

TA-53



Risk Reduction & Environmental Stewardship Division
Waste Disposition
PO Box 1663, MS J552
Los Alamos, New Mexico 87545
(505) 665-8293/Fax: (505) 665-7913

Date: May 28, 2002
Refer to: RRES:02-020

Mr. John Young, Corrective Action Project Leader
Permits Management Program
NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building 1
Santa Fe, NM 87505-6303



SUBJECT: WELL COMPLETION FACT SHEETS FOR R-8/R-8A

Dear Mr. Young:

Enclosed are two copies of well completion fact sheets for Characterization Well R-8/R-8A, located in the TA-53, Los Alamos Canyon.

If you have any questions, please call Dave Broxton at (505) 667-2492 or Bob Enz at (505) 667-7640.

Sincerely,

Charlie Nylander, Program Manager
Los Alamos National Laboratory
Water Quality & Hydrology

Sincerely,

Everett Trollinger, Acting Project Manager
Department of Energy
Los Alamos Area Office

CN/ET/th

Enclosure: Well R-8/R-8A Fact Sheet (ER2002-0360)



4547

Cy (w/enc.):

P. Longmire, EES-6, MS D462
D. Vaniman, EES-6 MS D462
C. Nylander, RRES-WQH, MS K497
D. Rogers, RRES-WQH, MS K497
D. Broxton, EES-6, MS M992
A. Dorries, RRES-R, MS M992
T. Herrera, RRES-WQH, MS M992
D. Hickmott, EES-6, MS M992
J. McCann, RRES-WQH, MS M992
M. Kirsh, RRES-R, MS M992
E. Keating, EES-6, MS T001
B. Robinson, EES-6, MS T001
B. Stone, EES-6, MS T001
B. Enz, LAAO, MS A316
E. Trollinger, LAAO, MS A316
T. Whitacre, LAAO, MS A316
T. Trujillo, DOE-AL, MS A906
L. King, US EPA (2 copies)
J. Davis, NMED-SWQB
M. Leavitt, NMED-GWQB
S. Yanicak, NMED-DOE OB, MS J993
J. Young, NMED-HWB (1 extra copy of Attachment)
IM-5, MS A150
RRES-WQH File, MS M992
RPF, MS M707 (ER2002-0375)

Cy (w/o enc.):

W. Neff, RRES-R, MS M992
D. McInroy, RRES-R, MS M992
B. Ramsey, RRES-DO, MS J591
J. Bearzi, NMED-HWB
T. Longo, DOE-HQ, EM 453
J. Parker, NMED-DOE OB

Construction, Stratigraphic, and Hydrologic Information for Hydrogeologic Workplan Characterization Well R-8/Ba Rev. 1 (05/22/02).

Location: TA-53, Los Alamos Canyon, below confluence with DP canyon.
 Survey coordinates (brass marker in NW corner of R-8a cement pad):
 x: 1,641,139.0 E y: 1,772,554.6 N (NAD 83)
 z: 6,544.7 ft asl (NGVD 29)
 R-8 is 62 ft due east from R-8a at survey coordinates (center of cement plug):
 x: 1,641,195.5 E y: 1,772,533.4 N (NAD 83)
 z: 6,542.9 ft asl (NGVD 29)

Drilling: air rotary core w/ wireline retrieval and fluid-assist air rotary reverse circulation with casing advance.
 R-8 Start date: 09/27/01.
 R-8 End date: 12/10/01.
 R-8a Start date: 01/09/02.
 R-8a End date: 01/27/02.

Borehole R-8 drilled to 1022 ft. bgs. (T.D.).
 Borehole R-8a drilled to 880 ft. bgs. (T.D.).

Data collection:
 Hydrologic properties:
 Field Hydraulic Testing: Falling head test on R-8a screen #2.

Cores/cuttings submitted for geochemical and contaminant characterization: (0)
 Groundwater samples submitted for geochem and contaminant characterization: (1, R-8)
 Geologic properties:

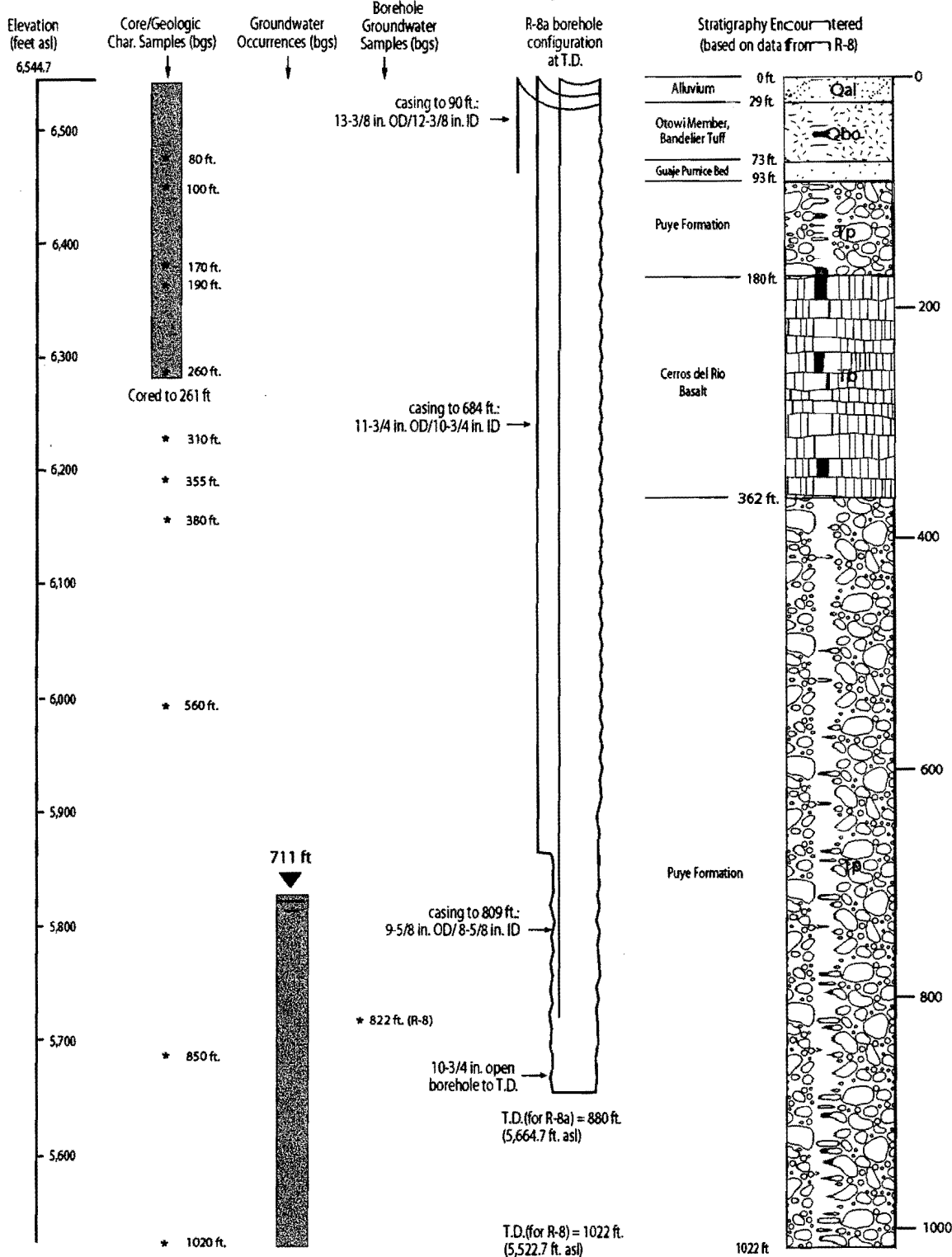
Mineralogy, petrography, and chemistry 11
 Borehole logs from R-8:
 Lithologic: (0-1022 ft).
 Video (LANL tool): 30-261 ft.
 Natural gamma (LANL tool): 0-261 ft. and 0-768 ft. bgs.
 Induction (LANL tool): 30-261 ft.
 Schlumberger Logs (0-761 ft cased, 761-764 ft open hole): Litho-Density, Spectral Gamma, Elemental Capture, Thermal/Epithermal Neutron, Natural Gamma.
 Contaminants Detected in R-8 Water Sample:
 Tritium at 15 pCVL.

Well construction:
 Drilling Completed (R-8a): 01/27/02.
 Contract Geophysics (R-8): 11/13/01.
 Well Constructed (R-8a): 01/27/02 through 02/01/02.
 Well Developed (R-8a): 02/04/02 through 02/14/02.
 Westbay Installed (R-8a): 02/21/02 through 02/24/02.

Casing: 5-in OD/4.5-in ID stainless steel with external couplings

Number of Screens in R-8a: 2
 5.56-in OD/4.5-in ID pipe based, s.s. wire-wrapped; 0.010-in slotted.

Screens in R-8a (perforated pipe interval):
 Screen #1 - 705.3-755.7 ft. bgs.
 Screen #2 - 821.3-828.0 ft. bgs.



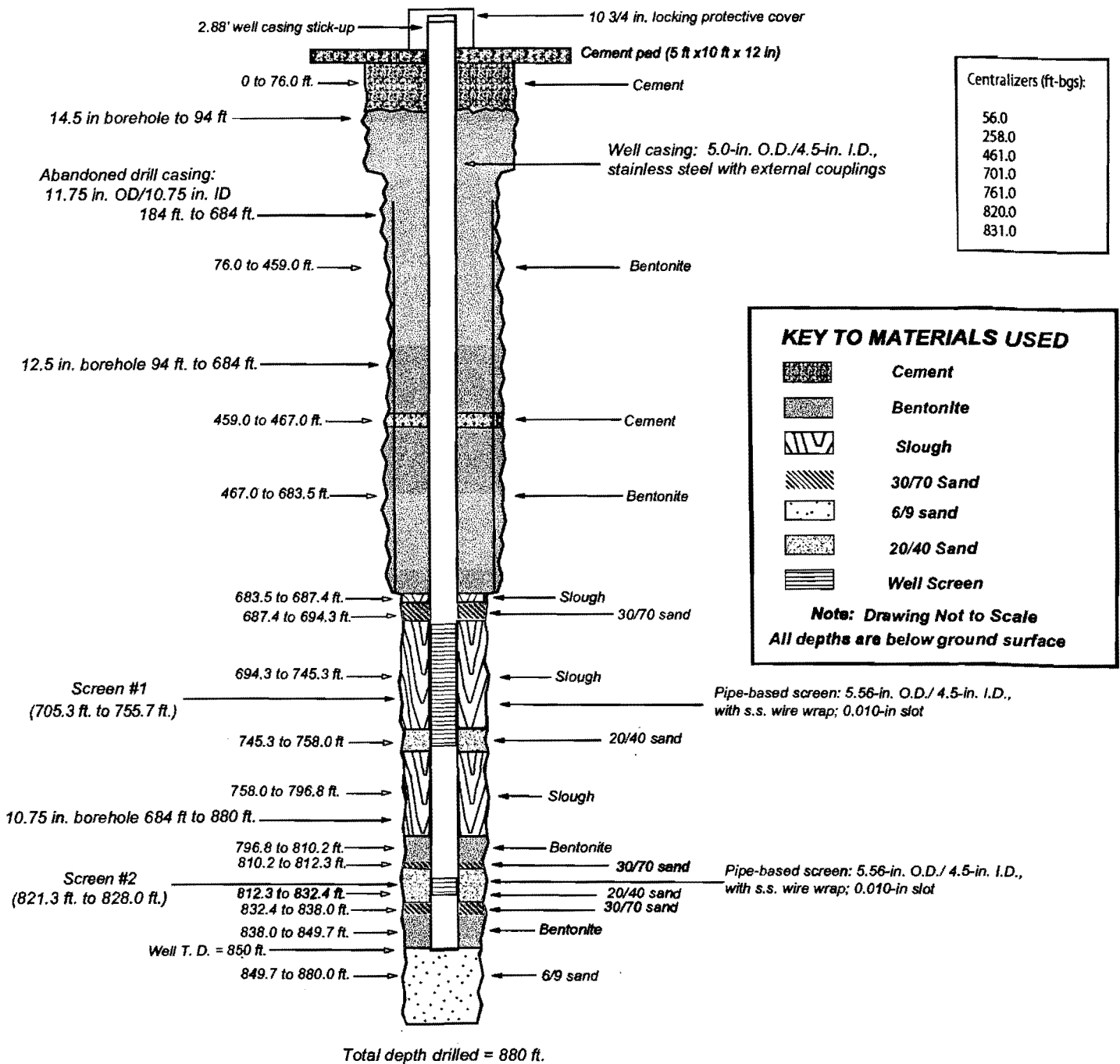
* = geologic or groundwater samples

Well development consisted of wire brushing, bailing, surging, swabbing, and pumping.

Groundwater occurrence was determined in R-8 by recognition of first water produced while drilling, by borehole geophysics, and by borehole video. Static water levels were determined after the R-8a borehole was rested.

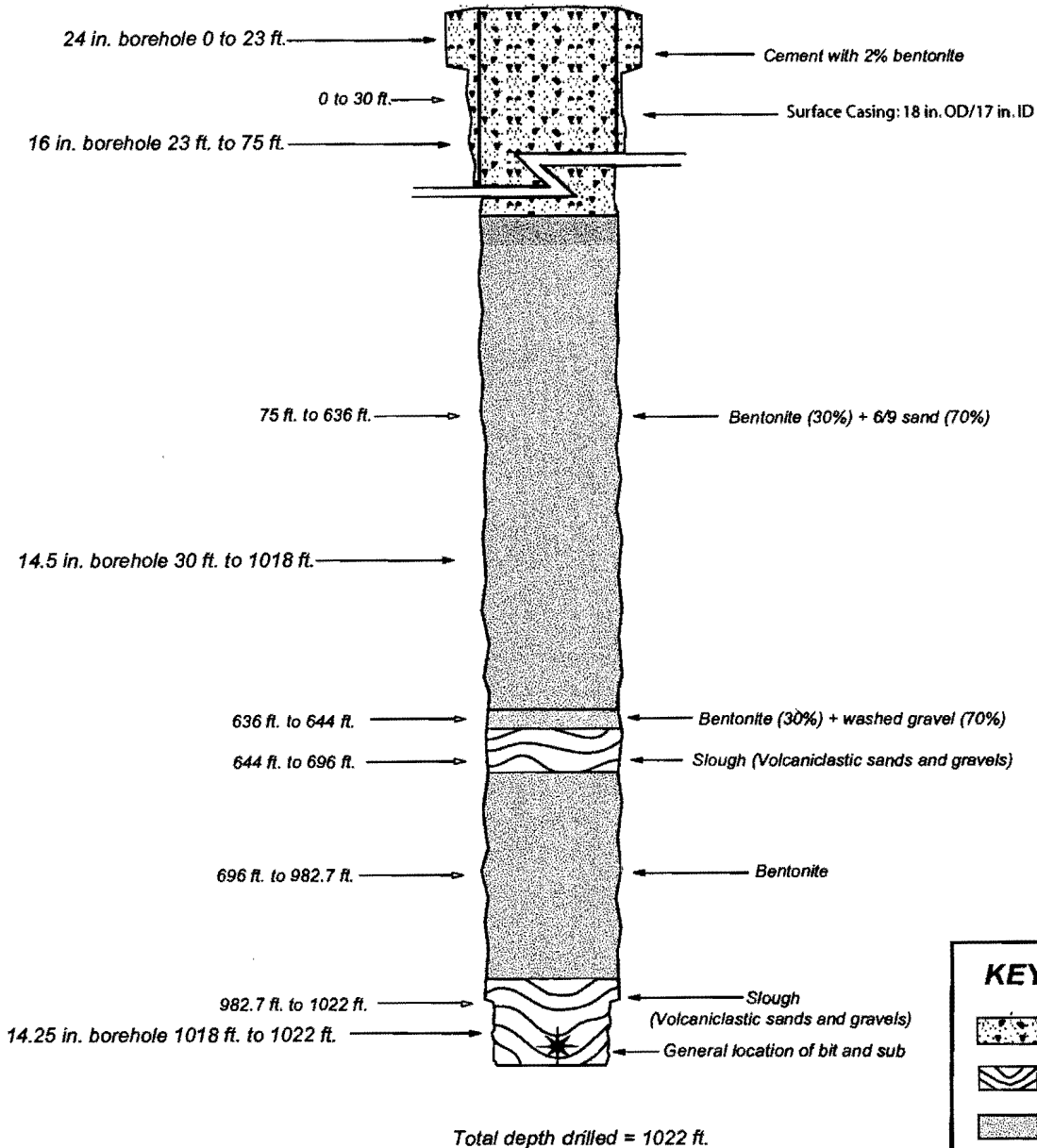
Geologic contacts are from R-8 and were determined by examination of cuttings and interpretation of geophysical logs. Contacts may be refined by analysis of geologic samples by petrography and rock chemistry. No samples collected from R-8a borehole.

As-built Well Completion Diagram of Well R-8A, Rev. 1 (5/22/02)



Note: The screen intervals list the footages of the pipe perforations, not the top and bottom of screen joints.
The formation slough around screen #1 consists of volcanoclastic sands and gravels.

Well Abandonment Diagram of Well R-8, Rev. 1 (05/22/02)



KEY TO MATERIALS USED

	Cement + bentonite (2%)
	Slough
	Bentonite

Note: Drawing Not to Scale
All depths are below ground surface