TA-15

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

DEC 22 2003

RECEIVED
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NMED Hazardous Waste Bureau

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

Subject: Fact Sheet for R-26

Dear Mr. Young:

Enclosed is the fact sheet for R-26, which was recently completed by Kleinfelder, Inc.

Sincerely,

for Mat Johansen

Mat Johansen
Project Manager
Program Compliance Manager

OPM:5TW-002

Enclosure: R-26 Fact Sheet

cc w/enclosures
John Kieling
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East,
Building 1
Santa Fe, NM 87505-6303
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K. Hargis, RRES-DO, LANL, MS-J591
J. McCann, RRES-WQH, LANL, MS-M 992
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

6464

Location: Mesa South of Canon de Valle
(on down thrown side of Pajarito Fault) TA-16

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' - 19') Split Spoon
(19' - 25') Continuous Sampler
(25' - 55') HQ Coring
(55' - 62.5') Split Spoon
(62.5' - 250') HQ Coring

Drilling:
(0' - 77') 13-3/8" Air Rotary Casing Hammer
(77' - 140') 12-1/4" Tri-Cone
(140' - 205') 12-1/4" Downhole Hammer
(205' - 1005') 12-1/4" Tri-Cone
(1005' - 1490.5') 8.5" Tri-Cone

Reaming:
(77' - 1005') 14" Roller Reamed - unsuccessful
(1005' - 1490') 10" Reamed - partial success

Data Collection:
- Hydrologic Properties: Pending
- Cores/Cuttings submitted for geochemical and contaminant characterization: 13
- Ground Water Samples Submitted
  Perched Ground Water - 9/15/03 (241') - corehole
  Deep Ground Water - 9/21/03 (604')

Geologic Properties:
Minerology, petrography, and chemistry: 7

Borehole Logs:
- Lithologic: 0' - 1490.5'
- Video (LANL tool): 0' - 717'
- Caliper Logging: 1374' - 1474'
- Schlumberger logs:
  Compensated Neutron Log:
  9/28/03: Open Hole: 70'-985'
  10/14/03: Cased: 500'-1005'; Open Hole: 1005'-1481'
  Triple Litho-Density:
  9/28/03: Open Hole: 70'-985'
  10/14/03: Cased: 500'-1005'; Open Hole: 1005'-1481'
  Array Induction Imager:
  9/28/03: Open Hole: 70'-979'
  10/14/03: Cased: 500'-1005'; Open Hole: 1005'-1476'
  Elemental Capture Sonde:
  9/28/03: Open Hole: 70'-981'
  10/14/03: Cased: 500'-1005'; Open Hole: 1005'-1477'
  Natural GR Spectroscopy:
  9/28/03: Open Hole: 70'-979'
  10/14/03: Cased: 500'-1005'; Open Hole: 1005'-1460'
  Combinable Magnetic Resonance:
  9/28/03: Open Hole: 100'-967'
  10/14/03: Cased: none; Open Hole: 1050'-1464'
  Fullbore Formation Micro Imager:
  9/28/03: Open Hole: 450'-985'
  10/14/03: Cased: none; Open Hole: 1005'-1483'

Corehole Logs:
- Lithologic: 0' - 250'
- Video (LANL tool): 0' - 241'
- Gamma Ray (LANL Tool): 0'-245'

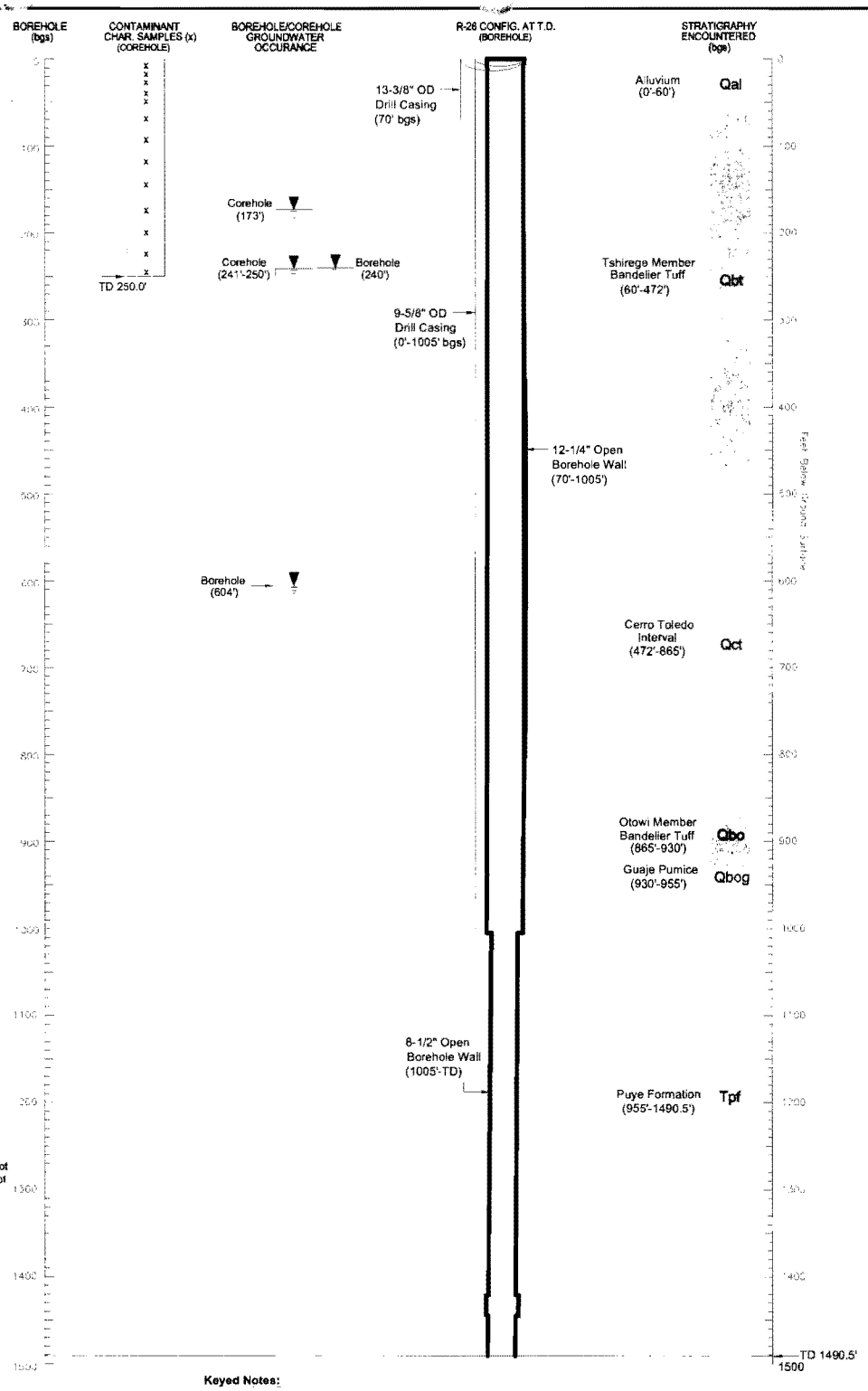
Core Drilling Completed: 9/8/03-9/12/03
Rotary Drilling Completed: 9/18/03-10/14/03
Contract Geophysics: 9/28/03 and 10/14/03-10/15/03
Well Installation: 10/17/03-10/19/03
Well Developed: 11/4/03-11/17/03

- 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): 651.8' - 669.9'
  Screen #2 (Lower): 1421.8' - 1445'

Well Development performed by swabbing, bailing, and pumping.
Total Volume Purged: 36,200 gallons

Corehole Piezometer Completions
- Casing - 2" OD Sched. 40 PVC threaded
- Number of Screens - One (1) 2" OD Sched. 40 PVC 0.010 slotted
- Screen Interval -
  Upper - 150' - 180'
  Lower - 230' - 250'

Geologic contacts for R-26 were determined from core samples, 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. Surface completion and surveying pending.
4. All depths are below ground surface (bgs).
5. Drill casing removed prior to well installation.
6. Borehole reamed across Screen #2 interval (1421'-1445')
7. Water level measurements in shallow piezometer was 172.97', the deep piezometer was dry when sounded on 11-25-03.
8. Post development deep groundwater level measurement recorded on 9-21-03.

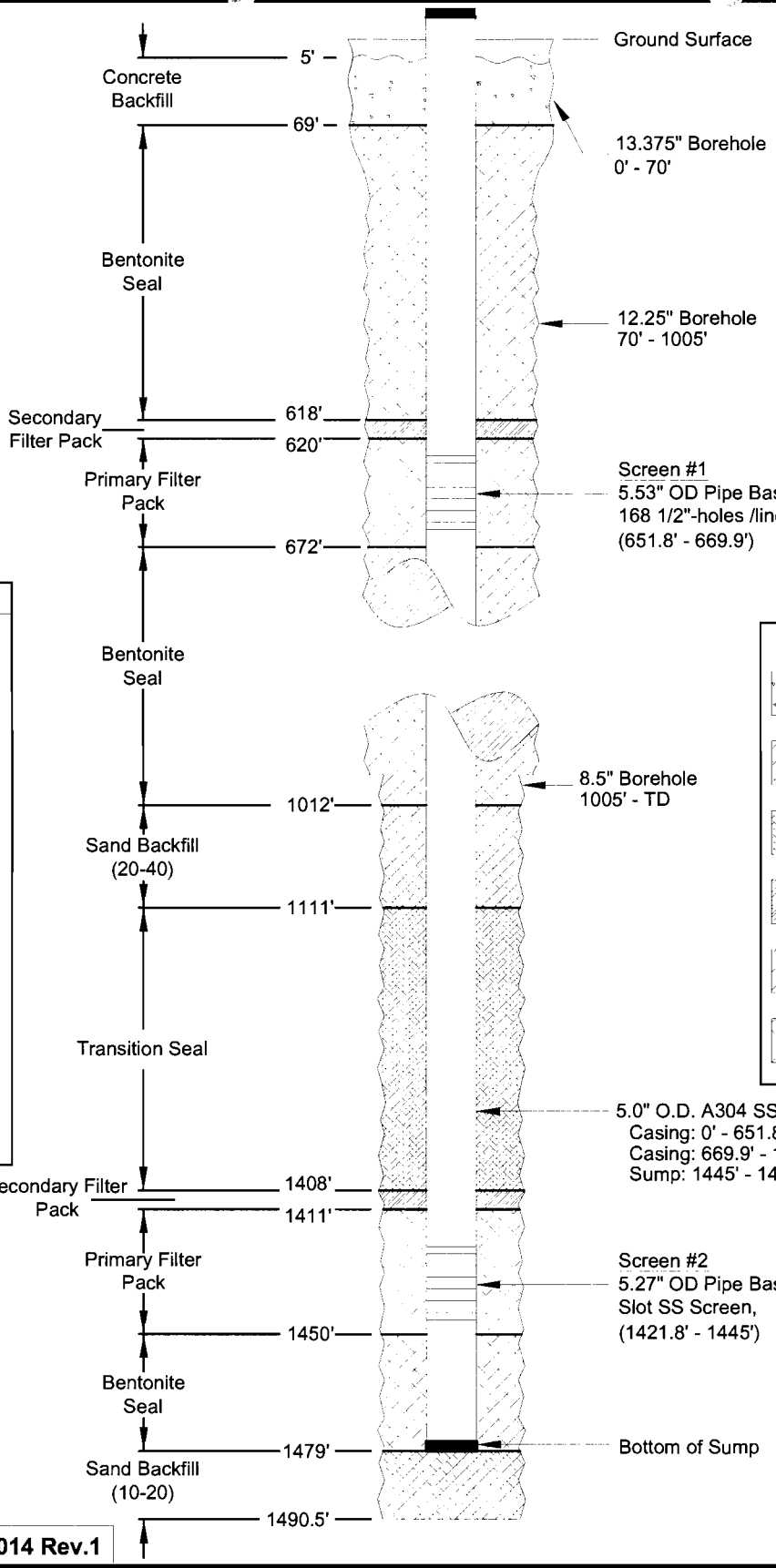
DCN: ALB3DR015 Rev.1

KLEINFELDER

Drawn By: C. Landon	Date: December 2003
Project No.: 37151	Filename: ALB3DR015 REV 1
Scale: Not-To-Scale	Revision: 1
Reviewed By: F. Schelby	Approved By: M. Everett

Construction, Stratigraphic, and Hydrogeologic Information for Characterization Well R-26
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE
1



CENTRALIZERS
Upper Section:
347 ft. bgs
540 ft. bgs
649 ft. bgs
659 ft. bgs
671 ft. bgs
Lower Section:
1086 ft. bgs
1298 ft. bgs
1420 ft. bgs
1432 ft. bgs
1446 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)
- **Sand Backfill** (Silica Sand)

Keyed Notes:

1. Installation Date: 10/17/03.
2. All depths are below ground surface (bgs).
3. Dedicated sampling system location not shown.
4. Surface completion and survey pending.
5. 0-5' Interval will be filled with concrete during surface completion.
6. Screen depths are slotted intervals.
7. Sand Backfill (1012'-1111') used for casing support
8. Borehole reamed across Screen #2 interval (1421'-1445')
9. Drill casing removed prior to well installation.

DCN: ALB3DR014 Rev.1

KLEINFELDER

Drawn By: C. Landon	Date: December 2003
Project No.: 37151	Filename: ALB3DR014 REV 1
Scale: Not-To-Scale	Revision: 1
Reviewed By: F. Schelby	Approved By: M. Everett

Schematic Diagram of Characterization Well R-26
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE **2**