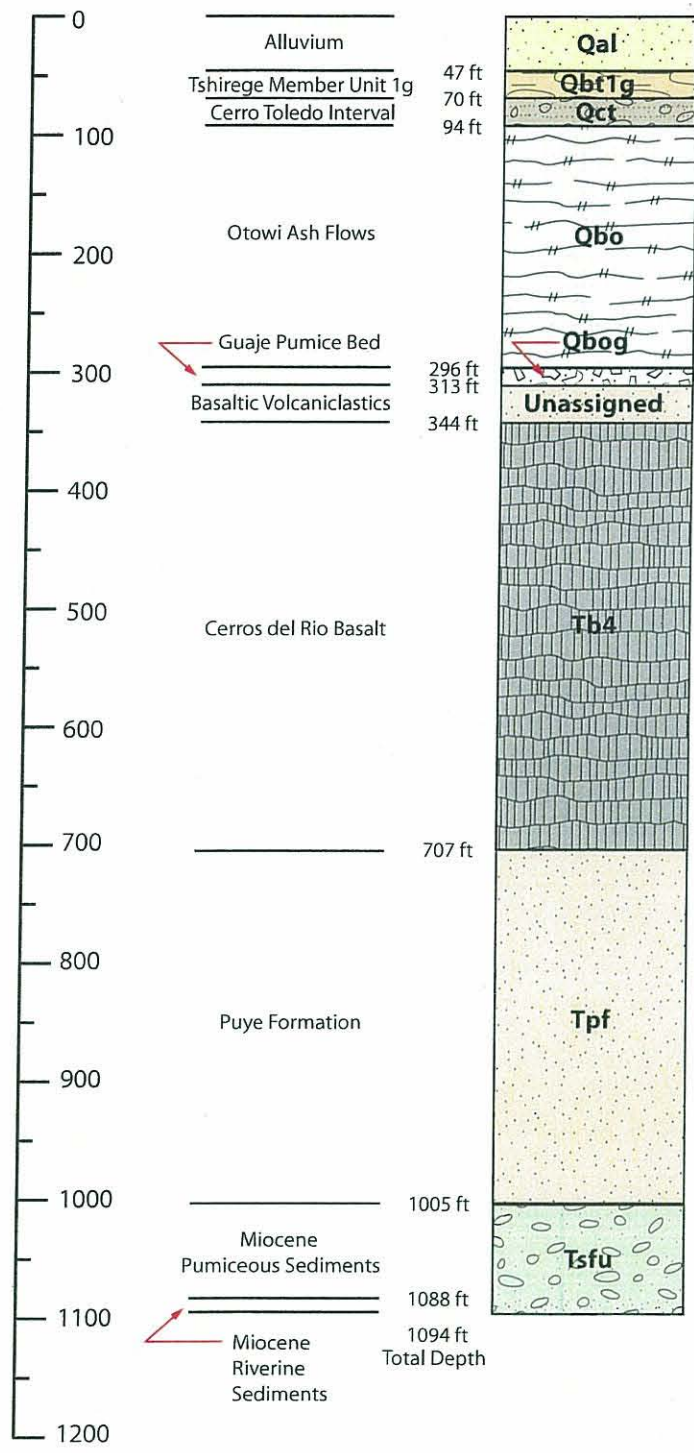




DEPTH (FT BGS)



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL:

Boart Longyear
J. Staloch, E. Johnson

DRILL RIG: Foremost DR-24HD

DRILLING METHOD:

DUAL ROTARY

DRILLING FLUID TYPE:

0-780 ft bgs 780-1094 ft bgs

WATER

WATER

AIR

AIR

AQF-2 FOAMING AGENT

DRILLING START/FINISH:

DATE: 11/10/2008 TIME: 0145

DATE: 12/08/2008 TIME: 1735

▼ 879.1 ft bgs (12/09/08)
(post drilling)



Drafted By: TPMC
Project Number: 88100

Date: January 21, 2009
Filename: R44_Lithology_FactSheet

WELL SUMMARY DATA SHEET
R-44 Borehole Stratigraphy
Mortandad Canyon
Los Alamos National Laboratory
Los Alamos, New Mexico

FACT SHEET
NOT TO SCALE

TOTAL LENGTH OF CASING AND SCREEN (FT) 1019.0

DEPTH TO WATER FOLLOWING DRILLING (FT BGS) 879.1

DIAMETER OF BOREHOLE
16.75" FROM 0.0 FT TO 345.8 FT BGS
15.0" FROM 345.8 FT TO 765.0 FT BGS
12.75" FROM 765.0 FT TO 1094.0 FT BGS

SURFACE COMPLETION INFORMATION
TYPE OF PROTECTIVE CASING (PROPOSED)

- STEEL SIZE 10"
- PROTECTIVE POSTS INSTALLED

SURFACE SEAL AND PAD COMPLETION (PROPOSED)

- CHECKED FOR SETTLEMENT
- MATERIAL USED CONCRETE
- REINFORCED: NO YES STEEL MESH
- PAD DIMENSIONS 10 FT (L) x 10 FT (W) x 0.5 FT (H)

SURFACE SEAL 3.0 TO 342.4 (FT BGS)

HYDRATED BENTONITE CHIP SEAL 342.4 TO 887.6 (FT BGS)

FINE SAND COLLAR 887.6 TO 890.3 (FT BGS)

FILTER PACK 890.3 TO 910.2 (FT BGS)

SCREENED INTERVAL 895.0 TO 905.0 (FT BGS)

BENTONITE SEAL 910.2 TO 976.3 (FT BGS)

FINE SAND COLLAR 976.3 TO 980.2 (FT BGS)

FILTER PACK 980.2 TO 999.8 (FT BGS)

SCREENED INTERVAL 985.3 TO 995.2 (FT BGS)

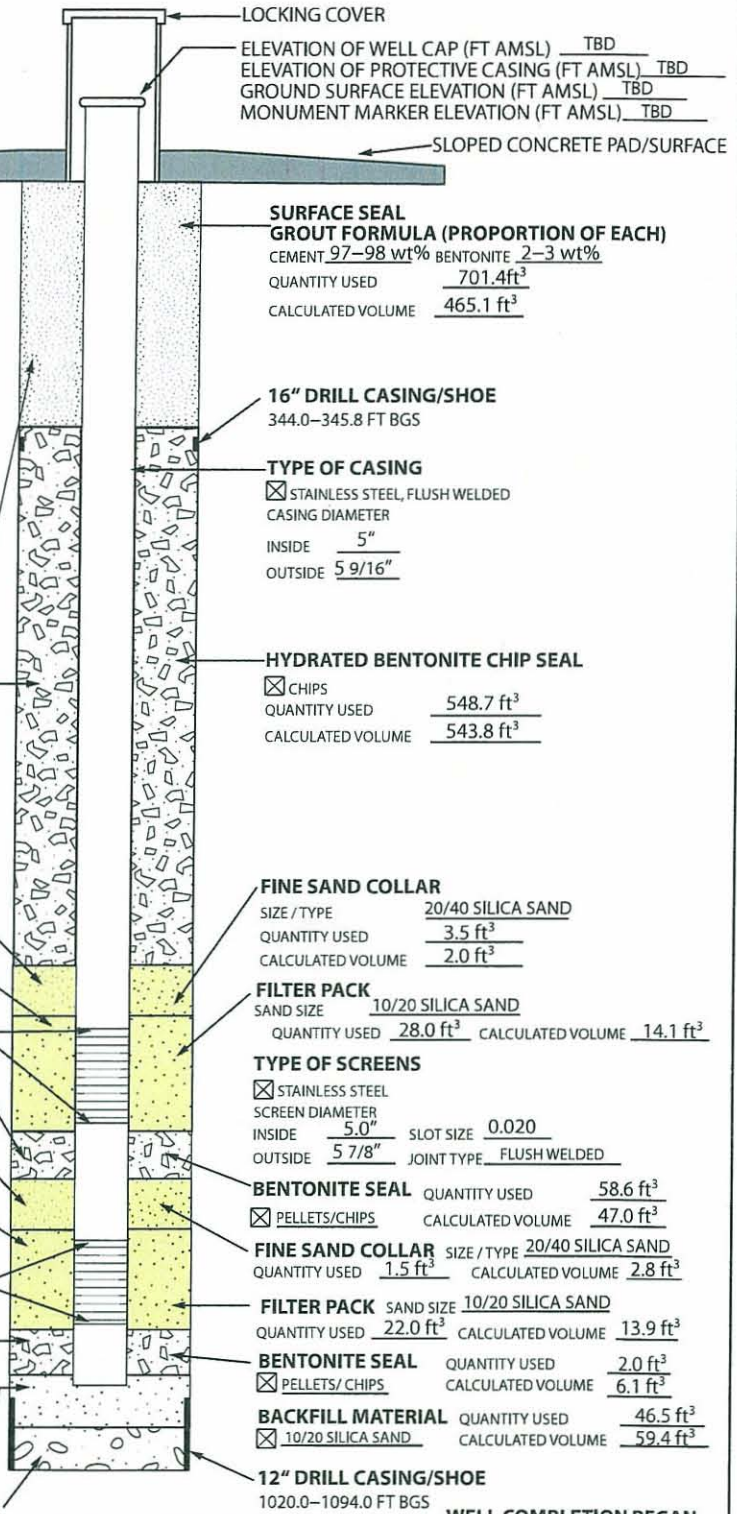
BENTONITE SEAL 999.8 TO 1008.4 (FT BGS)

BOTTOM OF CASING 1016.0 (FT BGS)

BACKFILL MATERIAL 1008.4 TO 1084.0 (FT BGS)

SLOUGH 1084.0 TO 1094.0 (FT BGS)

BOTTOM OF BORING 1094.0 (FT BGS)



16" DRILL CASING/SHOE
 344.0-345.8 FT BGS

TYPE OF CASING
 STAINLESS STEEL, FLUSH WELDED
 CASING DIAMETER
 INSIDE 5"
 OUTSIDE 5 9/16"

HYDRATED BENTONITE CHIP SEAL
 CHIPS
 QUANTITY USED 548.7 ft³
 CALCULATED VOLUME 543.8 ft³

FINE SAND COLLAR
 SIZE / TYPE 20/40 SILICA SAND
 QUANTITY USED 3.5 ft³
 CALCULATED VOLUME 2.0 ft³

FILTER PACK
 SAND SIZE 10/20 SILICA SAND
 QUANTITY USED 28.0 ft³ CALCULATED VOLUME 14.1 ft³

TYPE OF SCREENS
 STAINLESS STEEL
 SCREEN DIAMETER
 INSIDE 5.0" SLOT SIZE 0.020
 OUTSIDE 5 7/8" JOINT TYPE FLUSH WELDED

BENTONITE SEAL QUANTITY USED 58.6 ft³
 PELLETS/CHIPS CALCULATED VOLUME 47.0 ft³

FINE SAND COLLAR SIZE / TYPE 20/40 SILICA SAND
 QUANTITY USED 1.5 ft³ CALCULATED VOLUME 2.8 ft³

FILTER PACK SAND SIZE 10/20 SILICA SAND
 QUANTITY USED 22.0 ft³ CALCULATED VOLUME 13.9 ft³

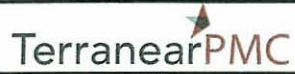
BENTONITE SEAL QUANTITY USED 2.0 ft³
 PELLETS/CHIPS CALCULATED VOLUME 6.1 ft³

BACKFILL MATERIAL QUANTITY USED 46.5 ft³
 10/20 SILICA SAND CALCULATED VOLUME 59.4 ft³

12" DRILL CASING/SHOE
 1020.0-1094.0 FT BGS

STAINLESS-STEEL CENTRALIZERS USED
 YES AT 2.1' ABOVE AND
BELOW SCREENS

WELL COMPLETION BEGAN
 DATE 12/13/08 TIME 0947
WELL COMPLETION FINISHED
 DATE 01/15/09 TIME 1030



R-44 AS-BUILT WELL CONSTRUCTION DIAGRAM
 Mortandad Canyon
 Los Alamos National Laboratory
 Los Alamos, New Mexico

FACT SHEET
 NOT TO SCALE