

TA-16



Department of Energy
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544
FEB 18 2004



CERTIFIED MAIL/RETURN RECEIPT

Mr. John Young
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East,
Building 1
Santa Fe, NM 87505-6303

Dear Mr. Young:

Subject: Fact Sheet for Well CdV-16-1(i)

Enclosed is the fact sheet for Well CdV-16-1(i), which was recently completed by the Department of Energy. If you have any questions regarding this matter, I can be reached at 665-5046.

Sincerely,

Mat Johansen
Project Manager
Program Compliance Manager

OPM:1TW-002

Enclosure: CdV-16-1(i)

cc w/enclosure:

- John Kieling
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East,
Building 1
Santa Fe, NM 87505-6303
- B. Enz, OPM, LASO
- M. Johansen, OPM, LASO
- T. Whitacre, OPM, LASO
- T. Taylor, OOM, LASO
- S. Yanicak, NMED-DOE OB, MS-J993
- K. Hargis, RRES-DO, LANL, MS-J591
- J. McCann, RRES-WQH, LANL, MS-M992
- C. Nylander, RRES, LANL, MS-J591
- N. Quintana, RRES-R, LANL, MS-M992
- S. Rae, LANL, RRES-WQH, LANL, MS-K497
- B. Ramsey, LANL, RRES-DO, LANL, MS-J591
- M. Reed, RRES-DO, LANL, MS-J556
- B. Robinson, EES-6, LANL, MS-T003
- D. Stavert, RRES-D, LANL, MS-J591



6473

Location: Cañon de Valle
North of R-25, TA-16

Description: Brass Marker
Northing: Survey to be performed February, 2004
Easting: Survey to be performed February, 2004
Elevation: Survey to be performed February, 2004

Description: Well Casing
Northing: Survey to be performed February, 2004
Easting: Survey to be performed February, 2004
Elevation: Survey to be performed February, 2004

Description: Core Hole
Northing: Survey to be performed February, 2004
Easting: Survey to be performed February, 2004
Elevation: Survey to be performed February, 2004

Coring:
(0' - 10') Split Spoon
(10' - 95') HQ Coring
(95' - 200') HQ Coring w/Water; QUIK-FOAM ®

Drilling:
(0' - 12') 13-3/8" Air Rotary Casing Hammer
(12' - 683') 12-1/4" Tri-Cone

Data Collection:
• Hydrologic Properties: Proposed Constant Discharge Pumping Test: To be performed Feb. 2004
• Cores/Cuttings submitted for geochemical and contaminant characterization: 11
• Ground Water Samples Submitted
Deep Ground Water - 11/05/03 (595') open borehole
Perched Water: Insufficient volume for sample collection.

Geologic Properties:
Mineralogy, petrography, and chemistry: 7

Borehole Logs:
• Lithologic: 0' - 683'
• Video (LANL tool): 0' - 568'
• Schlumberger logs:
Compensated Neutron Log:
11/07/03: Open Hole: 50'-680'
Triple Litho-Density:
11/07/03: Open Hole: 50'-680'
Array Induction Tool:
11/07/03: Open Hole: 50'-674'
Elemental Capture Sonde:
11/07/03: Open Hole: 50'-675'
Natural GR Spectroscopy:
11/07/03: Open Hole: 50'-674'
Combinable Magnetic Resonance:
11/07/03: Open Hole: 50'-682'
Fullbore Formation Micro Imager:
11/07/03: Open Hole: 568'-682'

Corehole Logs:
• Lithologic: 0' - 200'

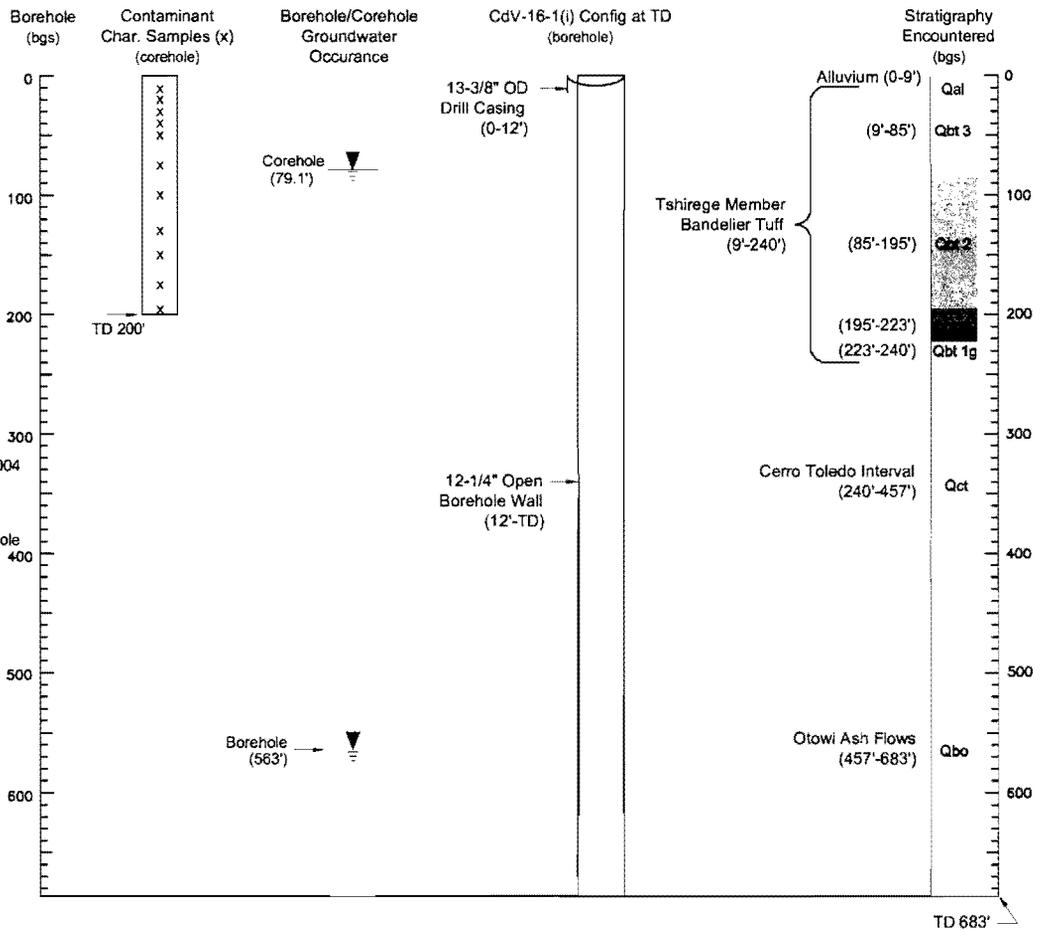
Core Drilling Completed: 10/06/03 - 10/17/03
Rotary Drilling Completed: 10/31/03 - 11/06/03
Contract Geophysics: 11/06/03 - 11/07/03
Well Installation: 11/09/03 - 11/12/03

Well Developed: 12/05/03 - 12/17/03
• Casing:
4.5" I.D. / 5.0" O.D. A304 Stainless Steel casing with external couplings
• Number of Screens:
One (1) 4.46" ID wire wrapped stainless steel with external couplings.
Screen: 5.27" OD Rod based 0.020 slot
• Screen Interval:
Screen: 624' - 634'

Well Development performed by swabbing, bailing, and pumping.
Total Volume Purged: 5393 gallons

Temporary Corehole Piezometer Completion
• Casing - 2" OD Sched. 40 PVC threaded
• Casing Interval - 0 - 50'
• Number of Screens - One (1) 2" OD Sched. 40 PVC 0.010 slotted
• Screen Interval - 50' - 80'
• Annular Fill:
Bentonite (0-45')
10/20 Silica Sand (45'-80')
Bentonite (80'-200')

Geologic contacts for CdV-16-1(i) were determined from core samples, cuttings, borehole video, 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 (NGVD29); expressed in feet above mean sea level.
- Surface completion and surveying to be performed February 2004
- All depths are below ground surface (bgs).
- Drill casing removed prior to well installation.
- Permanent corehole piezometer was installed across moisture zone first encountered at 70 ft. bgs.
- Water level measurement in the piezometer was 79.1 ft. bgs. when sounded on 11-02-03.

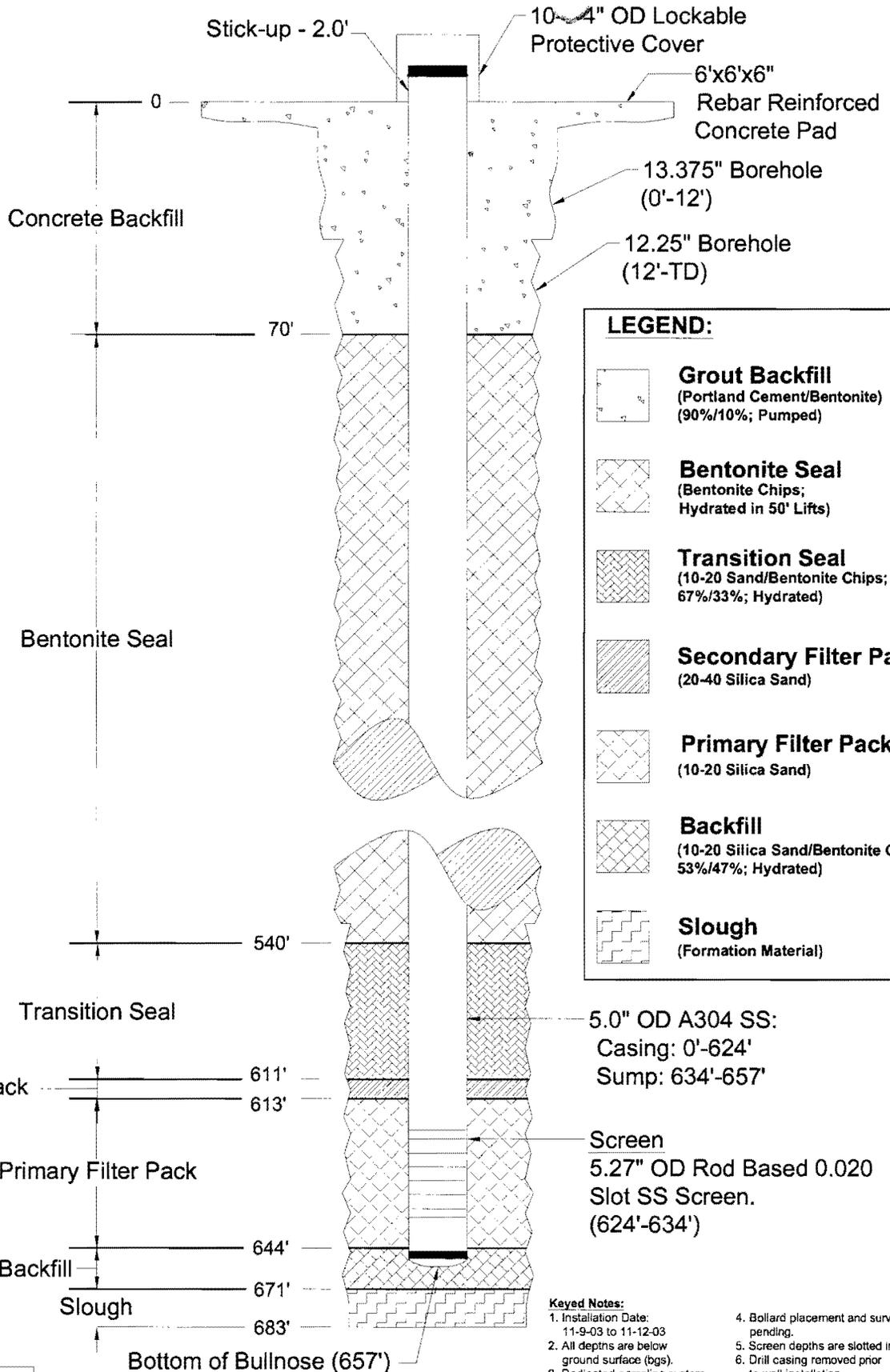
DCN: ALB04DR001 Rev.2

Drawn By: C. Landon	Date: February 13, 2004
Project No.: 37151	Filename: ALB04DR001 REV 2
Scale: Not-To-Scale	Revision: 2
Reviewed By: F. Schelby	Approved By: M. Everett

Construction, Stratigraphic, and Hydrogeologic Information for Characterization Well CdV-16-1(i)
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE

1



CENTRALIZERS
535 ft. bgs
623 ft. bgs
635 ft. bgs

LEGEND:	
	Grout Backfill (Portland Cement/Bentonite) (90%/10%; Pumped)
	Bentonite Seal (Bentonite Chips; Hydrated in 50' Lifts)
	Transition Seal (10-20 Sand/Bentonite Chips; 67%/33%; Hydrated)
	Secondary Filter Pack (20-40 Silica Sand)
	Primary Filter Pack (10-20 Silica Sand)
	Backfill (10-20 Silica Sand/Bentonite Chips; 53%/47%; Hydrated)
	Slough (Formation Material)

- Keyed Notes:**
1. Installation Date: 11-9-03 to 11-12-03
 2. All depths are below ground surface (bgs).
 3. Dedicated sampling system location not shown.
 4. Bollard placement and survey pending.
 5. Screen depths are slotted intervals.
 6. Drill casing removed prior to well installation.

DCN: ALB04DR002 Rev.2

Drawn By: C. Landon	Date: February 13, 2004
Project No.: 37151	Filename: ALB04DR002 Rev 2
Scale: Not-To-Scale	Revision: 2
Reviewed By: F. Schelby	Approved By: M. Everett

**Schematic Diagram of
Characterization Well CdV-16-1(i)**
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE
2