



TA-16

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

Rec'd
2/17/04

FEB 11 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-16-2(i)

Enclosed is the fact sheet for Well CdV-16-2(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:8TW-002

Enclosure: R-1 Fact Sheet

cc w/enclosure:

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



6471

Location: East of Burning Ground, 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

Coring: None

Drilling:
 (0' - 12') 13-3/8" Air Rotary Casing Hammer
 (12' - 203') 12-1/4" Tri-Cone with Air
 (203' - 1063.1') 12-1/4" Tri-Cone with Air, Water, Quick-Foam, & EZ Mud

Data Collection:
 • Hydrologic Properties
 • Cores/Cuttings submitted for geochemical and contaminant characterization: None, corehole not advanced
 • Ground Water Samples Submitted
 Deep Ground Water - 12/03/03 (957')

Geologic Properties:
 Mineralogy, petrography, and chemistry: 7

Borehole Logs:
 • Lithologic: 0' - 1063.1'
 • Video (LANL tool): 0' - 1027'
 • Schlumberger logs:

Compensated Neutron Log:
 Open Hole: 42'-1060'

Triple Litho-Density:
 Open Hole: 42'-1060'

Array Induction Tool:
 Open Hole: 42'-1055'

Elemental Capture Sonde:
 Open Hole: 42'-1056'

Natural GR Spectroscopy:
 Open Hole: 42'-1039'

Combinable Magnetic Resonance:
 Open Hole: 42'-1055'

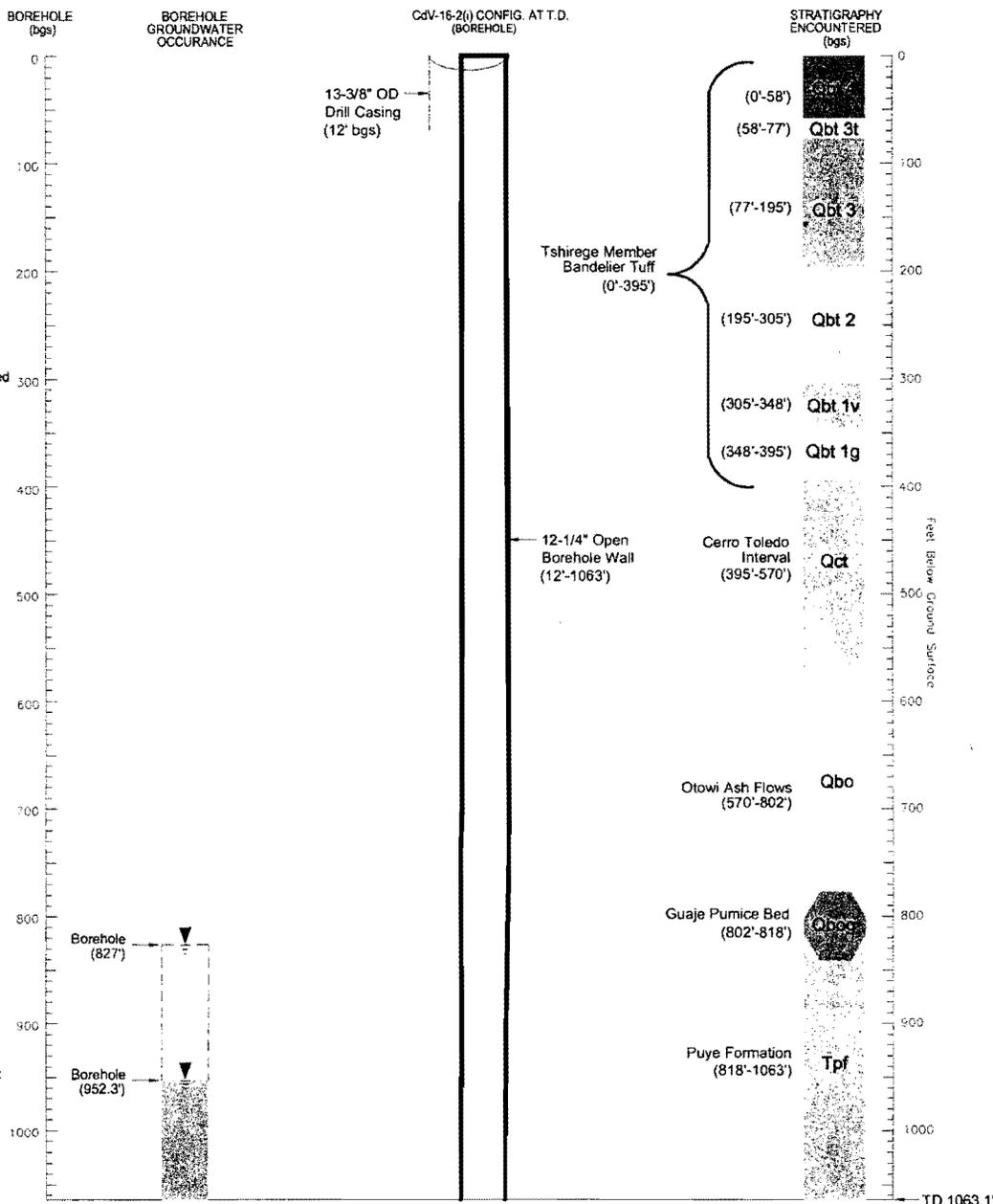
Fullbore Formation Micro Imager:
 Open Hole: 958'-1062'

Corehole Logs:
 Corehole not advanced.

Core Drilling Completed: not applicable
 Rotary Drilling Completed: 11/17/03-12/02/03
 Contract Geophysics: 12/4/03 and 12/5/03
 Well Installation: 12/8/03
 Surface Completion: 1/5/04
 Well Completion:

- Casing:
 4.5" I.D. / 5.0" O.D. A304 Stainless Steel casing with external couplings
- Number of Screens:
 Two (2) 4.46" ID wire wrapped stainless steel with external couplings.
 Screen #1 (Upper): 5.53" OD Pipe based 0.010 slot
 Screen #2 (Lower): 5.27" OD Rod based 0.020 slot
- Screen Intervals:
 Screen #1 (Upper): 850.2' - 867.8'
 Screen #2 (Lower): 992' - 1015.2'

Well Development performed by bailing.
 Total Volume Purged: 60 gallons



Geologic contacts for CdV-16-2(i) were determined from cuttings, borehole video, and geophysical logs.

Keyed Notes:

1. Coordinates - NM State Plane Grid Central Zone (North America) Datum - 1983 (NAD83); expressed in feet.
2. Elevations - National Geodetic Vertical Datum (NGVD29); expressed in feet above mean sea level.
3. Bollard placement and surveying pending.
4. All depths are below ground surface (bgs).
5. Drill casing removed prior to well installation.
6. Borehole video indicates water flowing into open borehole from 827 ft. bgs.
7. Groundwater level measurement at 952.3' was recorded on 12-5-03 with LANL video camera.
8. After initial hand bailing, borehole sounded dry. Results of video logging in completed well performed on 1-17-04 indicated no water entering well screens.
9. Qbt 1, Qbt 2, Qbt 3, and Qbt 4 are cooling units of the Tshirege Member of the Bandelier Tuff.

DCN: ALB4DR002 Rev.1



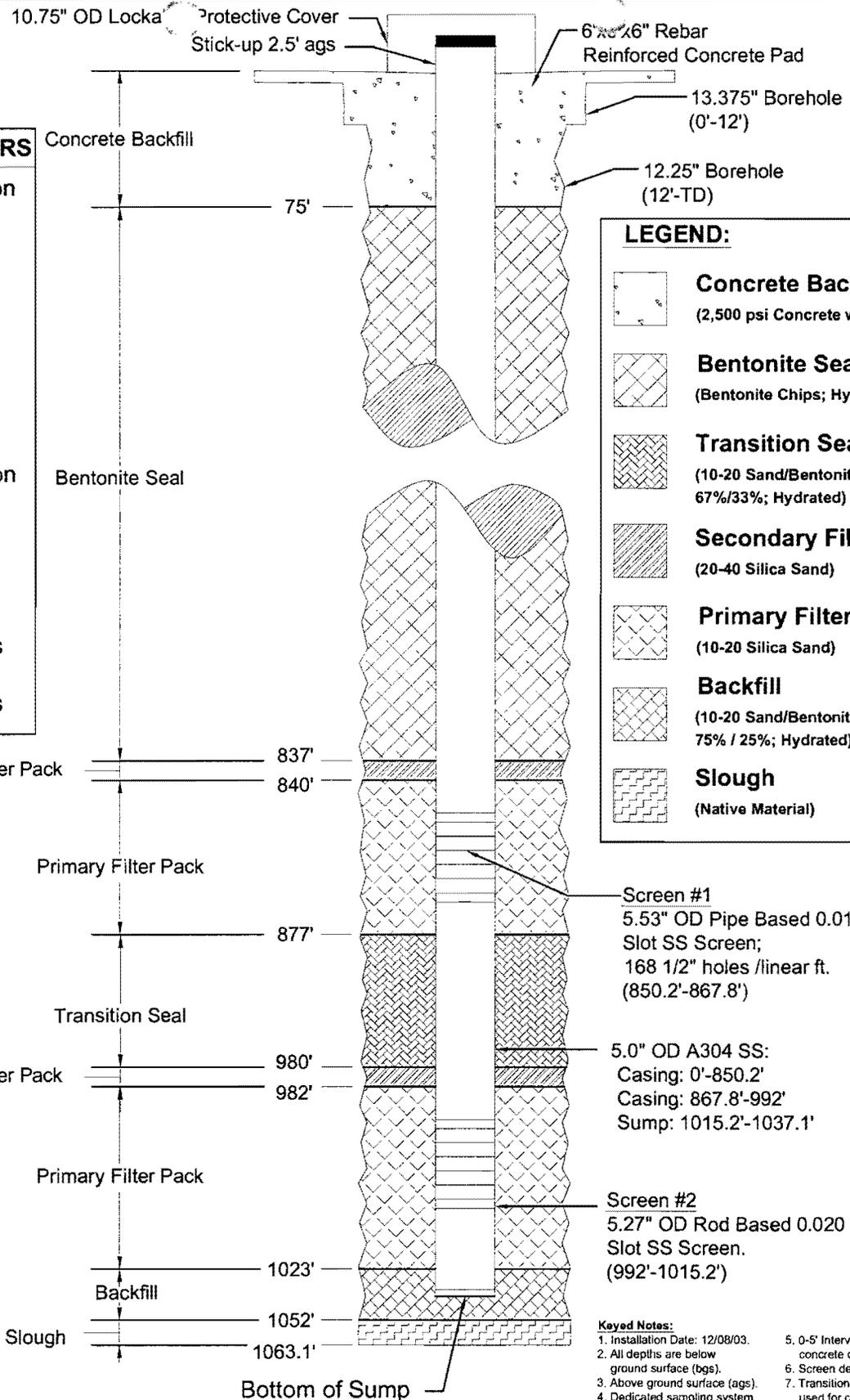
Construction, Stratigraphic, and Hydrogeologic Information for Characterization Well CdV-16-2(i)
 Los Alamos National Laboratory
 Los Alamos, New Mexico

FIGURE

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Drawn By: C. Landon	Date: February 2004
Project No.: 37151	Filename: ALB04DR002 REV 1
Scale: Not-To-Scale	Revision: 1
Reviewed By: F. Schelby	Approved By: M. Everett

CENTRALIZERS	
Upper Section	
728 ft. bgs	
848 ft. bgs	
858 ft. bgs	
868 ft. bgs	
Lower Section	
930 ft. bgs	
999 ft. bgs	
1003 ft. bgs	
1016 ft. bgs	



LEGEND:

-  **Concrete Backfill**
(2,500 psi Concrete w/ 4% Bentonite)
-  **Bentonite Seal**
(Bentonite Chips; Hydrated)
-  **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 Sand/Bentonite Chips 75% / 25%; Hydrated)
-  **Slough**
(Native Material)

Screen #1
5.53" OD Pipe Based 0.010 Slot SS Screen; 168 1/2" holes /linear ft. (850.2'-867.8')

5.0" OD A304 SS:
Casing: 0'-850.2'
Casing: 867.8'-992'
Sump: 1015.2'-1037.1'

Screen #2
5.27" OD Rod Based 0.020 Slot SS Screen. (992'-1015.2')

- Keyed Notes:**
1. Installation Date: 12/08/03.
 2. All depths are below ground surface (bgs).
 3. Above ground surface (ags).
 4. Dedicated sampling system location not shown.
 5. 0-5' Interval will be filled with concrete during surface completion.
 6. Screen depths are slotted intervals.
 7. Transition Seal (877'-980') used for casing support.
 8. Drill casing removed prior to well installation.

DCN: ALB04DR001 Rev.1

 KLEINFELDER	
Drawn By: C. Landon	Date: February 2004
Project No.: 37151	Filename: ALB04DR001 REV 1
Scale: Not-To-Scale	Revision: 1
Reviewed By: F. Schelby	Approved By: M. Everett

**Schematic Diagram of
Characterization Well CdV-16-2(i)**
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE
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