TA-35
R-33

DEPARTMENT OF ENERGY
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544

NOV 1 0 2004

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

RECEIVED
NOV 2004
NMED Hazardous Waste Bureau

Subject: Fact Sheet for R-33

Dear Mr. Young:

Enclosed is the fact sheet for Well R-33, which was recently completed by the Department of Energy. If you have any question regarding this matter, I can be reached at (505) 665-5046.

Sincerely,

Mathew P. Johansen
Groundwater Program
Compliance Manager

EM:3TW-003

Enclosure: R-33 Fact Sheet

cc w/enclosures
John Kieling
NMED – Hazardous Waste Bureau
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Building 1
Santa Fe, NM 87505-6303
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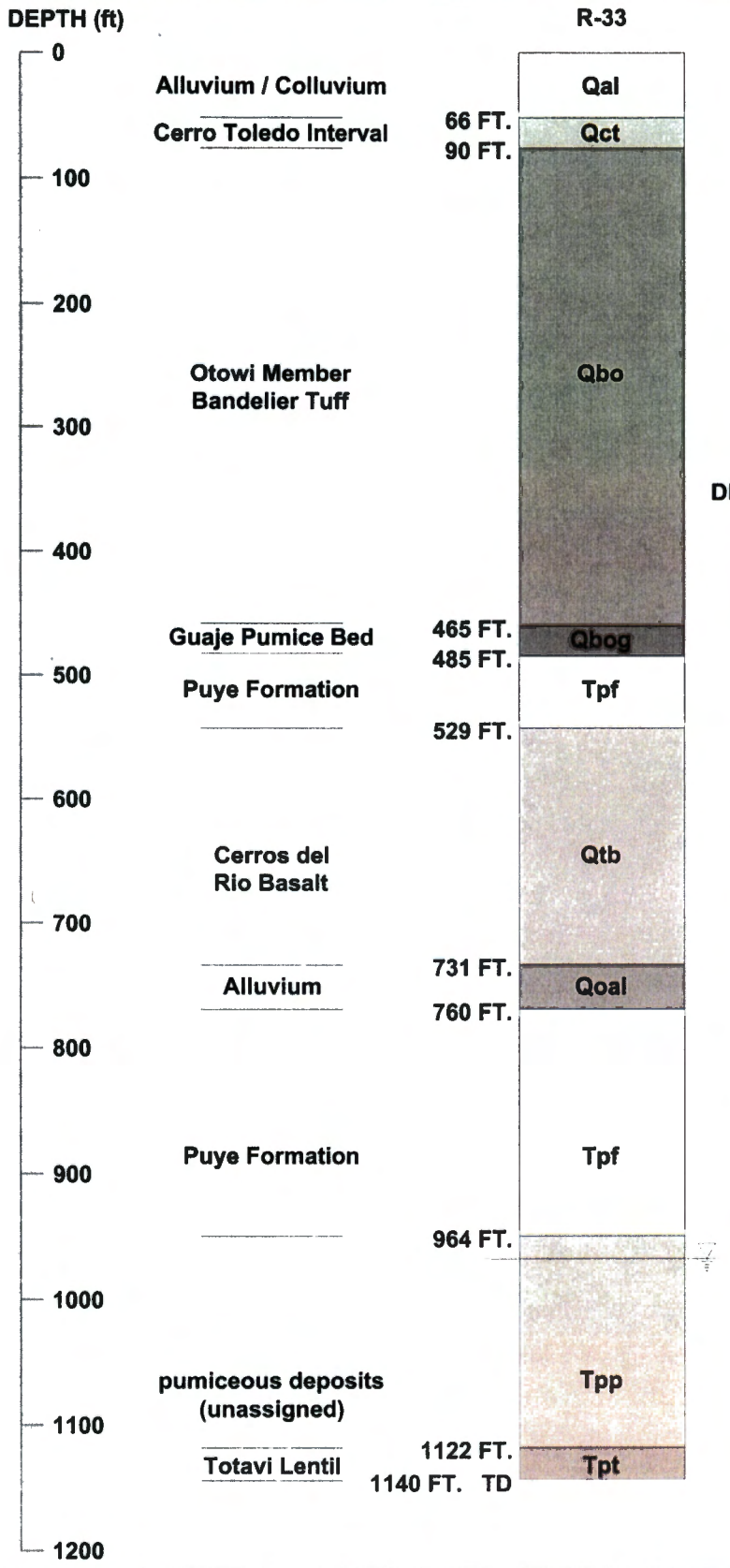
C. Nylander, RRES, LANL, MS-J591
N. Quintana, RRES-R, LANL, MS-M992
S. Rae, LANL, RRES-WQH, LANL, MS-K497
B. Ramsey, LANL, RRES-DO, LANL, MS-J591
M. Reed, RRES-DO, LANL, MS-J556
B. Robinson, EES-6, LANL, MS-T003
D. Stavert, RRES-D, LANL, MS-J591

5332



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL

WDC Exploration
Christopher Bufkin, Rodney Price

DRILL RIG Speedstar 90k

DRILLING METHOD

- ☐ HOLLOW-STEM AUGER
- ☒ AIR ROTARY
- ☐ MUD/WATER ROTARY
- ☒ Reverse Circulation
- ☒ Fluid-Assisted Air Rotary

DRILLING FLUID TYPE

- ☐ BENTONITE
- ☒ WATER
- ☒ POLYMER
- ☒ AIR

QUIK-FOAM®, EZ-MUD®

DRILLING START / FINISH

DATE 08/31/04 TIME 09:00 AM
DATE 10/03/04 TIME 12:20 PM

979 FT. BGS

Note: Geologic Contacts are preliminary and subject to change.

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Drawn By: C. Landon
Project No.: 37151
Date: November 2004
Filename: Figure 1.dwg

SUMMARY DATA SHEET
Characterization Well R-33
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE
1

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TOTAL LENGTH OF CASING AND SCREEN Pending Survey FT

DEPTH TO WATER FOLLOWING INSTALLATION (TOC) Pending Survey FT

SLOPED CONCRETE PAD

LOCKING COVER

WELL CAP

ELEVATION OF PROTECTIVE CASING (FT AMSL) Pending Survey
ELEVATION OF TOP OF WELL CASING (FT AMSL) Pending Survey
GROUND SURFACE ELEVATION (FT AMSL) Pending Survey
MONUMENT MARKER ELEVATION (FT AMSL) Pending Survey

GROUND SURFACE

16" OD SURFACE CASING
(0.7 FT. AGS - 56.4 FT. BGS)

DEPTH TO TOP OF SURFACE SEAL (FT BGS) 0.5

DIAMETER OF BOREHOLE
22" FROM 0 FT TO 56.4 FT BGS
15" FROM 56.4 FT TO 529 FT BGS
15" FROM 529 FT TO 1030 FT BGS
11" FROM 1030 FT TO 1140 FT BGS

CENTRALIZERS USED
☒ YES AT 893, 993, 1006, 1019, 1112, 1123 (FT. BGS)

☒ STAINLESS STEEL

TYPE OF CASING
☒ STAINLESS STEEL
JOINT TYPE API L/T
CASING DIAMETER
ID 4.5"
OD 5.0"

995.5 DEPTH TO TOP OF SCREEN (FT. BGS)

TYPE OF SCREEN
☒ ROD-BASED STAINLESS STEEL
SLOT SIZE 0.02"
JOINT TYPE API L/T
SCREEN DIAMETER
ID 4.5"
OD 5.0"

1018.5 DEPTH TO BOTTOM OF SCREEN (FT. BGS)

1112.4 DEPTH TO TOP OF SCREEN (FT. BGS)

TYPE OF SCREEN
☒ ROD-BASED STAINLESS STEEL
SLOT SIZE 0.02"
JOINT TYPE API L/T
SCREEN DIAMETER
ID 4.5"
OD 5.0"

1122.3 DEPTH TO BOTTOM OF SCREEN (FT. BGS)

1126 DEPTH TO BOTTOM OF CASING (FT. BGS)

1140 DEPTH TO BOTTOM OF BORING (FT. BGS)

SLOUGH

BENTONITE SEAL (74 - 643 FT. BGS)
☒ CHIPS
ACTUAL VOLUME (FT^3) 960
CALCULATED VOLUME (FT^3) 632
METHOD INSTALLED
☒ TREMIE

BENTONITE SEAL (643 - 861 FT. BGS)
☒ CHIPS + 10/20 SILICA SAND
ACTUAL VOLUME (FT^3) 288.9
CALCULATED VOLUME (FT^3) 235.4
METHOD INSTALLED
☒ TREMIE

BENTONITE SEAL (861 - 958 FT. BGS)
☒ CHIPS
ACTUAL VOLUME (FT^3) 240
CALCULATED VOLUME (FT^3) 104.8
METHOD INSTALLED
☒ TREMIE

BENTONITE SEAL (958 - 988 FT. BGS)
☒ CHIPS + 10/20 SILICA SAND
ACTUAL VOLUME (FT^3) 42.5
CALCULATED VOLUME (FT^3) 32.4
METHOD INSTALLED
☒ TREMIE

FINE SAND COLLAR (988 - 991 FT. BGS)
☒ 20/40 SILICA SAND
METHOD INSTALLED
☒ TREMIE

FILTER PACK (991 - 1027 FT. BGS)
☒ 10/20 SILICA SAND
ACTUAL VOLUME (FT^3) 80
CALCULATED VOLUME (FT^3) 38.9
METHOD INSTALLED
☒ TREMIE

BENTONITE SEAL (1027 - 1105 FT. BGS)
☒ CHIPS + 10/20 SILICA SAND
ACTUAL VOLUME (FT^3) 45
CALCULATED VOLUME (FT^3) 42.2
METHOD INSTALLED
☒ TREMIE

FINE SAND COLLAR (1105 - 1107 FT. BGS)
☒ 20/40 SILICA SAND
METHOD INSTALLED
☒ TREMIE

FILTER PACK (1107 - 1126 FT. BGS)
☒ 10/20 SILICA SAND
ACTUAL VOLUME (FT^3) 11.5
CALCULATED VOLUME (FT^3) 9.4
METHOD INSTALLED
☒ TREMIE

BACKFILL MATERIAL (1126 - 1140 FT. BGS)
☒ FORMATION COLLAPSE

WELL COMPLETION BEGAN
DATE 10/06/04 TIME 01:07 AM
WELL COMPLETION FINISHED
DATE 10/13/04 TIME 11:55 AM

(PENDING)
WELL DEVELOPMENT INFORMATION
DEVELOPMENT METHOD
☐ SWABBING ☐ BAILING
☐ PUMPING
TOTAL PURGE VOLUME ____ GALLONS

(PENDING)
FINAL PARAMETER MEASUREMENTS
pH ____
TEMPERATURE ____ °C
SPECIFIC CONDUCTANCE ____ µS
TURBIDITY ____ NTU

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Drawn By: C. Landon
Project No.: 37151

Date: November 2004
Filename: Figure 2.dwg

WELL SCHEMATIC
Characterization Well R-33
Los Alamos National Laboratory
Los Alamos, New Mexico

FIGURE
2

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