

ANL TAG



ENVIRONMENTAL RESTORATION PROJECT

Los Alamos National Laboratory/University of California
Environmental Science and Waste Technology (E)
Environmental Restoration (ER) Project, MS M992
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U.S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
(505) 667-7203/FAX (505) 665-4504

Date: February 6, 2002
Refer to: ER2002-0102

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: CHARACTERIZATION WELL FACT SHEETS MCOBT-4.4

Dear Mr. Young:

Enclosed are two copies of well completion fact sheets for Hydrogeologic
Characterization Well MCOBT-4.4, located in the TA-5, Mortandad Canyon.

If you have any questions, please call Dave McInroy at (505) 667-0819 or
Bob Enz at (505) 667-5793.

Sincerely,

Julie A. Canepa, Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

Sincerely,

Mat Johansen, Project Manager
Department of Energy
Office of Los Alamos Site Operations



JC/MJ/DB/th

Enclosure: Characterization Well MCOBT-4.4 (ER2002-0061)

Cy (w/enc.):

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E/ER File, MS M992
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Characterization Well MCOBT-4.4:

Location: TA-5, Mortandad Canyon

Survey coordinates (brass marker in NW corner of cement pad):
 x = 1,634,189.8 ft (NAD 83),
 y = 1,768,514.7 ft (NAD 83),
 z = 6836.2 ft asl (NGVD 29)

Drilling: hollow stem auger (Phase 1) and fluid-assist air rotary reverse circulation with casing advance (Phase 2)
 Phase 1 Start date: 6/1/01
 Phase 1 End date: 6/8/01
 Phase 2 Start date: 6/11/01
 Phase 2 End date: 6/14/01

Borehole drilled to 767 ft total depth (TD)

Data collection:
 Hydrologic properties:
 Field Hydraulic Testing: N/A

Cores/cuttings submitted for anion profile: (53)
 Groundwater samples submitted for geochem and cont. characterization: (1)
 Geologic properties:
 Mineralogy, petrography, and chemistry (18)
 Borehole logs:
 Lithologic (0-767 ft)
 Video (LANL tool) 130-767 ft
 Natural gamma (LANL tool): cased 0-130 ft, open hole 130-767 ft.
 Schlumberger Logs (0-130 ft cased, 130-767 ft open hole): Compensated Neutron, Spectral Gamma, Array Induction, Combinable Magnetic Resonance, Elemental Capture Sonde, and Litho-Density

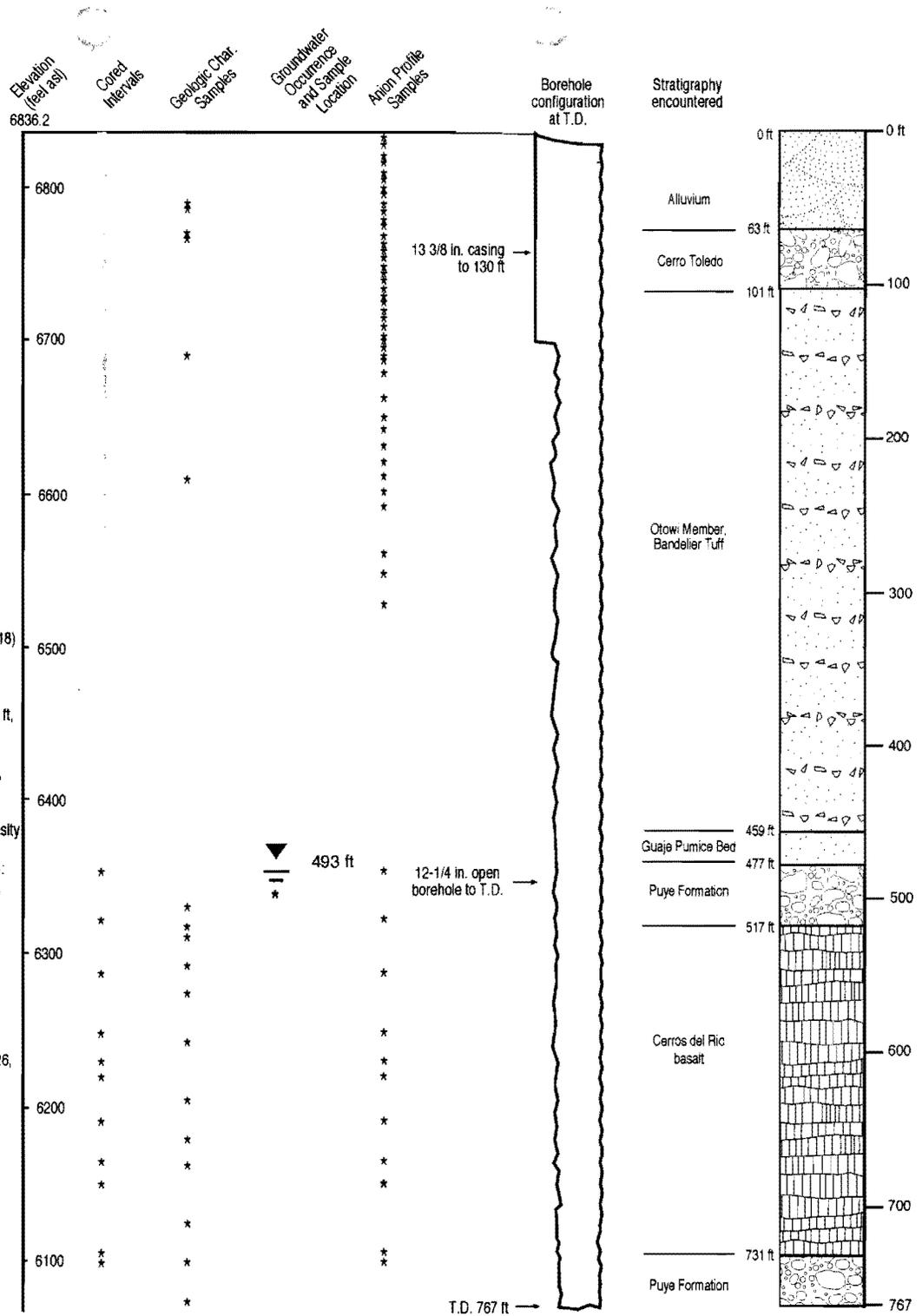
Contaminants Detected in Borehole Samples:
 Perched groundwater: Nitrate, perchlorate, and tritium.
 Core: Nitrate and perchlorate as soluble anions

Well construction:
 Drilling Completed: 6/14/01
 Contract Geophysics: 6/15/01
 Well Constructed: 6/16/01-7/2/01
 Well Developed: 7/9/01-7/12/01, 11/12-11/26,
 Variable Speed Pump installed: pending

Casing: 4.5-in ID, 5.0-in OD stainless steel with external couplings.

Number of Screens: 1
 4.5-in ID pipe based, s.s. wire-wrapped (5.563-in OD); 0.010-in slot

Screen (perforated pipe interval)
 Screen #1 - 485.4 - 524.0 ft



Well development consisted of brushing, bailing, and pumping

Groundwater occurrence was determined by packing off intervals to determine water producing zones.

Geologic contacts determined by examination of cuttings, petrography, rock chemistry and interpretation of geophysical logs.

Drilling, stratigraphic, and hydrologic information for characterization well MCOBT-4.4 rev 0a (1/31/02).

