

DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL:

Boart Longyear
M. Cross, E. Revis

DRILL RIG: Foremost DR-24HD

DRILLING METHOD:

DUAL ROTARY

DRILLING FLUID TYPE:

0-682 ft bgs 682-1035.2 ft bgs

WATER

WATER

AIR

AIR

AQF-2 FOAMING AGENT

DRILLING START/FINISH:

DATE: 05/09/2010 TIME: 1255

DATE: 06/29/2010 TIME: 1155



Drafted By: TPMC
Project Number: 80007

Date: September 20, 2010
Filename: R55_Lithology_FactSheet

R-55 Borehole Stratigraphy

Cañada del Buey (TA-54)
Los Alamos National Laboratory
Los Alamos, New Mexico

Fact Sheet

NOT TO SCALE

TOTAL LENGTH
OF CASING AND SCREEN (FT) 1028.7

COMPOSITE DEPTH TO WATER
FOLLOWING INSTALLATION (FT BGS) 834.6

DIAMETER OF BOREHOLE
16.75 (IN) FROM 0.0 TO 82.0 (FT BGS)
15.00 (IN) FROM 82.0 TO 565.0 (FT BGS)
12.75 (IN) FROM 565.0 TO 839.4 (FT BGS)
10.75 (IN) FROM 839.4 TO 1035.2 (FT BGS)

SURFACE COMPLETION (proposed)
PROTECTIVE CASING
TYPE STEEL SIZE (IN) 16
PROTECTIVE POSTS INSTALLED YES
SURFACE SEAL AND PAD
CHECK FOR SETTLEMENT YES
PAD MATERIAL CONCRETE
REINFORCED WIRE MESH
PAD DIMENSIONS (FT) 10 (L) 10 (W) 0.5 (H)

SURFACE SEAL 2.0 TO 59.2 (FT BGS)

BENTONITE SEAL 59.2 TO 565.0 (FT BGS)

CEMENT SEAL 565.0 TO 577.9 (FT BGS)

BENTONITE SEAL 577.9 TO 851.6 (FT BGS)

FINE SAND COLLAR 851.6 TO 855.2 (FT BGS)

FILTER PACK SCREENED INTERVAL 855.2 TO 891.3 (FT BGS)
860.0 TO 880.6 (FT BGS)

BENTONITE SEAL 891.3 TO 988.4 (FT BGS)

FINE SAND COLLAR 988.4 TO 990.0 (FT BGS)

FILTER PACK SCREENED INTERVAL 990.0 TO 1020.7 (FT BGS)
994.4 TO 1015.4 (FT BGS)

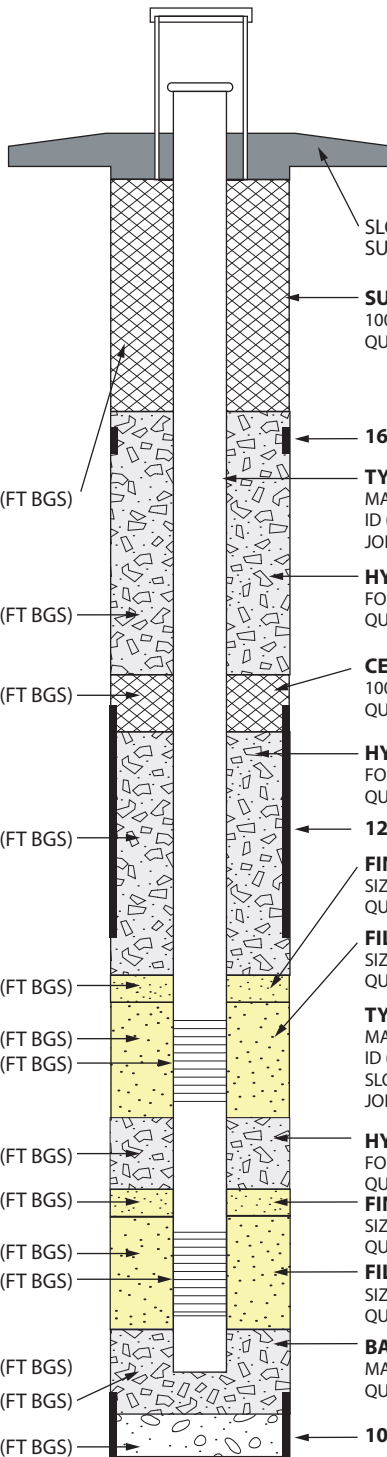
BOTTOM OF CASING 1021.0 (FT BGS)

BACKFILL MATERIAL 1020.7 TO 1028.6 (FT BGS)

SLOUGH 1028.6 TO 1035.2 (FT BGS)

BOTTOM OF BORING 1035.2 (FT BGS)

LOCKING COVER



ELEVATIONS (FT AMSL)
WELL CASING TBD
PROTECTIVE CASING TBD
GROUND SURFACE TBD
MARKER (BRASS CAP) TBD

WELL COMPLETION BEGAN
DATE 07/29/10 TIME 0750
WELL COMPLETION FINISHED
DATE 08/25/10 TIME 1635

SLOPED CONCRETE PAD/
SURFACE SEAL

SURFACE SEAL
100% (WT%) PORTLAND CEMENT
QUANTITY USED 93.6 FT³ CALC 78.3 FT³

16-IN CSG 77.0 TO 82.0 (FT BGS)

TYPE OF CASING
MATERIAL PASSIVATED A304 STAINLESS STEEL
ID (IN) 5.00 OD (IN) 5.56 (5⁵/₁₆)
JOINT TYPE THREADED/COUPLED

HYDRATED BENTONITE SEAL
FORM 3/8-IN CHIP
QUANTITY USED (DRY) 469.7 FT³ CALC 551.6 FT³

CEMENT SEAL
100% (WT%) PORTLAND CEMENT
QUANTITY USED 13.4 FT³ CALC 8.4 FT³

HYDRATED BENTONITE SEAL
FORM 3/8-IN CHIP
QUANTITY USED (DRY) 139.4 FT³ CALC 167.9 FT³

12-IN CSG 570.0 TO 839.4 (FT BGS)

FINE SAND COLLAR
SIZE/TYPE 20/40 SILICA
QUANTITY USED 1.0 FT³ CALC 1.6 FT³

FILTER PACK SAND
SIZE/TYPE 10/20 SILICA
QUANTITY USED 18.1 FT³ CAL 17.0 FT³

TYPE OF SCREEN(S)
MATERIAL A304 STAINLESS STEEL
ID (IN) 5.00 OD (IN) 5.88 (5⁷/₈)
SLOT SIZE (IN) 0.020
JOINT TYPE THREADED/COUPLED

HYDRATED BENTONITE SEAL
FORM 3/8-IN CHIP
QUANTITY USED (DRY) 27.5 FT³ CAL 45.6 FT³

FINE SAND COLLAR
SIZE/TYPE 20/40 SILICA
QUANTITY USED 1.0 FT³ CALC 0.8 FT³

FILTER PACK SAND
SIZE/TYPE 10/20 SILICA
QUANTITY USED 17.5 FT³ CALC 14.4 FT³

BACKFILL MATERIAL
MATERIAL 3/8-IN BENTONITE CHIP
QUANTITY USED (DRY) 4.0 FT³ CALC 4.5 FT³

10-IN CSG 1025.0 TO 1035.2 (FT BGS)

STAINLESS-STEEL CENTRALIZERS
USED YES AT 2.0 ft ABOVE AND
BELOW WELL SCREENS

TerranearPMC

Monitoring Well R-55 As-Built Well Diagram

Cañada del Buey (TA-54)
Los Alamos National Laboratory
Los Alamos, New Mexico

Fact Sheet

NOT TO SCALE

Drafted By: TPMC
Project Number: 80007
Date: September 20, 2010
File Name: R-55_2-ScreenProposedWellDesign