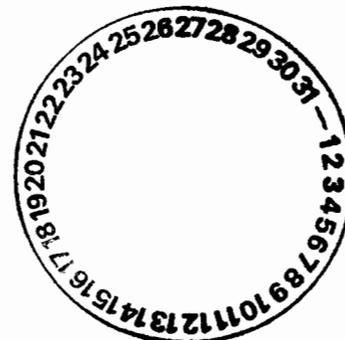


# Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

Date: February 25, 2002  
In Reply Refer To: ESH-18/WQ&H:02-081  
Mail Stop: K497  
Telephone: (505) 665-4681



Mr. John Young  
Permits Management Program  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico, 87505-6303

**SUBJECT: WELL R-5 SUMMARY SHEET AND NOTICE OF TRANSMITTAL OF WELL COMPLETION REPORTS**

Dear Mr. Young:

Please find enclosed the summary sheet for well R-5. In addition, during FY-01 five well completion reports were transmitted to your office by hand-delivery for the following wells:

- Characterization Well R-9 Completion Report; LA-13742-MS, May 2001
- Characterization Well R-9i Completion Report; LA-13821-MS, May 2001
- Characterization Well R-12 Completion Report; LA-13822-MS, May 2001
- Characterization Well R-15 Completion Report; LA-13749-MS, May 2001
- Characterization Well R-19 Completion Report; LA-13823-MS, May 2001

Drafts of these five well completion reports had previously been transmitted to you during the previous year. Please note that well completion reports for wells R-25 and R-31 are completed and should be transmitted to you in the near future. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Charles L. Nylander".

Charles L. Nylander  
Program Manager  
Hydrogeologic Characterization Program  
Water Quality and Hydrology Group

CN/tml



7606

Attachments: a/s

Cy: L. McAtee, ESH-DO, w/ att., MS K491  
P. Thullen, ESH-DO, w/att., MS K491  
D. Stavert, ESH-DO, w/att., MS K491  
S. Rae, ESH-18, w/att., MS K497  
J. Canepa, E-ER, w/att., MS M992  
J. McCann, E-ER, w/att., MS M992  
D. Broxton, E-ER, w/att., MS M992  
WQ&H File, w/att., MS K497  
IM-5, w/att., MS A150

**Characterization Well R-5:**

Location: TA-74, Pueblo Canyon

Ground surface elevation: 6472.6 ft asl  
 NAD 83 Survey coordinates (brass marker  
 in NW corner of cement pad):  
 x = 1646707 , y = 1773063 , z = 6472.6

Drilling: hollow stem auger and  
 fluid-assist air rotary reverse  
 circulation with casing advance  
 Phase 1 Start date: 4/24/01  
 Phase 1 End date: 4/25/01  
 Phase 2 Start date: 5/5/01  
 Phase 2 End date: 5/20/01

Borehole drilled to 902 ft

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

Cores/cuttings submitted for geochemical  
 and contaminant characterization: (0)  
 Groundwater samples submitted for  
 geochem. and cont. characterization: (4)  
 Geologic properties:  
 Mineralogy, petrography, and chemistry (38)  
 Borehole logs:  
 Lithologic (0-902 ft)  
 Video (LANL tool) 570-685 ft  
 Natural gamma (LANL tool): cased 0-851 ft,  
 open hole 851-902 ft.  
 Schlumberger Logs (0-851 ft cased, 851-  
 898 ft open hole): Compensated Thermal  
 and Epithermal Neutron, Spectral  
 Gamma, and Litho-Density

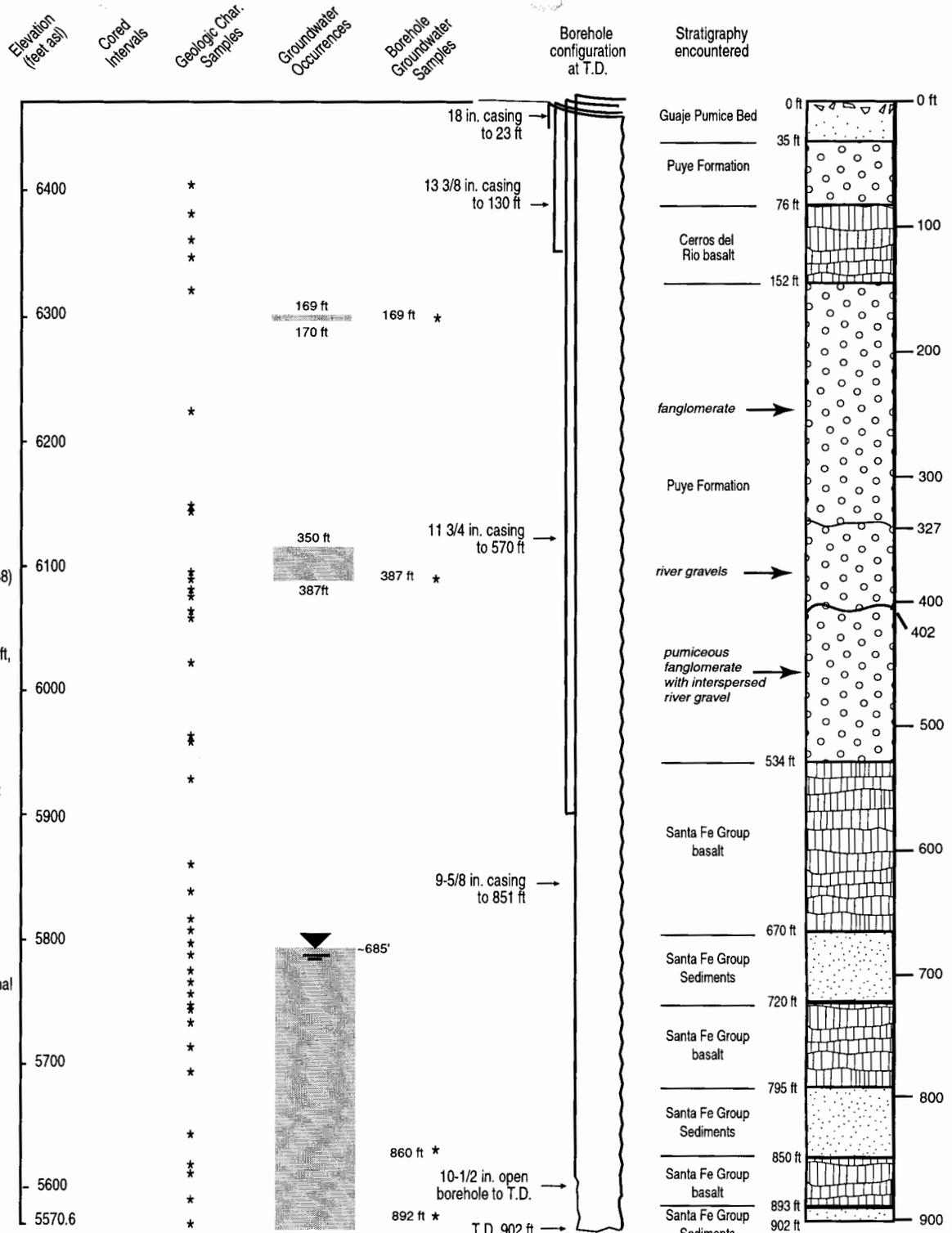
Contaminants Detected in Borehole Samples:  
 Regional groundwater: nitrate

Well construction:  
 Drilling Completed: 5/20/01  
 Contract Geophysics: 5/21/01  
 Well Constructed: 5/22/01-5/31/01  
 Well Developed: 6/2/01 - 6/21/01  
 Westbay Installed: 6/13/01 - 6/19/01

Casing: 4.5-in I.D. stainless steel with external  
 couplings

Number of Screens: 4  
 4.5-in I.D. pipe based, s.s. wire-wrapped;  
 0.010-in slot

Screen (perforated pipe interval):  
 Screen #1 - 326.4 - 331.5 ft  
 Screen #2 - 372.8 - 388.8 ft  
 Screen #3 - 676.9 - 720.3 ft  
 Screen #4 - 858.7 - 863.7 ft



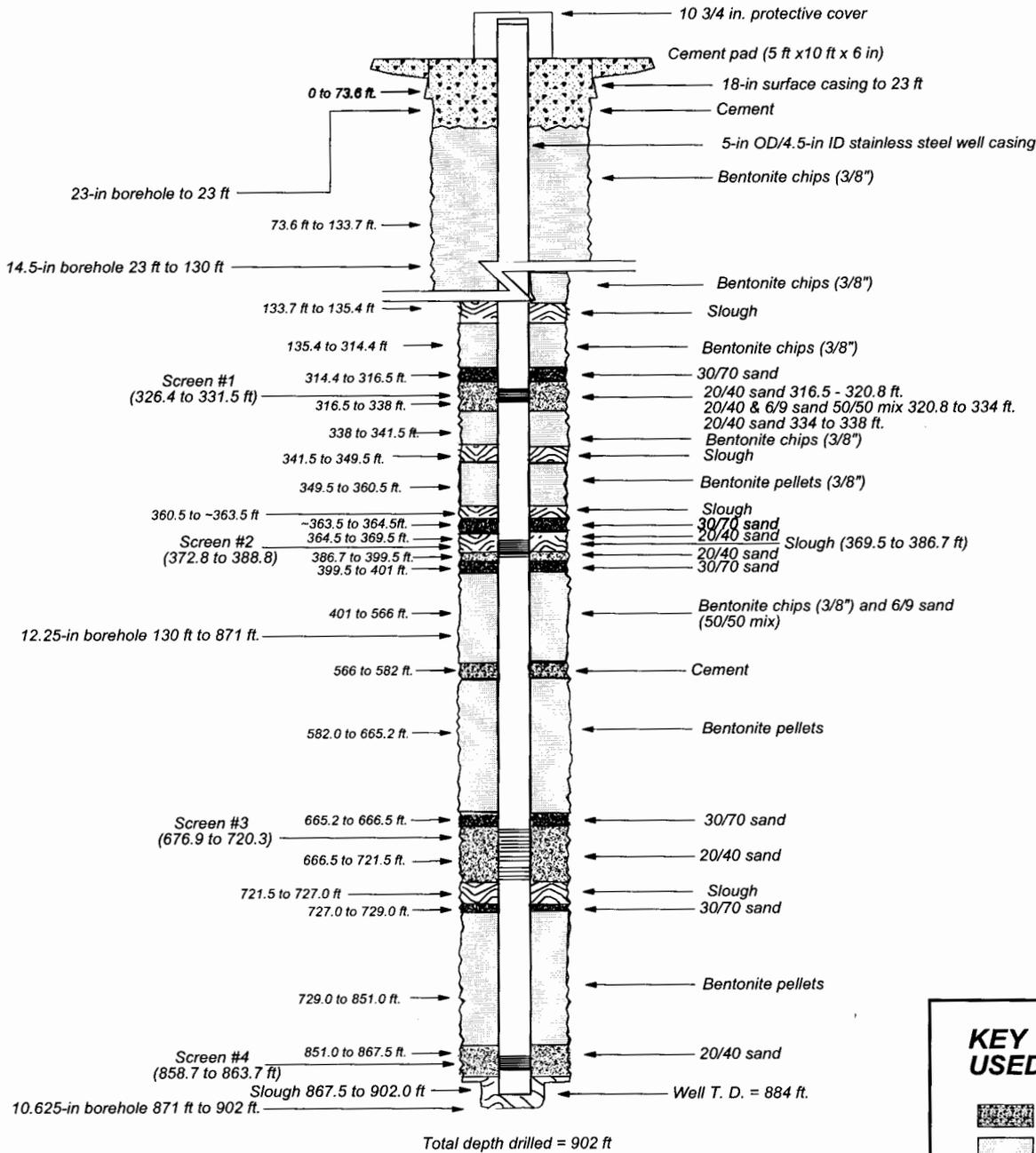
Well development consisted of brushing,  
 bailing, and pumping.

Groundwater occurrence was determined  
 by recognition of first water produced while  
 drilling. Static water levels were determined  
 after the borehole was rested.

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

# Drawing Not to Scale

All depths are feet below ground surface



**KEY TO MATERIAL USED**

-  **Cement**
-  **Bentonite**
-  **30/70 Sand**
-  **20/40 Sand**
-  **Well Screen**
-  **Slough**

Note: The screen intervals list the footages of the pipe perforations, not the tops and bottoms of screen joints.

**As-built well completion diagram of Well R-5.**