



Opposite

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

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 R-34

Enclosed is the fact sheet for Well R-34, which was recently completed by the Department of Energy. If you have any questions regarding this matter, I can be reached at (505) 665-5046.

Sincerely,


Mat Johansen
Project Manager
Program Compliance Manager

EM:8TW-001

Enclosure: R-1 Fact Sheet

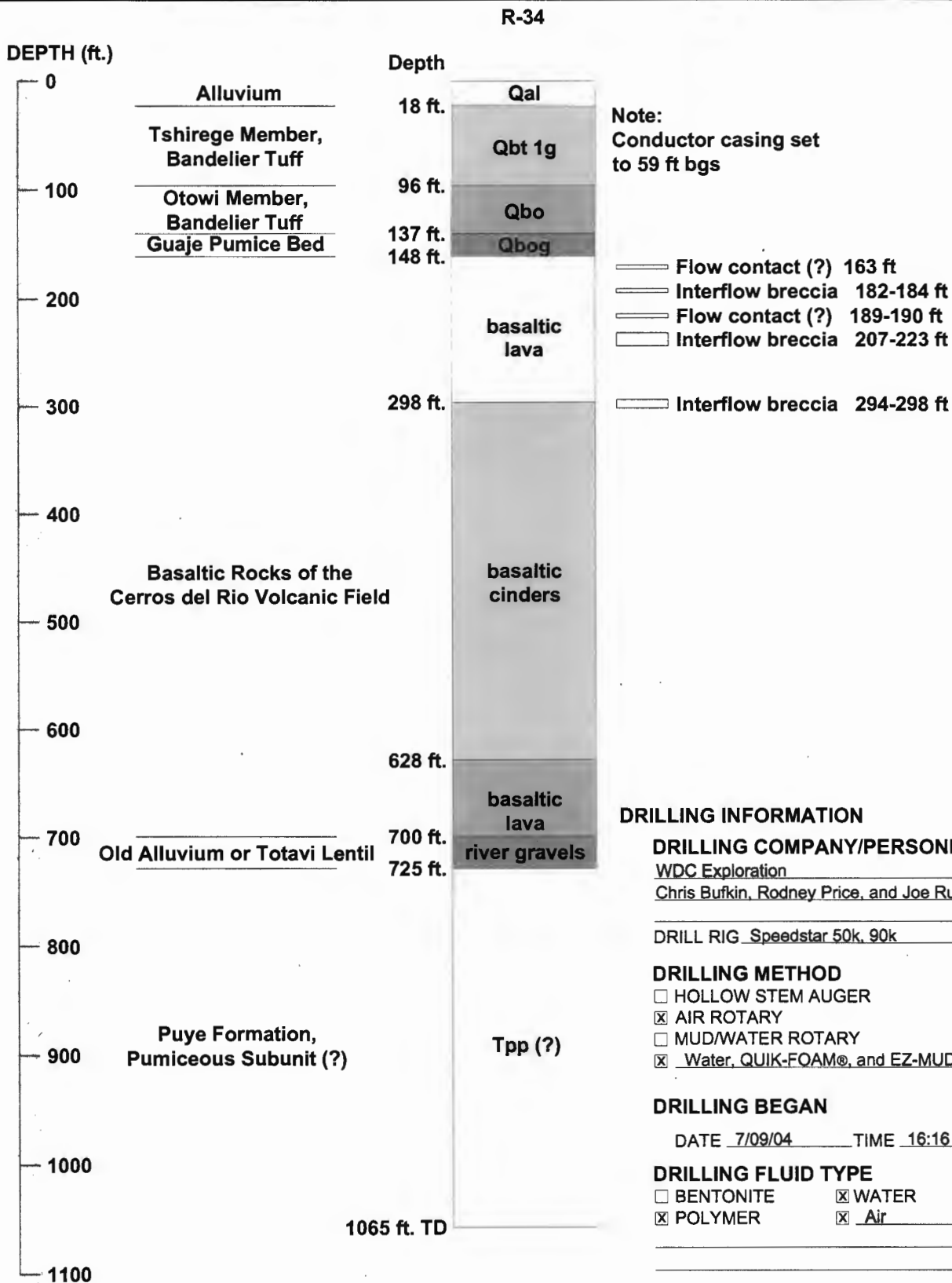
cc w/enclosure:

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D. Stavert, RRES-D, LANL, MS-J591



Note: Geologic Contacts are preliminary and subject to change.

DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL

WDC Exploration

Chris Bufkin, Rodney Price, and Joe Rupp

DRILL RIG Speedstar 50k, 90k

DRILLING METHOD

☐ HOLLOW STEM AUGER

☒ AIR ROTARY

☐ MUD/WATER ROTARY

☒ Water, QUIK-FOAM®, and EZ-MUD®

DRILLING BEGAN

DATE 7/09/04 TIME 16:16

DRILLING FLUID TYPE

☐ BENTONITE ☒ WATER

☒ POLYMER ☒ Air



WELL SUMMARY DATA SHEET
Characterization Well R-34
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE

1

Drawn By: C. Landon
Project No.: 48335

Date: September 2004
Filename: Figure 1 Rev 1.dwg

TOTAL LENGTH OF CASING AND SCREEN Pending Survey FT

DEPTH TO WATER FOLLOWING INSTALLATION (TOC) 796 FT

DIAMETER OF BOREHOLE
12-1/4" FROM 0 FT TO 1065 FT BGS
FROM FT TO FT BGS
FROM FT TO FT BGS

SURFACE COMPLETION INFORMATION

TYPE OF PROTECTIVE CASING

☒ STEEL SIZE 10-7/8" OD
☐

☒ PROTECTIVE POSTS INSTALLED

SURFACE SEAL AND PAD COMPLETION

☒ CHECKED FOR SETTLEMENT

MATERIAL USED: 3000 psi Concrete with REINFORCED Fiberglass

☒ YES: Rebar
☐ NO

PAD DIMENSIONS

5 FT (L) x 5 FT (W) x 0.5 FT (H)

717 DEPTH TO TOP OF BENTONITE SEAL (FT BGS)

875 DEPTH TO TOP OF FINE SAND COLLAR (FT BGS)

877 DEPTH TO TOP OF FILTER PACK (FT BGS)

883.7 DEPTH TO TOP OF SCREEN (FT BGS)

CENTRALIZERS USED

☐ YES AT

☐ STAINLESS STEEL

☒ No

906.6 DEPTH TO BOTTOM OF SCREEN

920.7 DEPTH TO BOTTOM OF CASING

935 DEPTH TO BOTTOM OF FILTER PACK

1065 DEPTH TO BOTTOM OF BORING

LOCKING COVER

WELL CAP

ELEVATION OF PROTECTIVE CASING Pending Survey

ELEVATION OF TOP WELL CASING (FT AMSL) Pending Survey

GROUND SURFACE ELEVATION (FT AMSL) Pending Survey

MONUMENT MARKER ELEVATION (FT AMSL) Pending Survey

SLOPED CONCRETE PAD / SURFACE SEAL

DEPTH TO TOP OF SURFACE SEAL (FT BGS) 0.7

GROUT FORMULA (PROPORTION OF EACH)

CEMENT 33% BENTONITE 5%

WATER OTHER 2% CaCl₂ 60% Sand

9 Sacks Sand Slurry

ACTUAL VOLUME 114.8 ft³

CALCULATED VOLUME 55.3 ft³

METHOD INSTALLED

☐ TREMIE

☒ POURED

☐

☐ NOT USED

DEPTH TO TOP OF

BACKFILL MATERIAL (FT BGS) 82

☒ 70% Bentonite / 30% 8/20 Sand

FORMATION COLLAPSE (FT BGS) 667 - 717

TYPE OF CASING

☒ STAINLESS STEEL CASING DIAMETER

☐ SCHEDULE 40 PVC INSIDE 4.5 in.

☐ SCHEDULE 80 PVC OUTSIDE 5.0 in.

☐

JOINT TYPE API Long thread

BENTONITE SEAL

☐ PELLETS

☐ SLURRY

☐ POWDER/GRANULAR ☒ Chips + 8/20 Sand

QUANTITY USED 1226.1 ft³

CALCULATED VOLUME 397.8 ft³

METHOD INSTALLED

☒ TREMIE

☐ POURED

☐

☐ NOT USED

FINE SAND COLLAR (OPTIONAL)

SIZE / TYPE 20/40 Sand

FILTER PACK

GRAVEL SIZE

SAND SIZE 8/20

ACTUAL VOLUME 27.5 ft³

CALCULATED VOLUME 41.0 ft³

FORMATION COLLAPSE: TO FT BGS

MATERIAL Silica Sand

METHOD INSTALLED

☒ TREMIE

☐ POURED

☐

TYPE OF SCREEN

☒ STAINLESS STEEL SCREEN DIAMETER

☐ SCHEDULE 40 PVC INSIDE 4.5 in.

☐ SCHEDULE 80 PVC OUTSIDE 5.0 in.

☐

SLOT SIZE 0.02 in. Wire Wrap

JOINT TYPE API Long thread

BACKFILL MATERIAL

☐ GRAVEL

☒ FORMATION COLLAPSE (975 - 1065 ft bgs)

☐ BENTONITE MATERIAL

☐ SAND

☒ 70% Bentonite / 30% 8/20 Sand

WELL COMPLETION BEGAN

DATE 8/13/04 TIME 07:00

WELL COMPLETION FINISHED

DATE 8/20/04 TIME 17:00

WELL DEVELOPMENT INFORMATION

DEVELOPMENT METHOD

☐ SWABBING

☒ BAILING

☒ PUMPING

TOTAL PURGE VOLUME 34,120 GALLONS

FINAL PARAMETER MEASUREMENTS

pH 8.11

TEMPERATURE 20.7 °C

SPECIFIC CONDUCTANCE 189 µS

TURBIDITY 3.7 NTU



KLEINFELDER

MONITORING WELL INSTALLATION RECORD

Characterization Well R-34
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE

2

Drawn By: C. Landon
Project No.: 48335

Date: September 2004
Filename: Figure 2.dwg