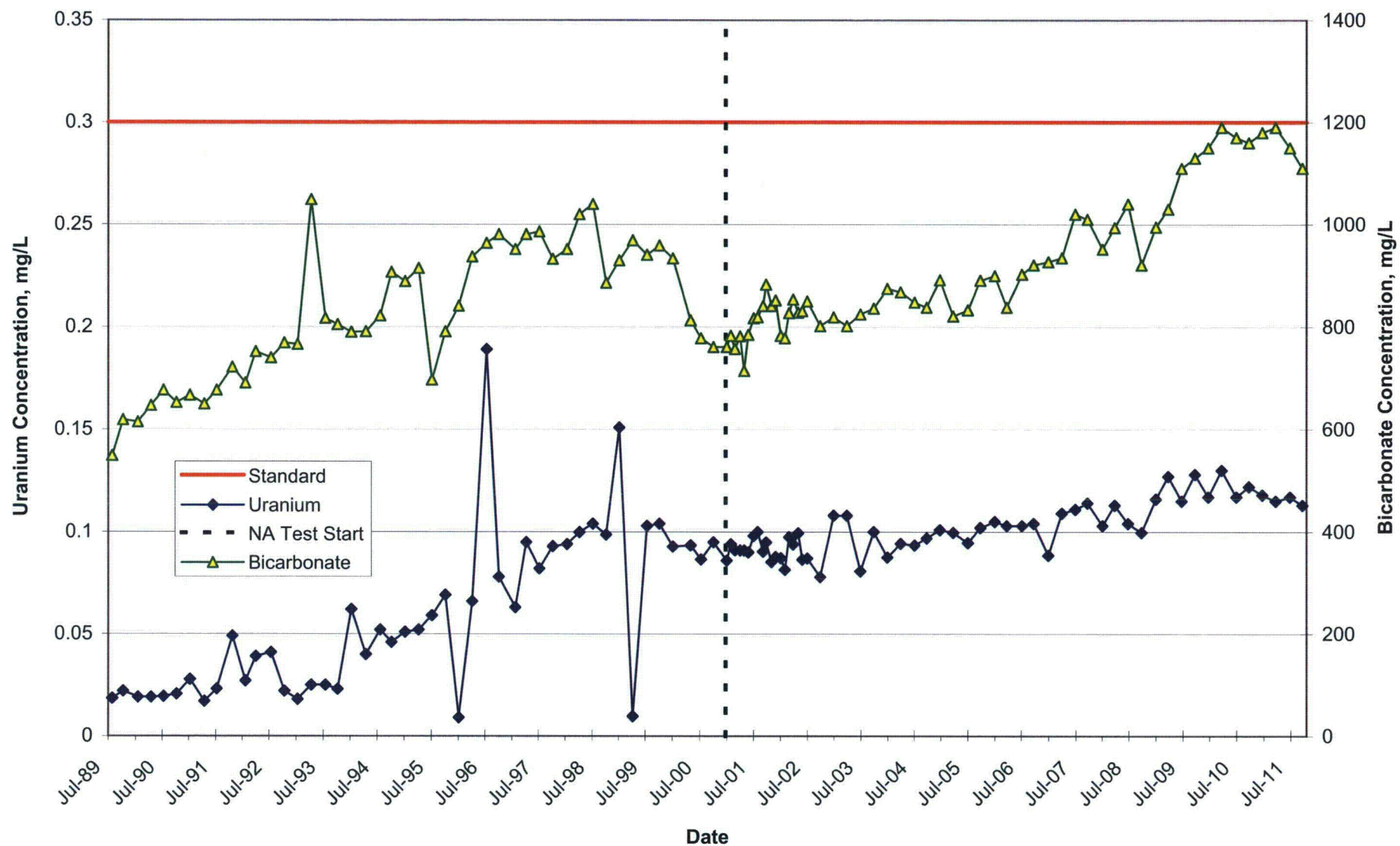


FIGURE 33
Uranium Concentration in Well EPA 28
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

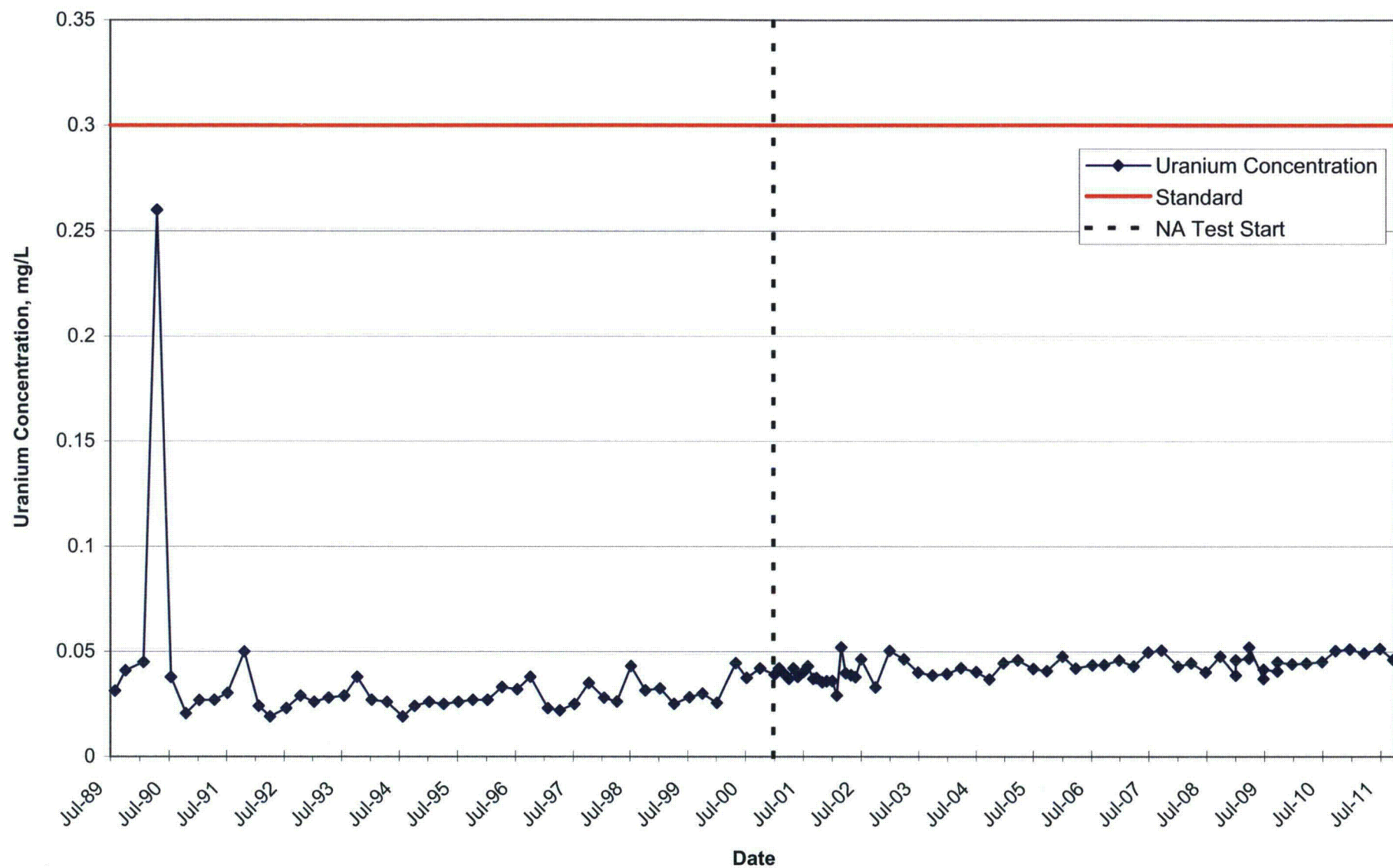
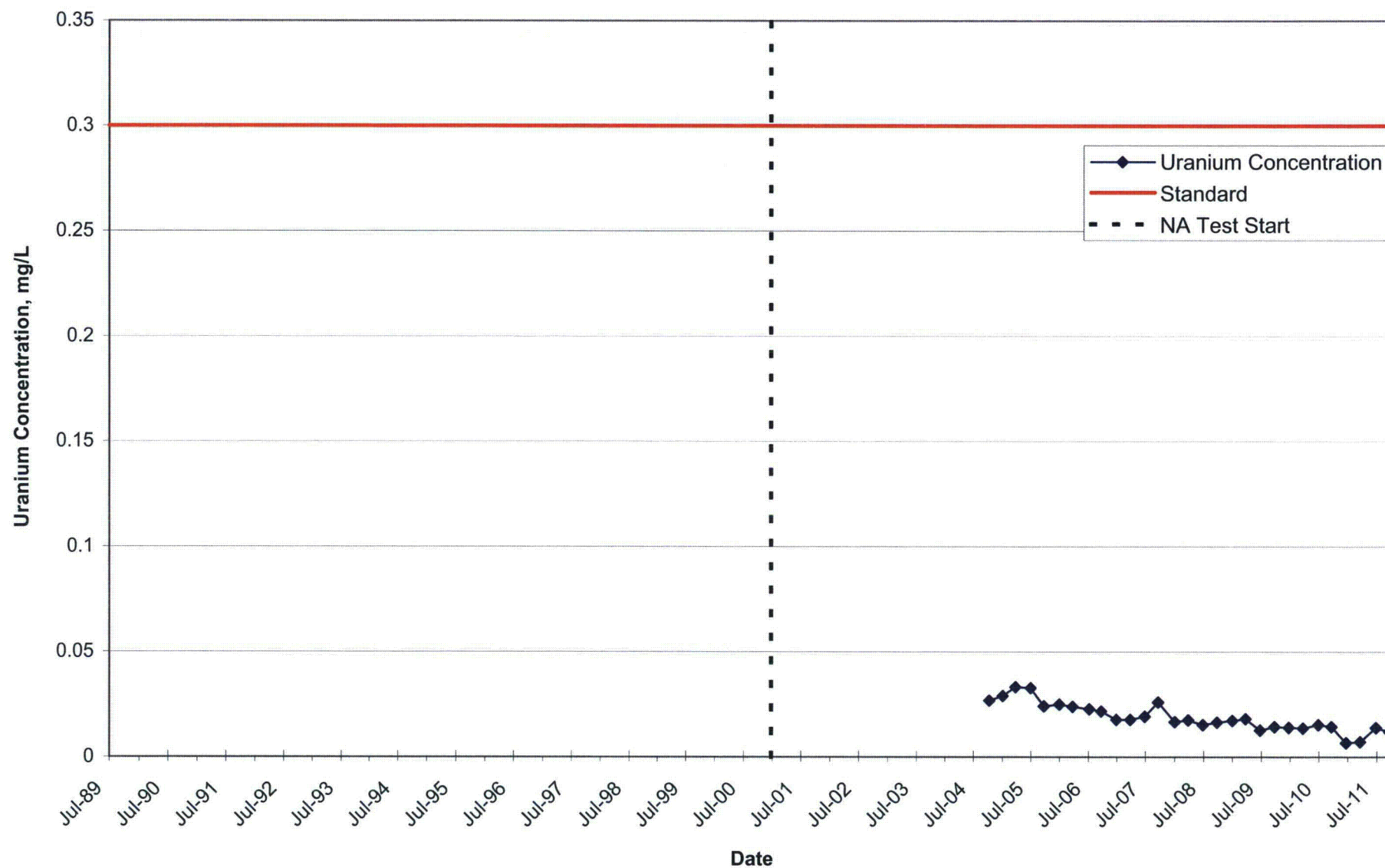


FIGURE 34
Uranium Concentration in Well SBL-01
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico



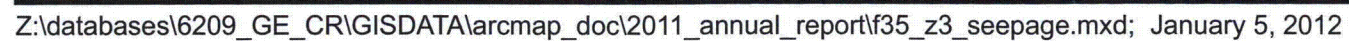
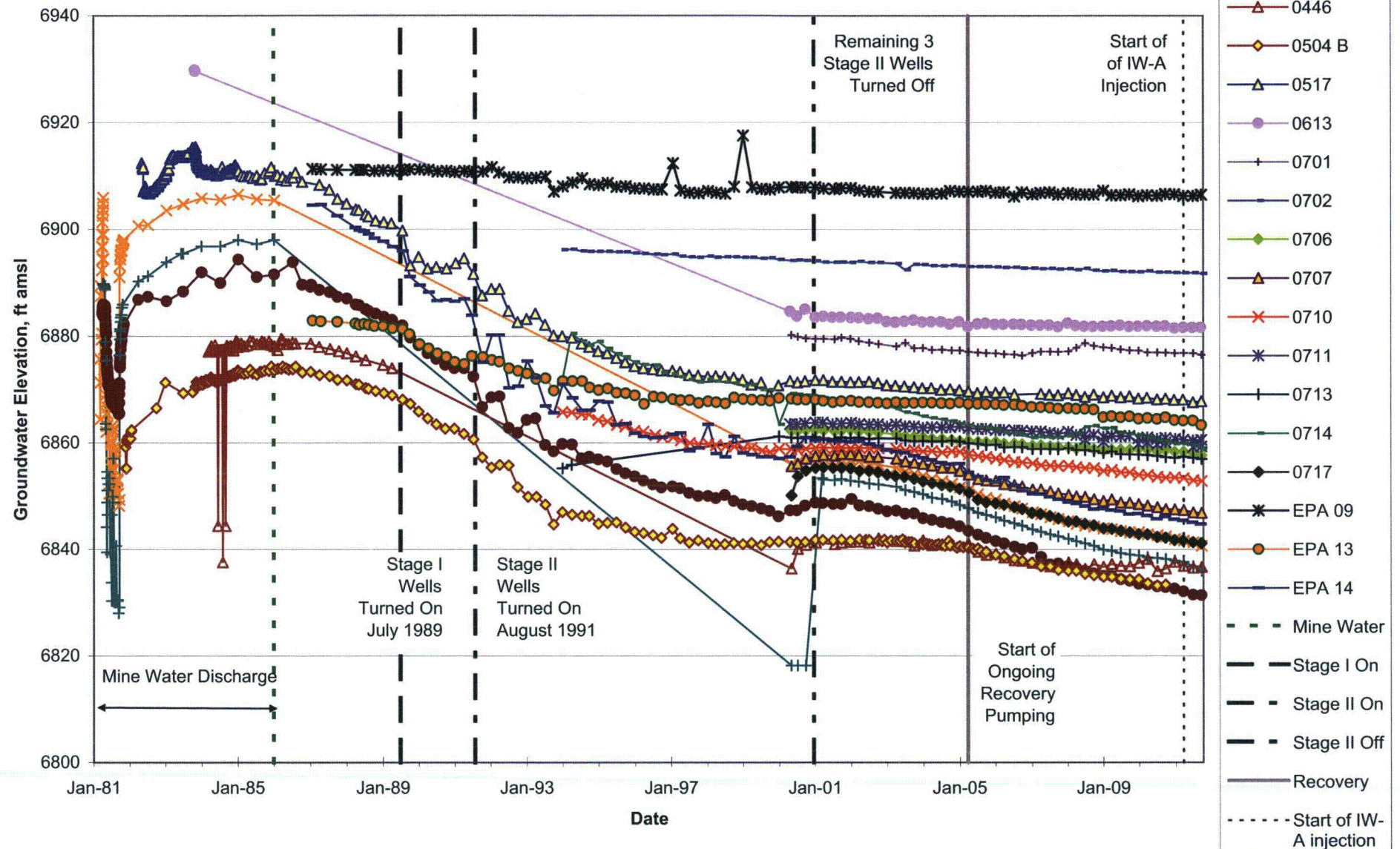
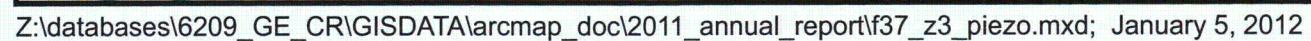


FIGURE 36
Effects of Past and Current Pumping to Dewater Zone 3
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

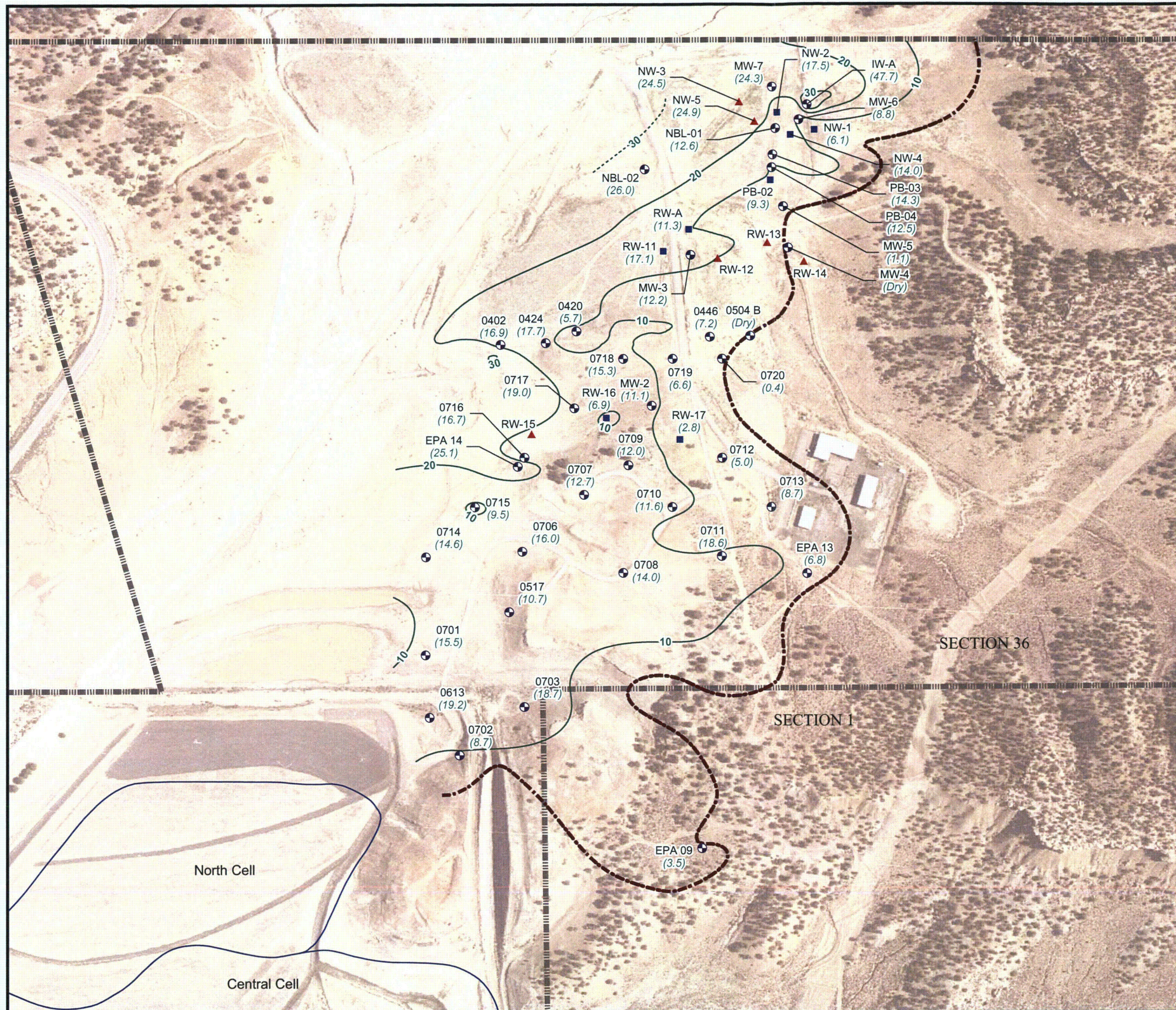




United Nuclear Corporation Church Rock Site,
Church Rock, New Mexico



CHESTER
ENGINEERS



Legend

- Monitoring Well
- Non-Pumping Well
- Pumping Well
- Saturated Thickness Contour
- Inferred Saturated Thickness Contour
- Approximate Eastern Boundary of Zero Saturation
- Cell Boundary
- Property Boundary
- (3.6) Measured Saturated Thickness

Notes:

1. Saturated thickness values shown in feet.
2. Well names are displayed with black text.
3. Aerial photo taken on August 1, 1996.

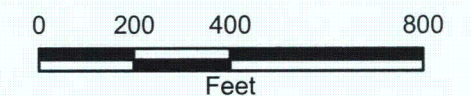


FIGURE 38

Zone 3 Saturated Thickness Map October 2011

United Nuclear Corporation Church Rock Site,
Church Rock, New Mexico



FIGURE 39
Zone 3 Bicarbonate Concentrations Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

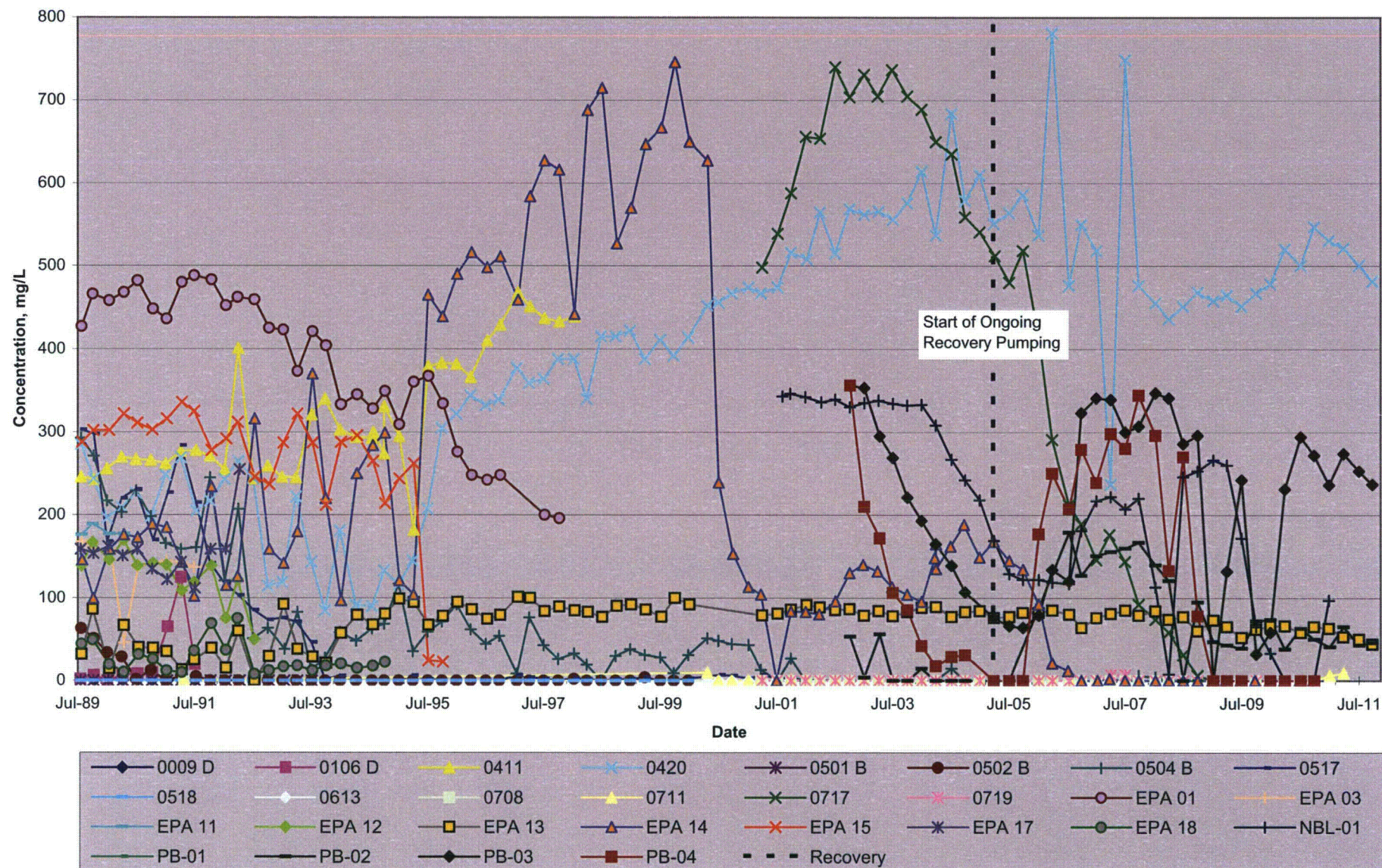


FIGURE 40
 Zone 3 Impact Perimeter Bicarbonate Concentrations Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

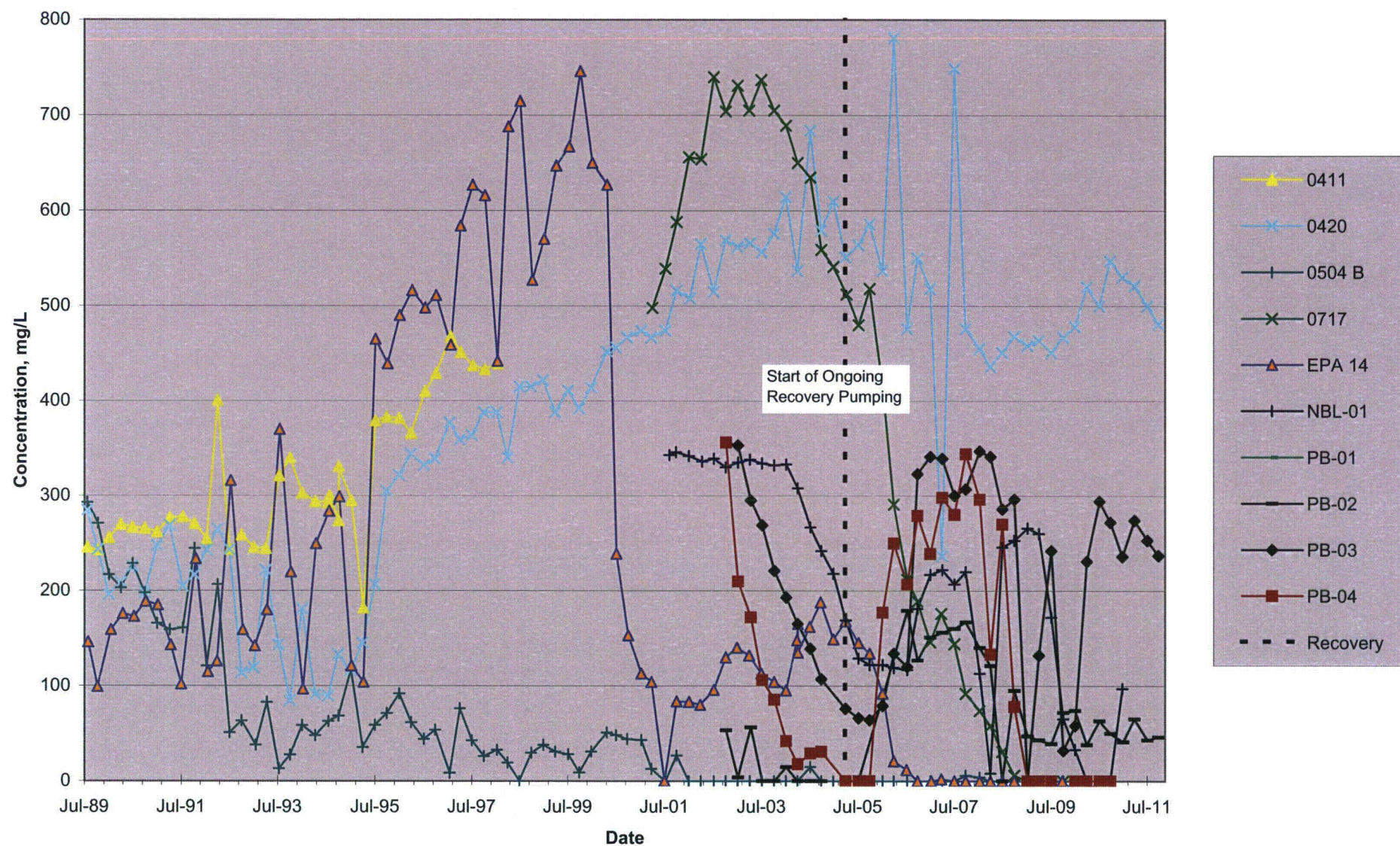


FIGURE 41
Zone 3 Sulfate Concentrations Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

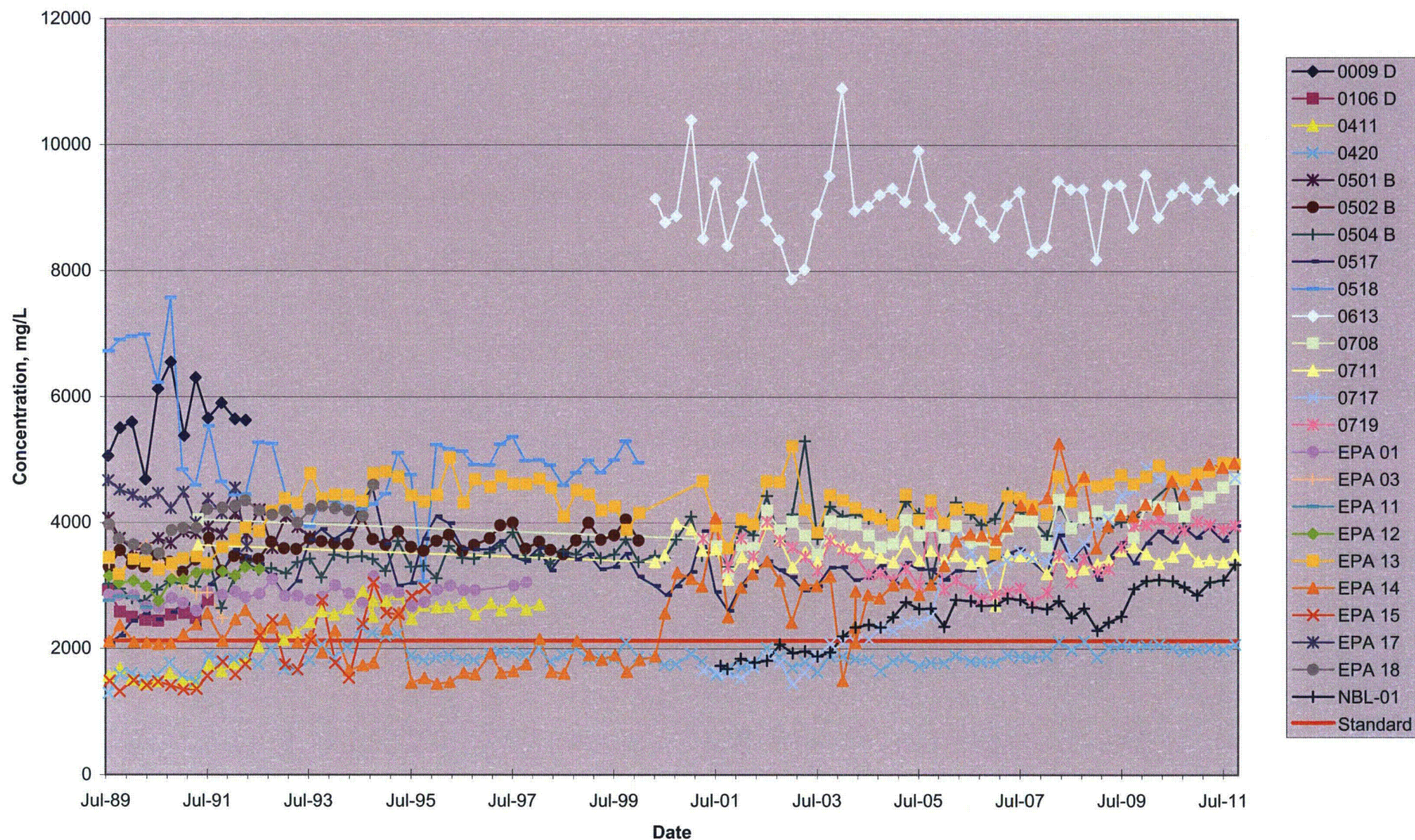


FIGURE 42A
Zone 3 Metals Concentrations over Time
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

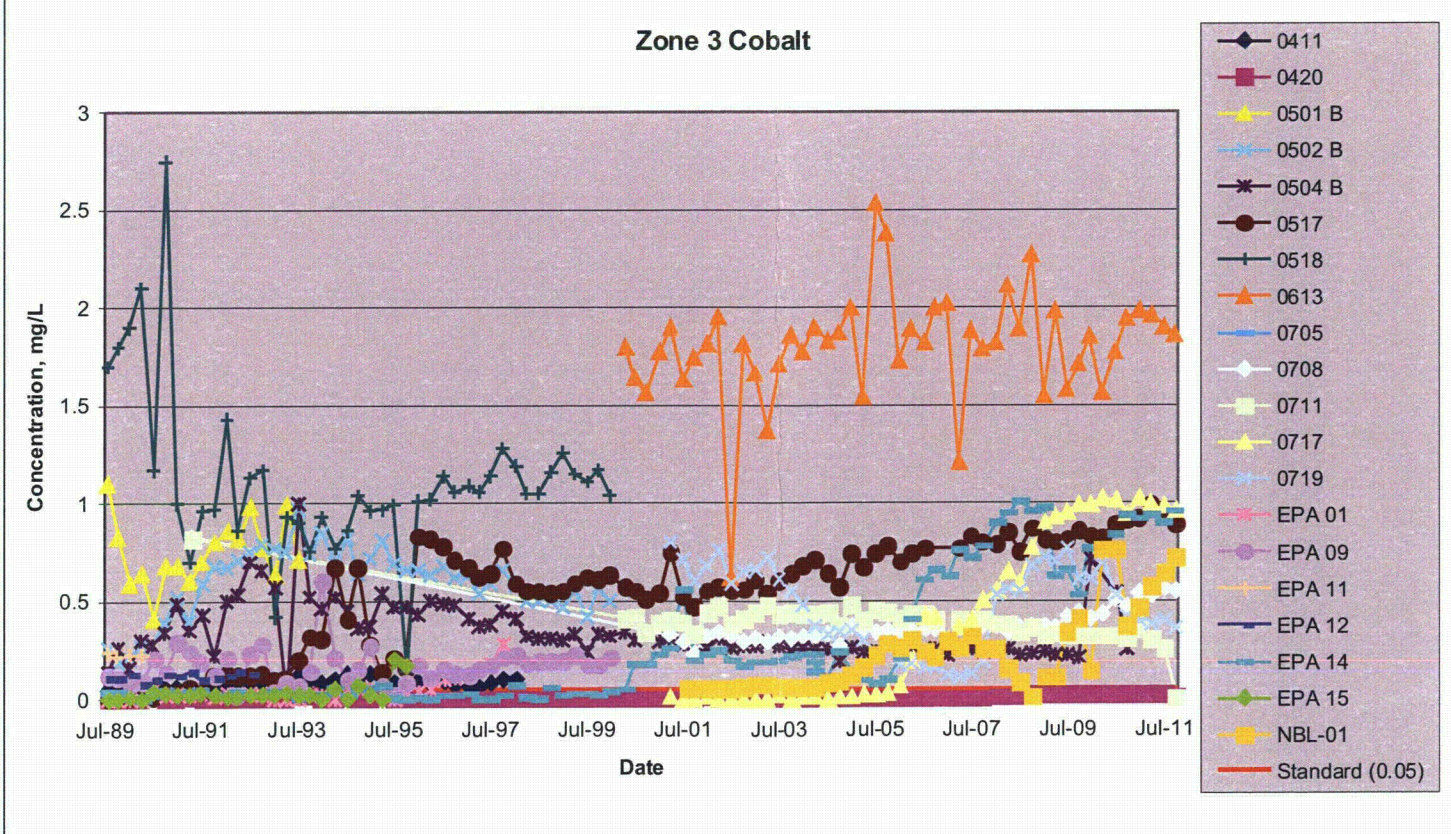
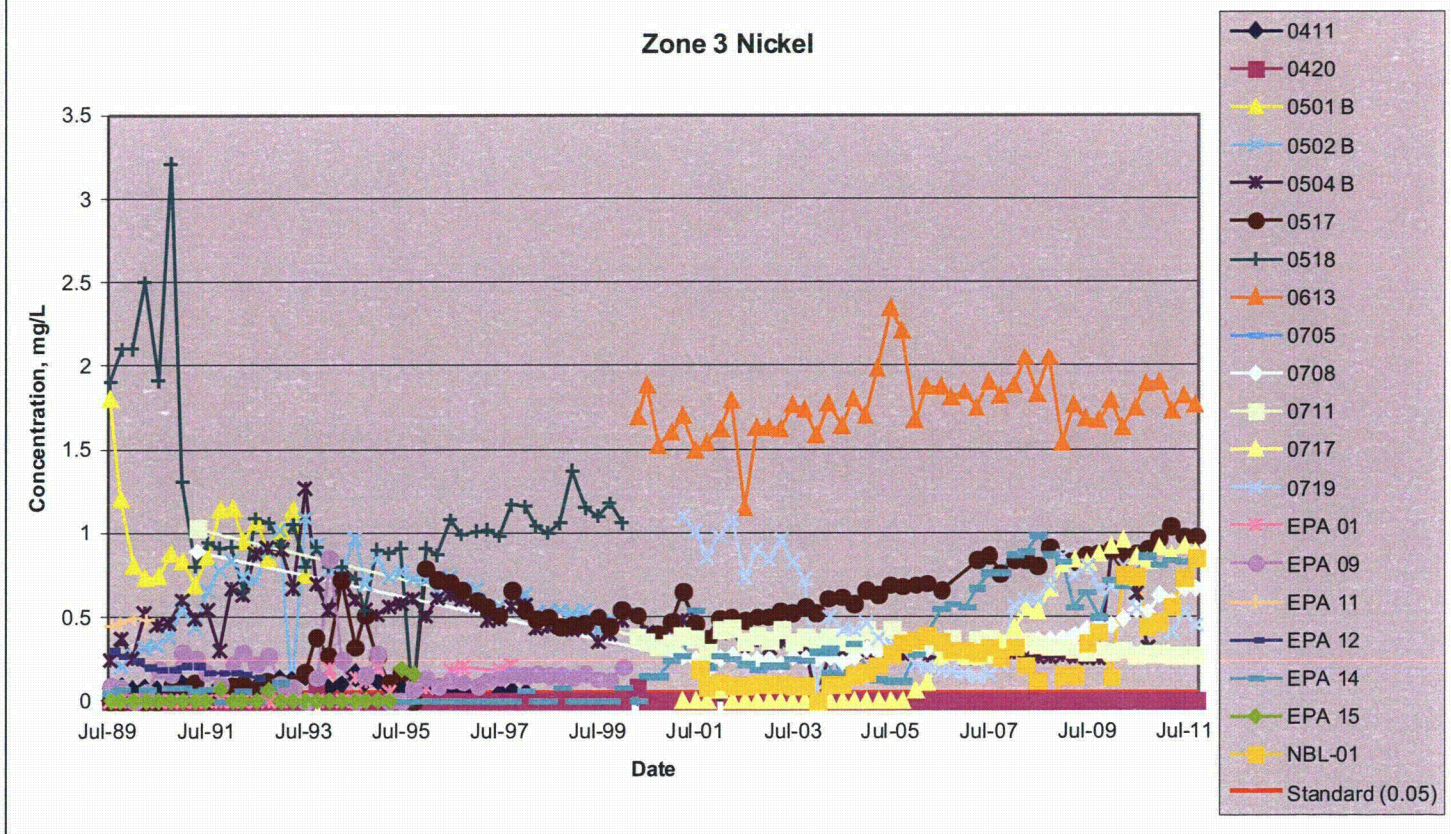
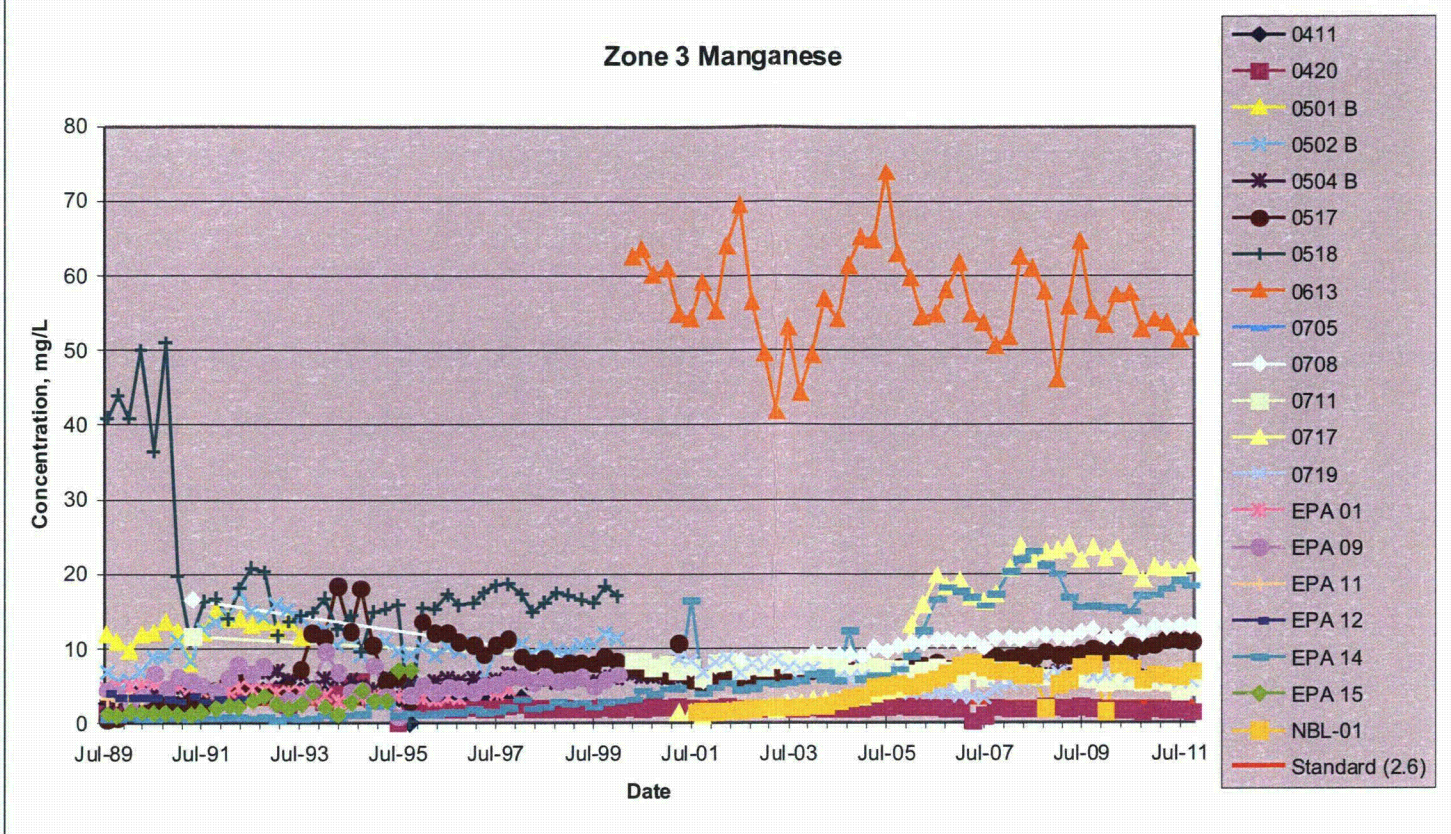
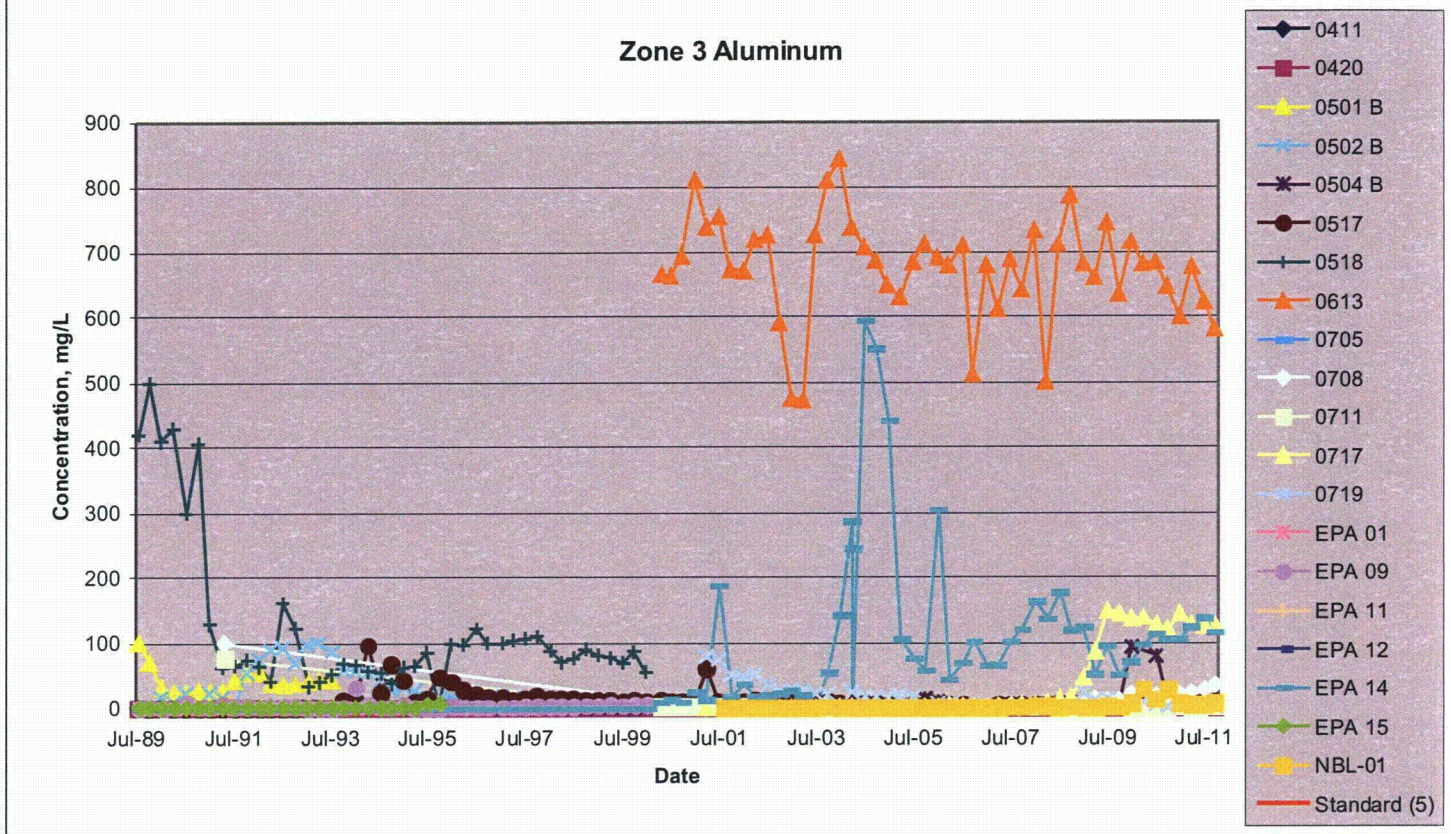
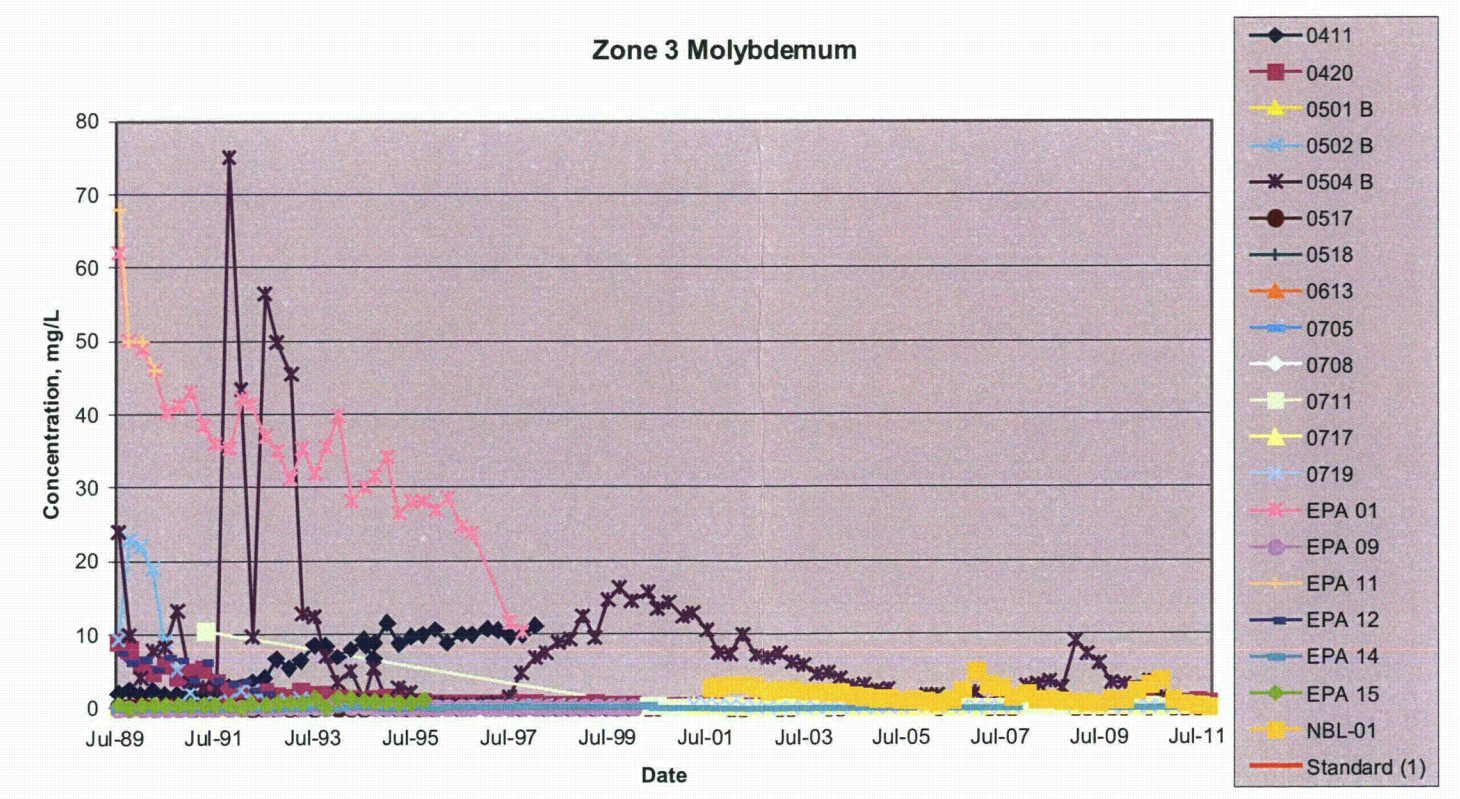
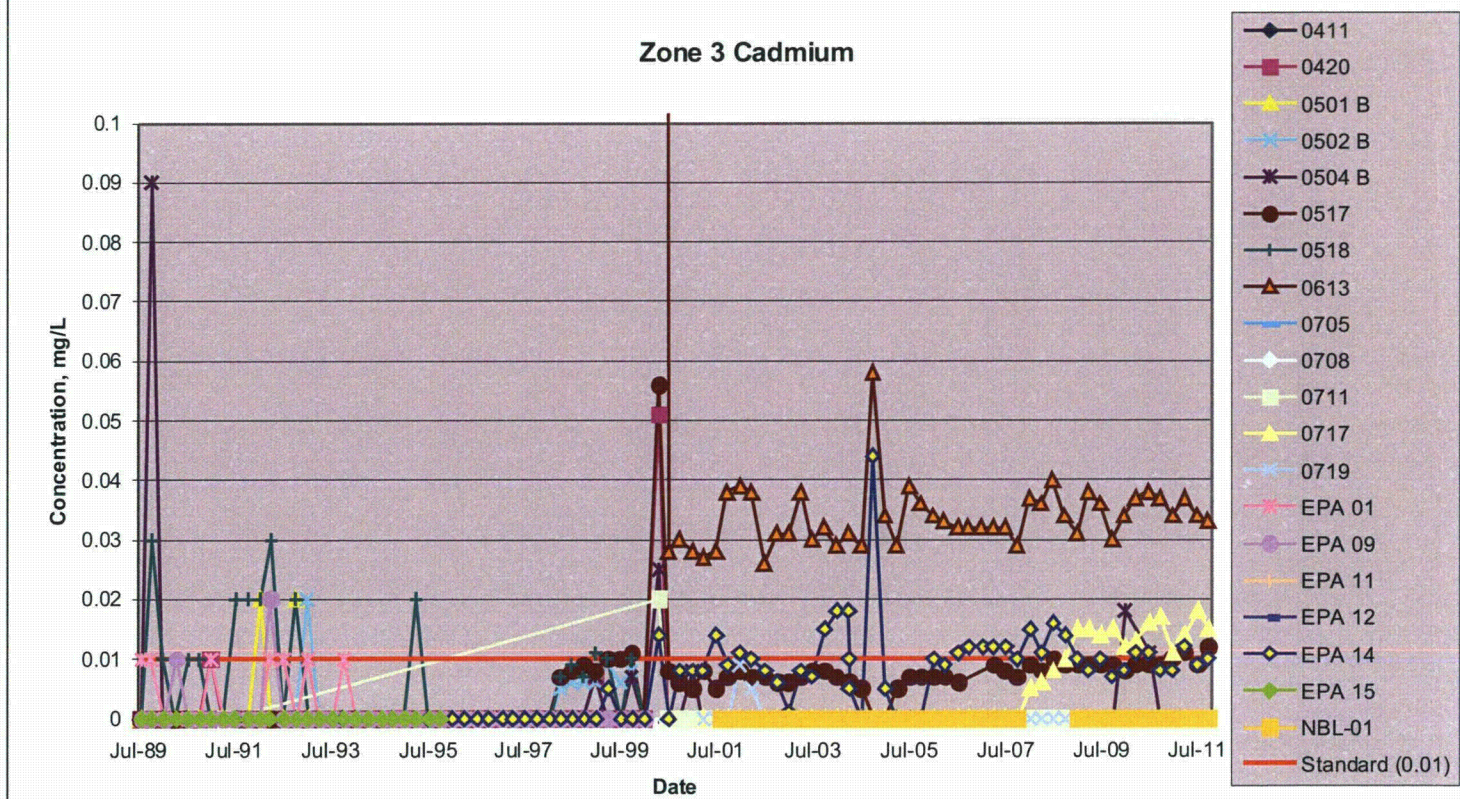
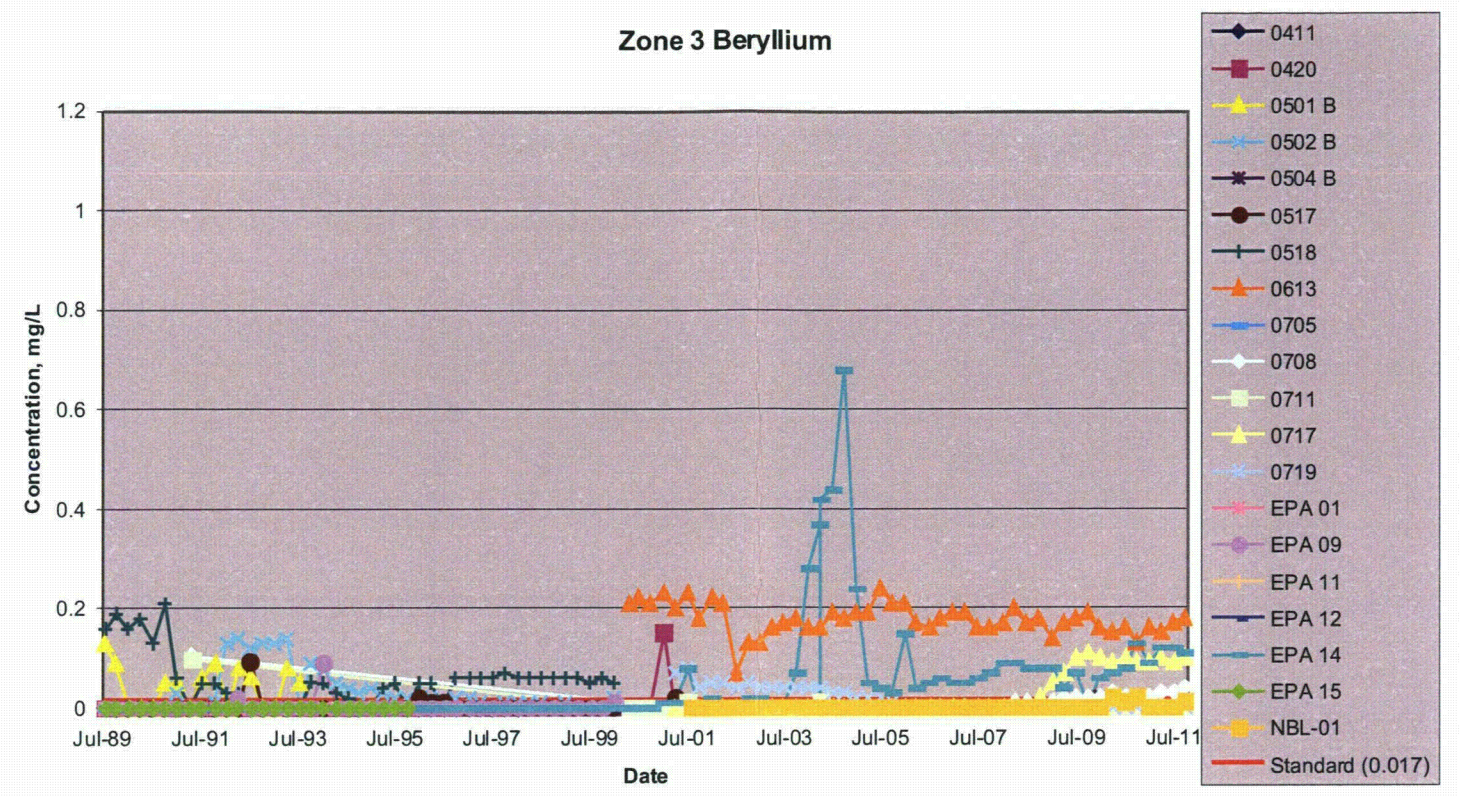
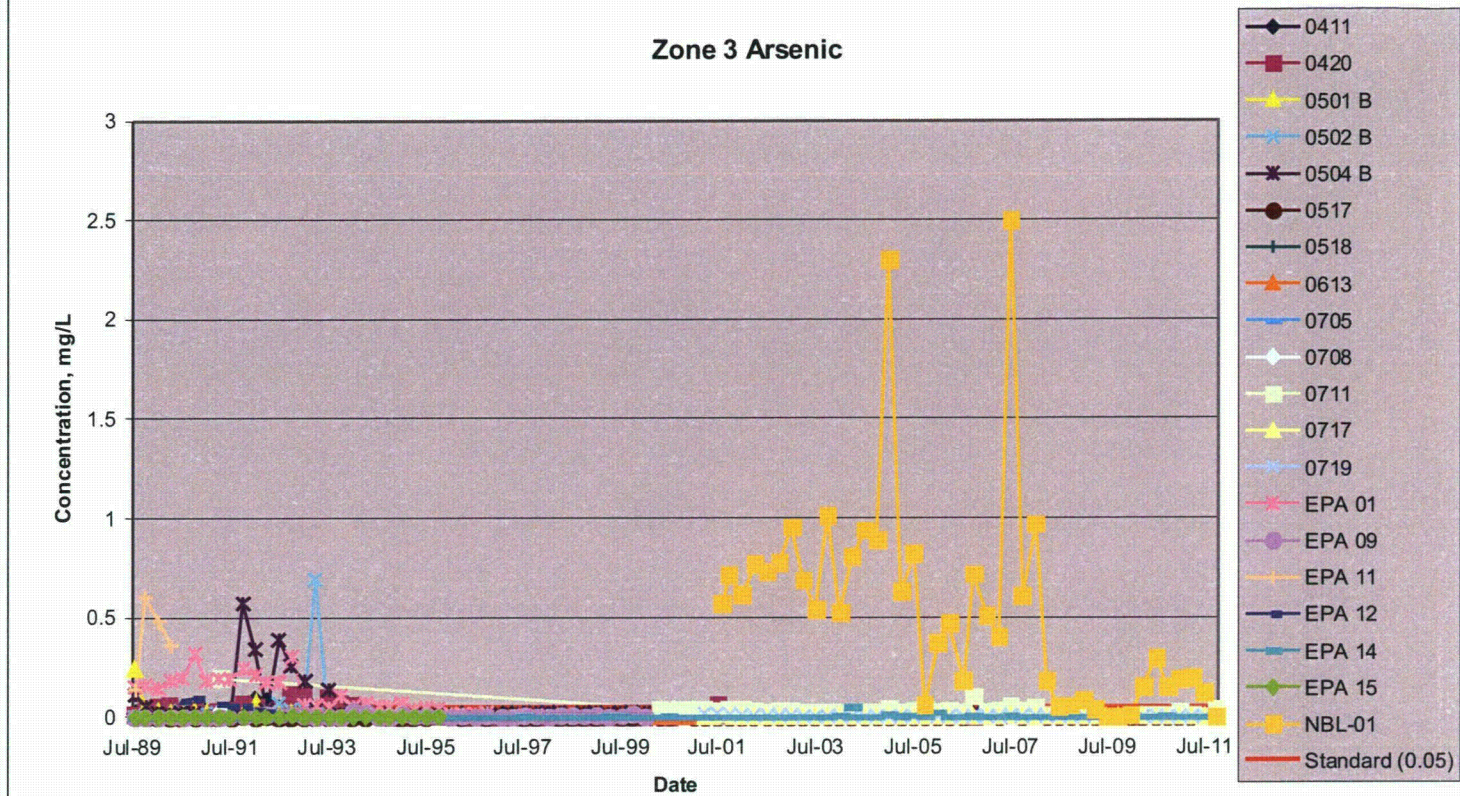
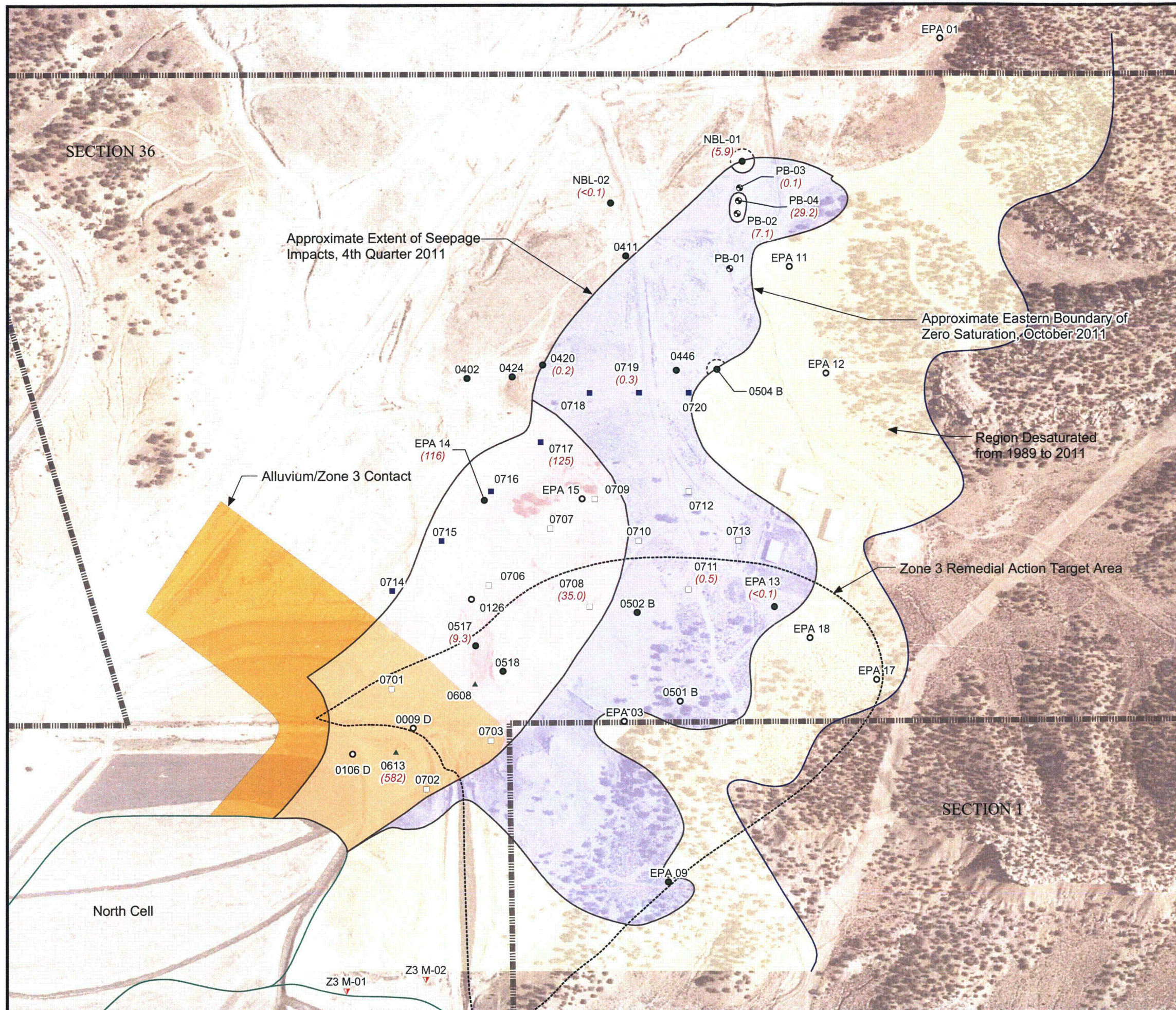


FIGURE 42B
Zone 3 Metals Concentrations over Time
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico





Legend

- ▬ Property Boundary
- - - - - Zone 3 Target Remedial Action Area
- Section Boundary
- Cell Boundary

Well Type

- Monitoring
- Dry Monitoring
- Stage I Extraction
- Stage II Extraction
- ⊙ Plume Boundary
- ▲ Northeast Pump-Back
- ▼ Piezometer
- Approximate Extent of Aluminum Exceeding 5.0 mg/L
- Approximate Area Impacted By Tailings Seepage
- (3.4) Aluminum values in mg/L

Notes:

1. Well names are displayed with black text.
2. Aerial photo taken on August 1, 1996.

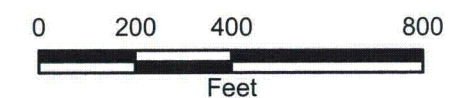


FIGURE 43

Zone 3 Approximate Extent of Aluminum Exceeding 5.0 mg/L, October 2011

United Nuclear Corporation Church Rock Site,
Church Rock, New Mexico



FIGURE 44
Zone 3 Uranium, Vanadium, and Radionuclides Concentrations over Time
United Nuclear Corporation Church Rock Site, Church Rock, New Mexico

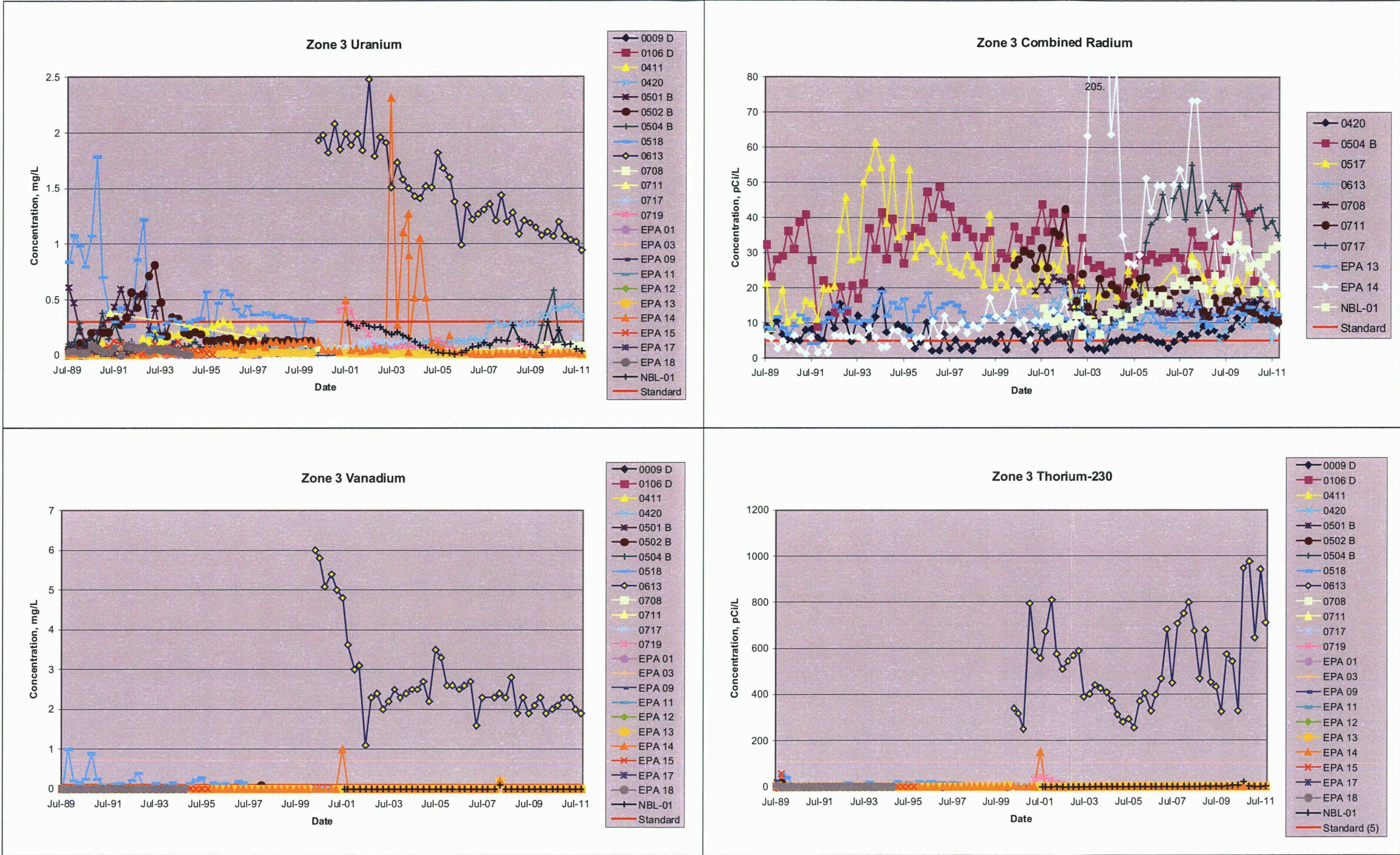
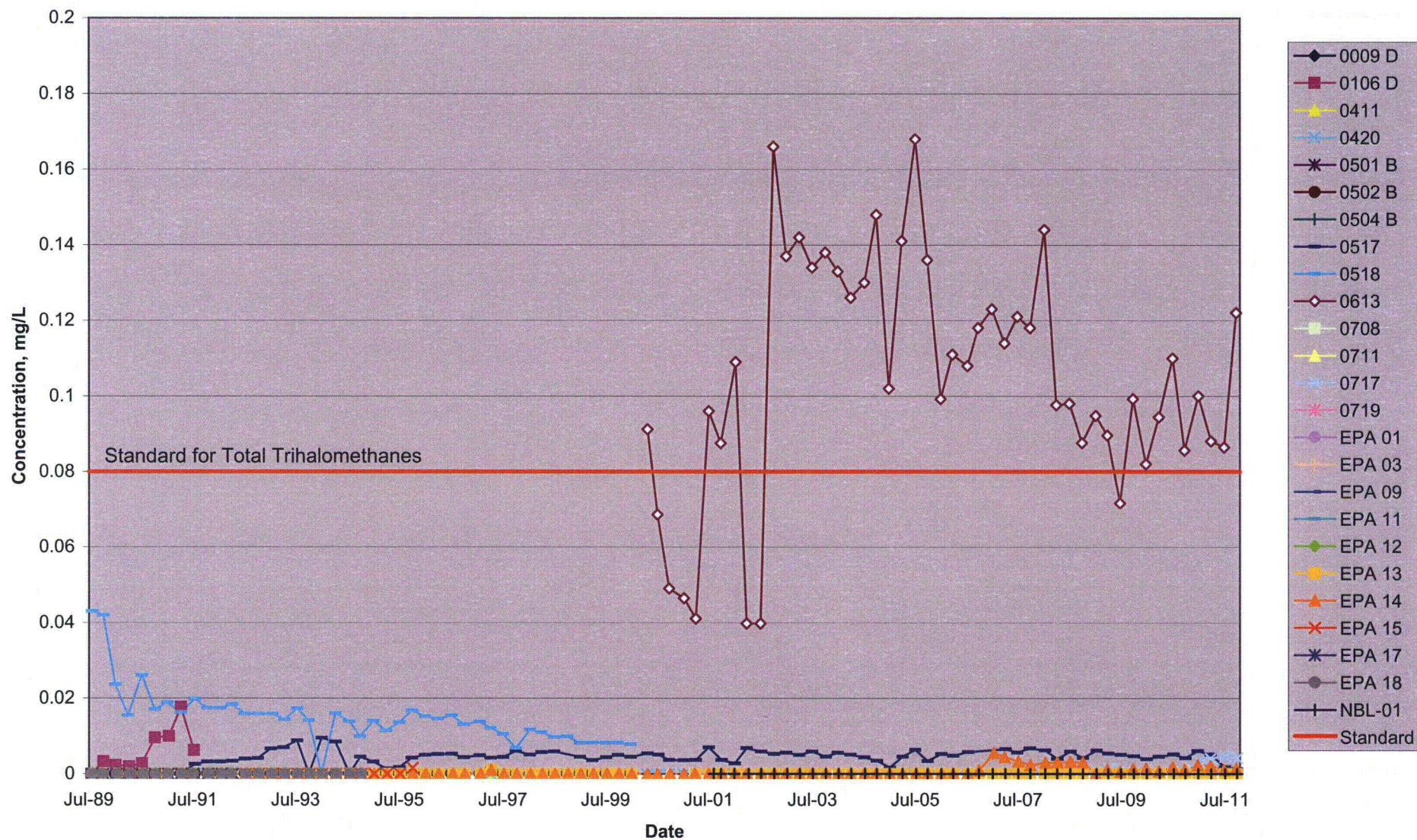


FIGURE 45
Zone 3 Chloroform Concentrations Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico





Legend

- Zone 1 Monitoring Well
- Groundwater Elevation Contour
- - - Inferred Groundwater Elevation Contour
- Cell Boundary
- ||||| Property Boundary

Notes:

1. Groundwater elevation values are displayed in feet above mean sea level.
2. Well names are displayed with black text.
3. Groundwater elevations are shown with blue text and enclosed in parentheses.
4. Aerial photo taken on August 1, 1996.



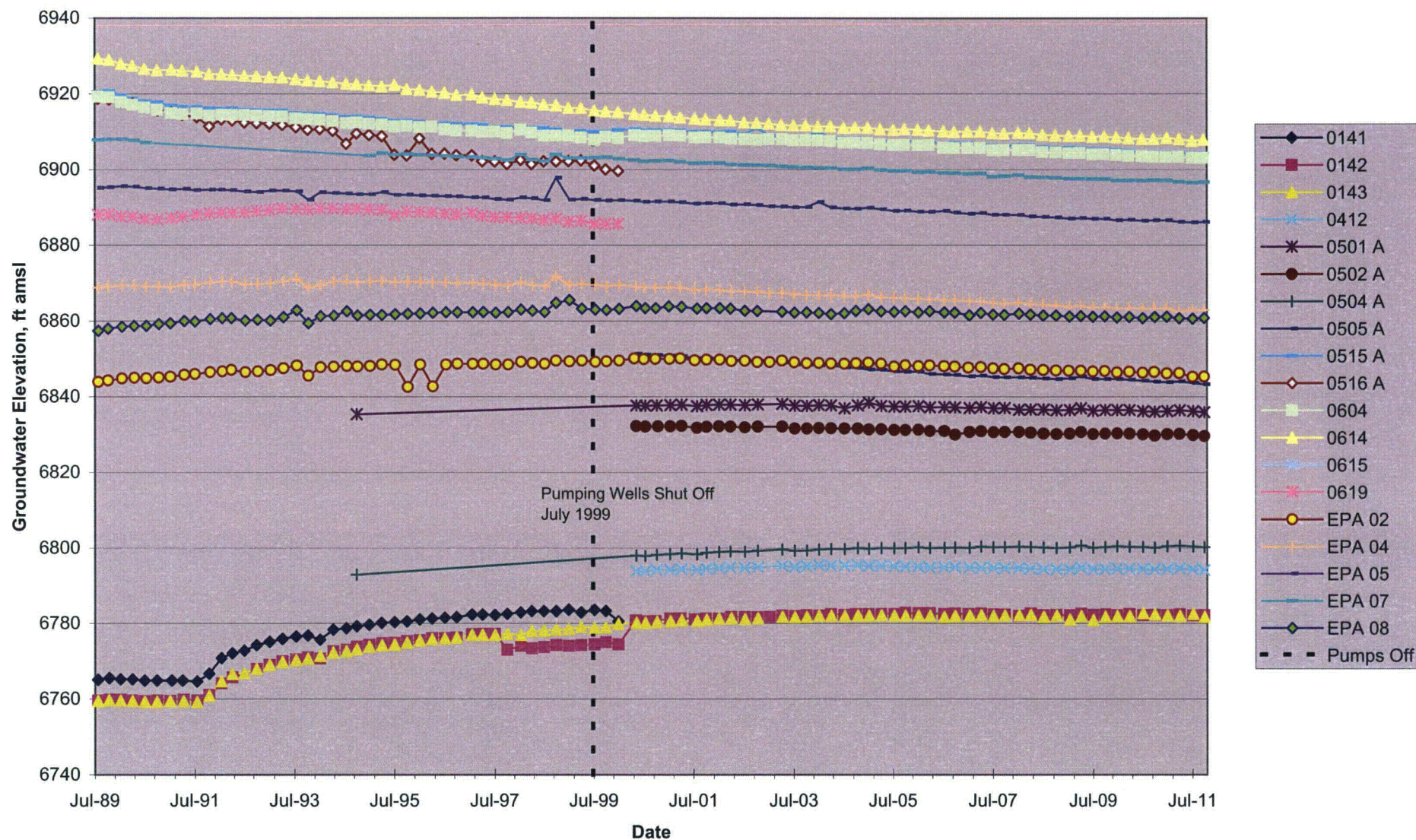
FIGURE 46

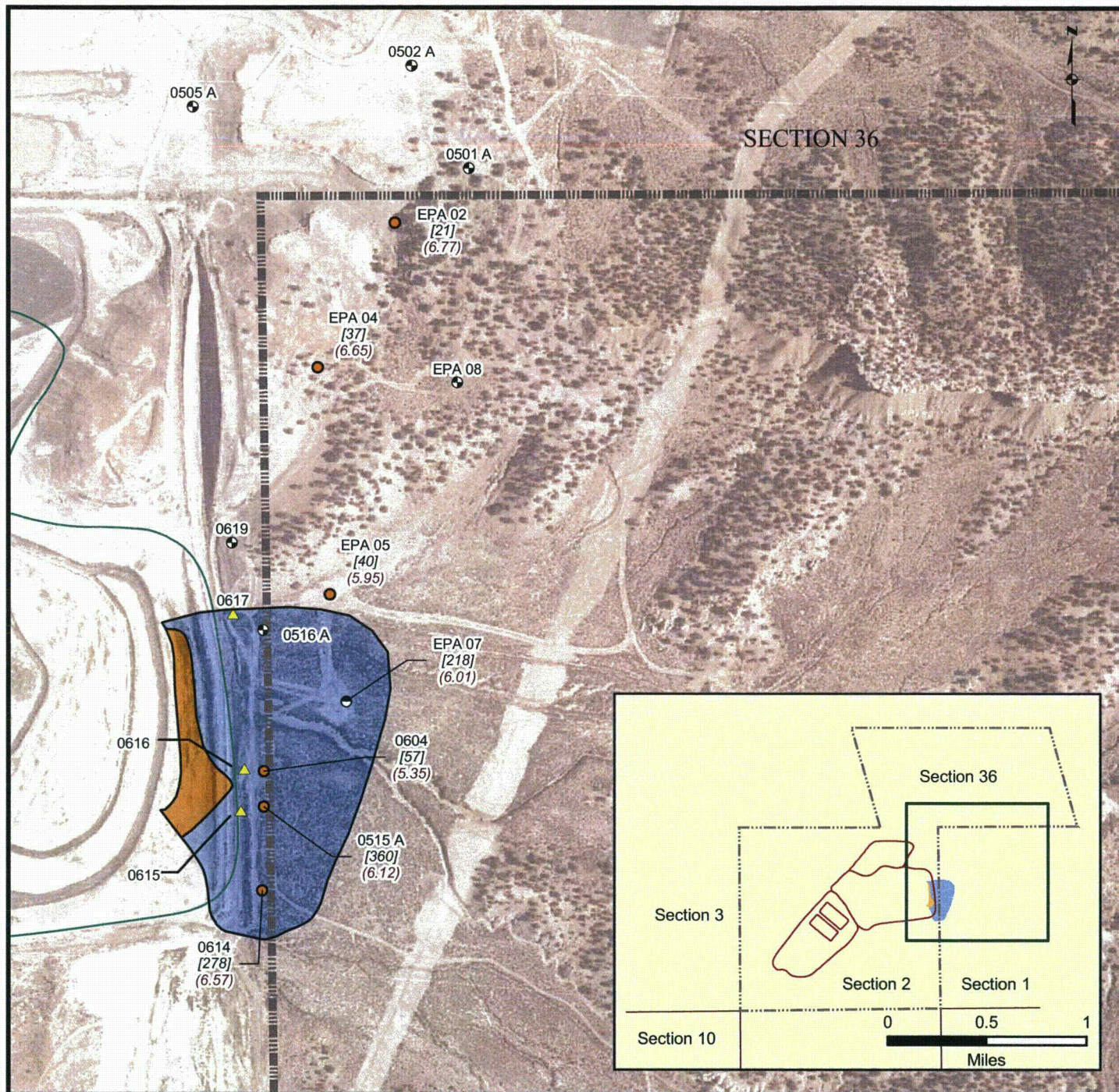
Zone 1 Potentiometric Surface Map
October 2011

United Nuclear Corporation Church Rock Site,
Church Rock, New Mexico



FIGURE 47
Zone 1 Water Levels Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico





Legend

Well Type

- Water Quality and Water Level Monitoring
- Water Level Monitoring
- Decommissioned East Pump Back
- Revised East Pump Back (Inactive)

Cell Boundary

Property Boundary

Approximate Extent of Zone 1 Seepage Impact

Approximate Extent of Zone 1 pH Less Than 4.0

[71] Chloride result in mg/L

(6.03) Field-measured pH in SU

Notes:

- Seepage impacts delineated by chloride detections greater than 50 mg/L.
- Aerial photo taken on August 1, 1996.

0 250 500 1,000
Feet

FIGURE 48

Zone 1 Extent of Seepage Impacts, October 2011

United Nuclear Corporation Church Rock Site,
Church Rock, New Mexico



FIGURE 49
Zone 1 pH Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

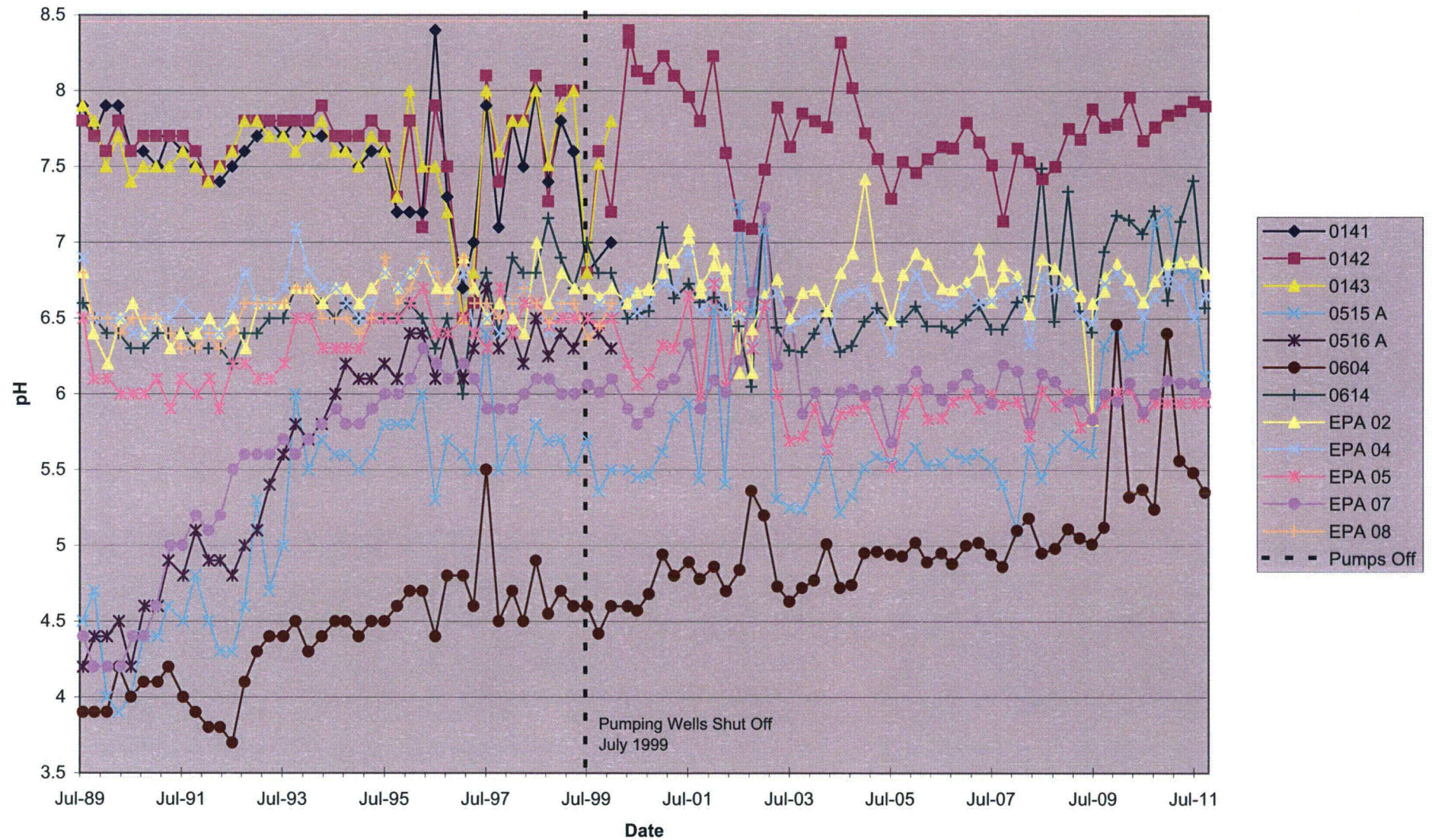


FIGURE 50
Zone 1 Sulfate Concentrations Over Time
 United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

