

TOTAL LENGTH  
OF CASING AND SCREEN (FT) 1254.4

DEPTH TO WATER  
FOLLOWING INSTALLATION (FT BGS) 1101.3 (05/04/11)

DIAMETER OF BOREHOLE  
18.75 (IN) FROM 0 TO 145.0 (FT BGS)  
20.00 (IN) FROM 145.0 TO 612.2 (FT BGS)  
15.88 (IN) FROM 612.2 TO 896.0 (FT BGS)  
13.50 (IN) FROM 896.0 TO 1266.4 (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** 3.0 TO 59.9 (FT BGS)

**BENTONITE SEAL** 59.9 TO 1116.9 (FT BGS)

**FINE SAND COLLAR** 1116.9 TO 1119.4 (FT BGS)

**FILTER PACK** 1119.4 TO 1140.4 (FT BGS)

**SCREENED INTERVAL** 1125.0 TO 1135.0 (FT BGS)

**BENTONITE SEAL** 1140.4 TO 1213.6 (FT BGS)

**FINE SAND COLLAR** 1213.6 TO 1215.5 (FT BGS)

**FILTER PACK** 1215.5 TO 1246.2 (FT BGS)

**SCREENED INTERVAL** 1220.4 TO 1241.0 (FT BGS)

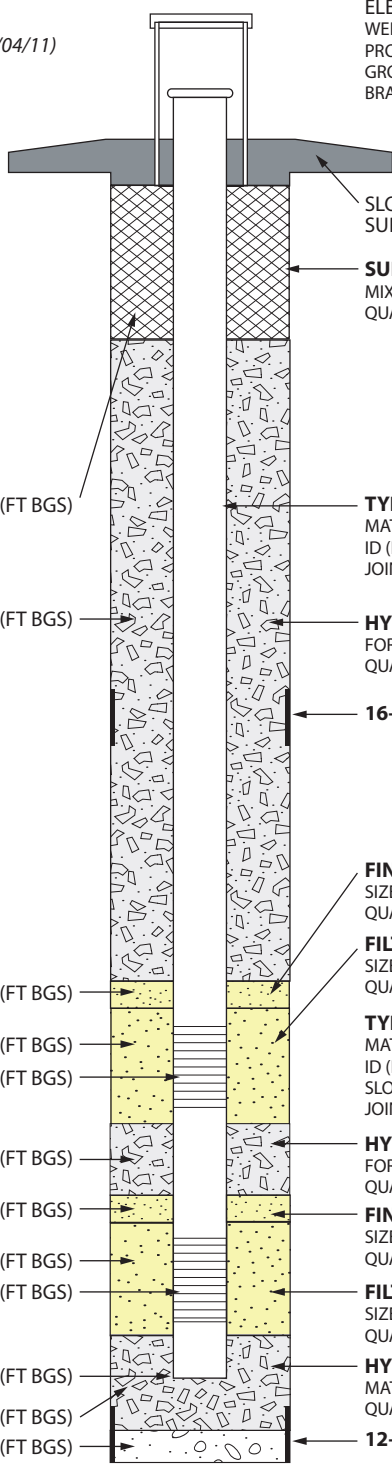
**BOTTOM OF CASING** 1251.6 (FT BGS)

**BACKFILL** 1246.2 TO 1263.6 (FT BGS)

**SLOUGH** 1263.6 TO 1266.4 (FT BGS)

**BOTTOM OF BORING** 1266.4 (FT BGS)

LOCKING COVER



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

SLOPED CONCRETE PAD/  
SURFACE SEAL

**SURFACE SEAL**  
MIX (WT%) PORTLAND CEMENT 100 BENTONITE 0  
QUANTITY USED 132.0 FT<sup>3</sup> CALC 91.2 FT<sup>3</sup>

**TYPE OF CASING**  
MATERIAL PASSIVATED A304 STAINLESS STEEL  
ID (IN) 5.00 OD (IN) 5.56 (5%)  
JOINT TYPE THREADED/COUPLED

**HYDRATED BENTONITE SEAL**  
FORM 3/8-IN BENTONITE CHIP  
QUANTITY USED 1472.7 FT<sup>3</sup> CALC 1557.2 FT<sup>3</sup>

**16-IN CSG/SHOE** 600.0 TO 612.2 (FT BGS)

**FINE SAND COLLAR**  
SIZE/TYPE 20/40 SILICA  
QUANTITY USED 2.0 FT<sup>3</sup> CALC 2.2 FT<sup>3</sup>

**FILTER PACK SAND**  
SIZE/TYPE 10/20 SILICA  
QUANTITY USED 24.0 FT<sup>3</sup> CALC 18.6 FT<sup>3</sup>

**TYPE OF SCREEN(S)**  
MATERIAL A304 STAINLESS STEEL  
ID (IN) 5.00 OD (IN) 5.88 (5%)  
SLOT SIZE (IN) 0.020  
JOINT TYPE THREADED/COUPLED

**HYDRATED BENTONITE SEAL**  
FORM 3/8-IN BENTONITE CHIP  
QUANTITY USED 60.3 FT<sup>3</sup> CALC 65.2 FT<sup>3</sup>

**FINE SAND COLLAR**  
SIZE/TYPE 20/40 SILICA  
QUANTITY USED 3.0 FT<sup>3</sup> CALC 1.7 FT<sup>3</sup>

**FILTER PACK SAND**  
SIZE/TYPE 10/20 SILICA  
QUANTITY USED 37.0 FT<sup>3</sup> CALC 27.3 FT<sup>3</sup>

**HYDRATED BENTONITE BACKFILL**  
MATERIAL 3/8-IN BENTONITE CHIP  
QUANTITY USED 6.7 FT<sup>3</sup> CALC 17.6 FT<sup>3</sup>

**12-IN CSG/SHOE** 1258.8 TO 1266.4 (FT BGS)

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

**WELL COMPLETION BEGAN**  
DATE 04/09/11 TIME 1330h  
**WELL COMPLETION FINISHED**  
DATE 05/03/11 TIME 1300h

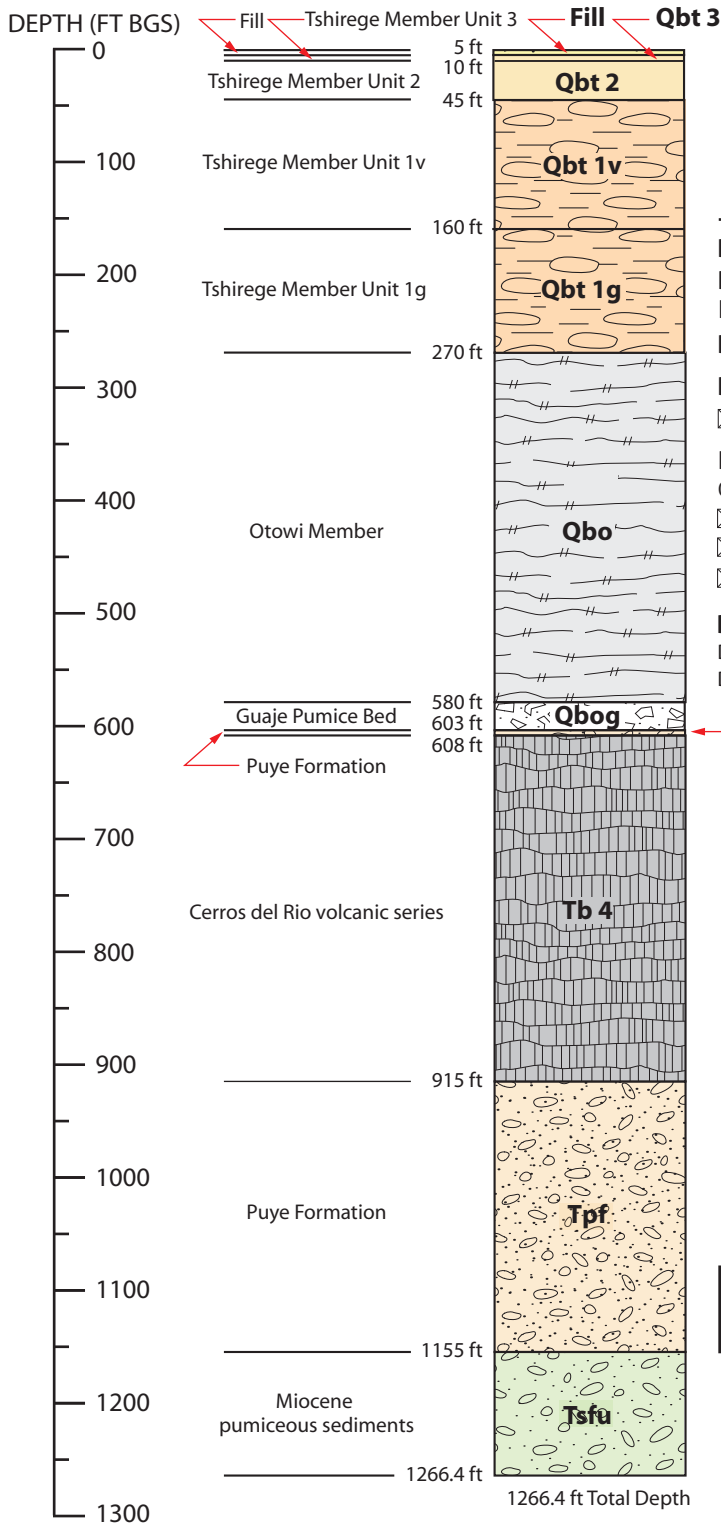


**Well R-61 As-Built Well Construction Diagram**  
Technical Area 5 (TA-05)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

**Fact Sheet**  
NOT TO SCALE

Drafted By: TPMC  
Project Number: 88200

Date: May 4, 2011  
File Name: R-61\_AsBuiltDiagram\_FactSheet



### DRILLING INFORMATION

#### DRILLING COMPANY/PERSONNEL:

Boart Longyear  
D. McCurdy, M. Cross

**DRILL RIG:** Foremost DR-24HD

#### DRILLING METHOD:

DUAL ROTARY

#### DRILLING FLUID TYPE:

0-1003 ft bgs                      1003-1265 ft bgs

WATER

WATER

AIR

AIR

AQF-2 FOAMING AGENT

#### DRILLING START/FINISH:

DATE: 03/12/2011    TIME: 0715

DATE: 04/04/2011    TIME: 1420

▼ 1100.7 ft bgs (04/05/11)  
(pre well installation)

TerranearPMC

Drafted By: TPMC  
Project Number: 88200

Date: May 18, 2011  
Filename: R61\_Lithology\_FactSheet

WELL SUMMARY DATA SHEET  
R-61 Borehole Stratigraphy  
Technical Area 05 (TA-05)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

Fact  
Sheet

NOT TO SCALE