



Location: Upper Pueblo Canyon,  
Los Alamos County Property

Description: Brass Marker

Northing: Survey to be performed January 2004  
Easting: Survey to be performed January 2004  
Elevation: Survey to be performed January 2004

Description: Well Casing

Northing: Survey to be performed January 2004  
Easting: Survey to be performed January 2004  
Elevation: Survey to be performed January 2004

Description: Core Hole

Northing: Survey to be performed January 2004  
Easting: Survey to be performed January 2004  
Elevation: Survey to be performed January 2004

Coring:  
(0' - 16.5') Continuous Sampler  
(16.5' - 24') Split Spoon  
(24' - 29') Continuous Sampler  
(29' - 34') Split Spoon  
(34' - 39') Continuous Sampler  
(39' - 241') Split Spoon

Drilling:  
(0' - 40') 13-3/8" Air Rotary Casing Hammer  
(40' - 944') 12-1/4" Mill-Tooth Tri-Cone  
(40'-143') Air  
(143'-403') Air with Water, QuickFoam, & E-Z Mud  
(403'-944') Water with Bentonite, Soda Ash, & PAC-L

Data Collection:  
• Hydrologic Properties:  
Proposed Constant Discharge  
Pumping Test: To be performed Jan. 2004  
• Cores/Cuttings submitted for geochemical and  
contaminant characterization: 12  
• Ground Water Samples Submitted  
Regional Ground Water - none; mud-filled borehole  
Perched Ground Water - none encountered

Geologic Properties:  
Minerology, petrography, and chemistry: 7

Borehole Logs:  
• Lithologic: 0' - 944'  
• Video (LANL tool): none  
• Schlumberger logs: mud filled borehole  
Compensated Neutron Log:  
Cased: 20'-40'; Open Hole: 40'-941'  
Triple Litho-Density:  
Cased: 20'-40'; Open Hole: 40'-941'  
Array Induction Imager:  
Cased: 20'-40'; Open Hole: 40'-936'  
Elemental Capture Sonde:  
Cased: none; Open Hole: 50'-937'  
Natural GR Spectroscopy:  
Cased: 20'-40'; Open Hole: 40'-919'  
Combinable Magnetic Resonance:  
Cased: none; Open Hole: 50'-919'  
Fullbore Formation Micro Imager:  
Cased: none; Open Hole: 50'-937'

Core Drilling Completed: 9/16/03 - 9/26/03

Rotary Drilling Completed: 10/11/03 - 10/16/03

Contract Geophysics: 10/17/03

Well Installation: 10/19/03 - 10/22/03

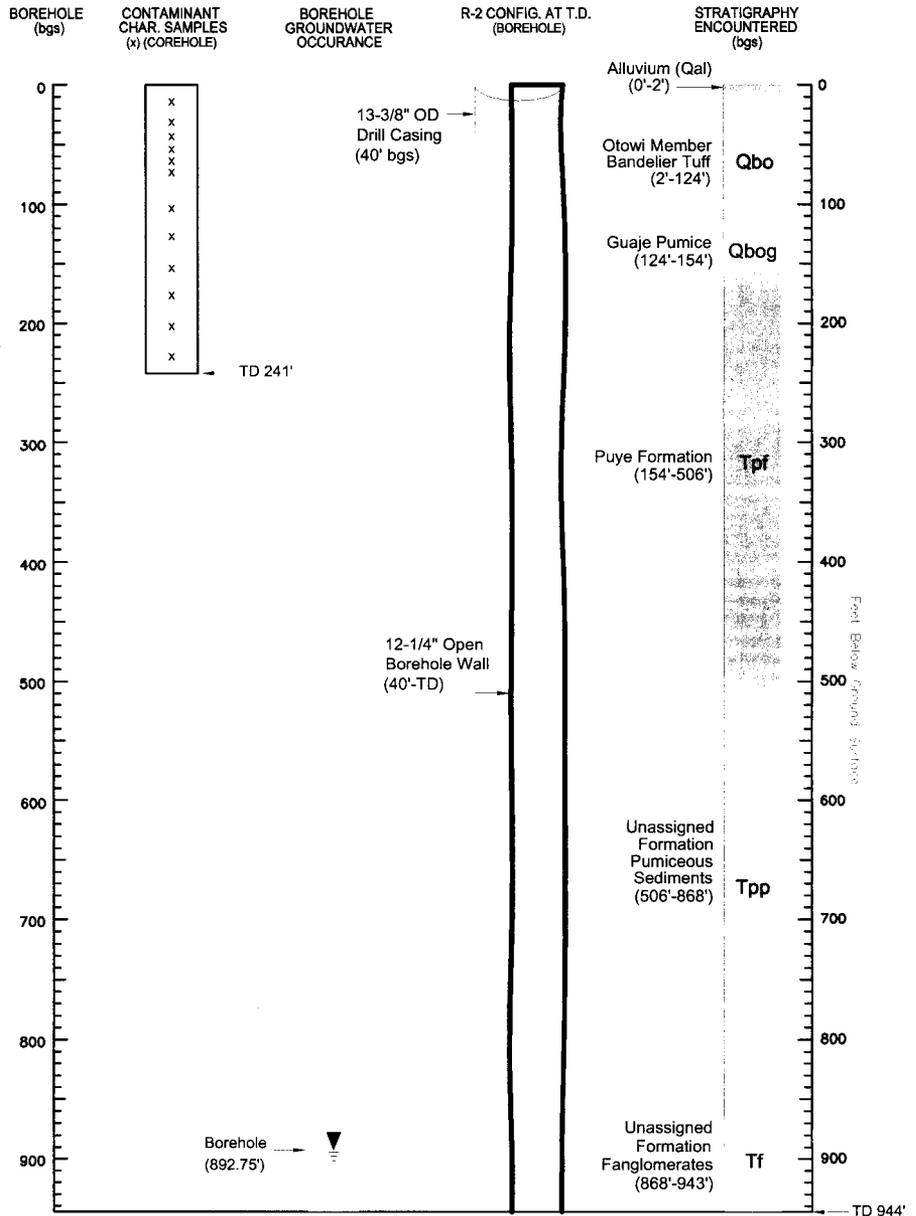
Well Development Completed: 12/11/03

- Casing:  
4.5" I.D. / 5.0" O.D. A304 Stainless Steel  
casing with external couplings
- Screen Type:  
One (1) 4.46" I.D./5.27" O.D. wire wrapped  
stainless steel rod-based 0.020 slot screen  
with external couplings.
- Screen Interval: 906.4' - 929.6'

Well Development performed by swabbing,  
bailing, and pumping.

Total Volume Purged:  
Purged/Bailed - 375 Gal. (10/27/03)  
Pumped - 10,940 Gal.

Geologic contacts for R-2  
were determined from core samples,  
cuttings, and geophysical logs.

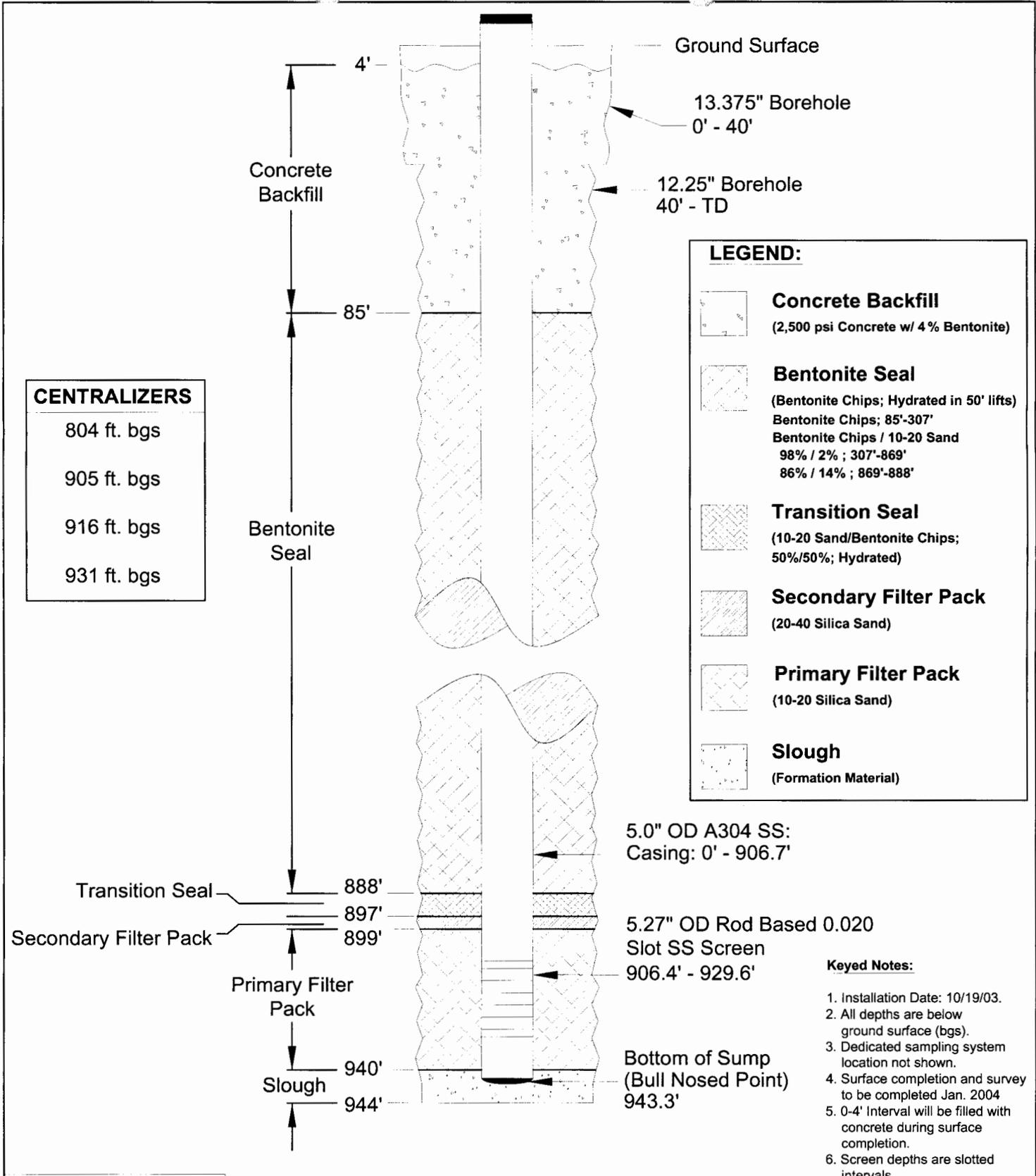


**Keyed Notes:**

- Coordinates - NM State Plane Grid Central Zone (North America) Datum - 1983 (NAD83); expressed in feet.
- Elevations - National Geodetic Vertical Datum (NGVD 29); expressed in feet above mean sea level.
- Surface completion and surveying pending.
- All depths are below ground surface (bgs).
- Ground water level measured after well installation - 10-25-03

DCN: ALB03DR001 Rev 1

		<b>Construction, Stratigraphic, and Hydrogeologic Information for Characterization Well R-2</b> Los Alamos National Laboratory Los Alamos, New Mexico	<b>FIGURE 1</b>
Drawn By: C. Landon	Date: December 2003		
Project No.: 37151	Filename: ALB03DR001 REV 1		
Scale: Not-To-Scale	Revision: 1		
Reviewed By: F. Schelby	Approved By: M. Everett		



DCN: ALB03DR002 Rev.1

Drawn By: C. Landon	Date: December 2003
Project No.: 37151	Filename: ALB03DR002 REV 1
Scale: Not-To-Scale	Revision: 1
Reviewed By: F. Schelby	Approved By: M. Everett

**Schematic Diagram of  
Characterization Well R-2**  
Los Alamos National Laboratory  
Los Alamos, New Mexico

FIGURE  
**2**