

DEPTH (FT BGS)

0
100
200
300
400
500
600
700
800
900
1000
1100
1200

Tshirege Member of the
Bandelier Tuff

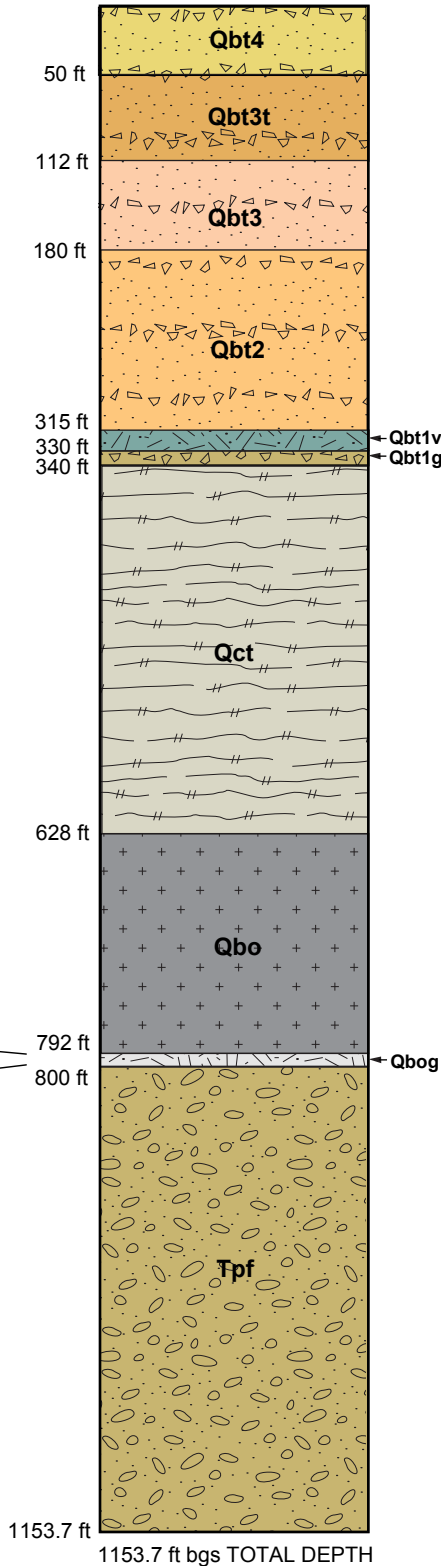
Cerro Toledo Interval

Otowi Member of the
Bandelier Tuff

Guaje Pumice Bed

Puye Formation

STRATIGRAPHY



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL:

Layne Christensen Company
E. Applegarth, K. Keller, R. Treptow

DRILL RIG: Schramm T130XD

DRILLING METHOD:

☒ AIR ROTARY
☒ DUAL ROTARY

DRILLING FLUID TYPE

0.0 - 603.0 ft bgs	603.0 - 1153.7 ft bgs
<input checked="" type="checkbox"/> WATER	<input checked="" type="checkbox"/> WATER
<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> AIR
<input checked="" type="checkbox"/> AQF-2 FOAM™	

DRILLING START/FINISH:

DATE: 08/04/10 TIME: 1225
DATE: 08/12/10 TIME: 1651

EP2010-0411



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Project Number: 10005.004.30

Date: September 14, 2010
Filename: CdV-16-4ip_Lithology.ai

CdV-16-4ip WELL SUMMARY DATA SHEET

Borehole Stratigraphy

TA-16

LA-UR-10-6159

Los Alamos National Laboratory
Los Alamos, New Mexico

Fig.
5.1-1

NOT TO SCALE

TOTAL LENGTHCASING AND SCREEN (ft) 1149.0**DEPTH TO WATER (UPPER SCREEN)**FOLLOWING INSTALLATION (ft bgs) 807.5 (08/27/10)**DIAMETER OF BOREHOLE**32.0 (in.) FROM 0.0 TO 20.0 (ft bgs)24.0 (in.) FROM 20.0 TO 59.3 (ft bgs)17.0 (in.) FROM 59.3 TO 625.4 (ft bgs)11.6 (in.) FROM 625.4 TO 1153.7 (ft bgs)**24-in. SURFACE CASING** 0.0 TO 59.3 (ft bgs)**SURFACE SEAL** 3.0 TO 59.3 (ft bgs)**SURFACE COMPLETION INFORMATION**

PROTECTIVE CASING

TYPE STEEL SIZE 16.0 (in.)PAD AND PROTECTIVE POSTS INSTALLED TBD

SURFACE SEAL AND PAD

CHECK FOR SETTLEMENT TBDPAD MATERIAL REINFORCED CONCRETE ~3500 psiREINFORCED REBAR WITH 1/8-in. WIRE MESHPAD DIMENSIONS (ft) 10.0 (L) 10.0 (W) 0.5 (H)**BENTONITE SEAL** 59.3 TO 805.7 (ft bgs)**FINE SAND COLLAR** 805.7 TO 809.8 (ft bgs)**FILTER PACK** 809.8 TO 884.9 (ft bgs)**SCREENED INTERVAL** 815.6 TO 879.2 (ft bgs)**STAINLESS STEEL CENTRALIZERS USED**☒ YES UPPER SCREEN AT 813 & 882 (ft bgs)LOWER SCREEN AT 1108 & 1143 (ft bgs)**BENTONITE SEAL** 884.9 TO 1098.3 (ft bgs)**FINE SAND COLLAR** 1098.3 TO 1105.3 (ft bgs)**FILTER PACK** 1105.3 TO 1145.1 (ft bgs)**SCREENED INTERVAL** 1110.0 TO 1141.1 (ft bgs)**BOTTOM OF WELL CASING** 1146.0 (ft bgs)**BENTONITE BOTTOM SEAL** 1145.1 TO 1150.5 (ft bgs)**SLOUGH** 1150.5 TO 1153.7 (ft bgs)**BOTTOM OF BORING** 1153.7 (ft bgs)**WELL DEVELOPMENT BEGAN**

Upper Lower

Date 08/27/10 TBDTime 0845 TBD**WELL DEVELOPMENT FINISHED**Date 08/31/10 TBDTime 1305 TBD**DEVELOPMENT METHOD**☒ Swabbing ☒ Bailing☒ Pumping

Total Purge Volume

Lower TBDUpper 11,145 gal.**PARAMETER MEASUREMENTS**

Upper Lower

pH 6.9 TBDTemperature (°C) 12.0 TBD

Specific

Conductance (µS/cm) 127.0 TBDTurbidity (NTU) 9.4 TBD**WELL COMPLETION BEGAN**Date 08/17/10 Time 2245**WELL COMPLETION FINISHED**Date 08/25/10 Time 1158**ELEVATIONS (ft amsl)**WELL CASING TBDPROTECTIVE CASING TBDGROUND SURFACE TBDMONUMENT MARKER TBD

LOCKING COVER

SLOPED CONCRETE
SURFACE COMPLETION PAD**SURFACE SEAL**MIX (WT%) CEMENT 100QUANTITY USED 94.8 ft³ CALCULATED 167.8 ft³**HYDRATED 0.375-in. BENTONITE CHIP SEAL**QUANTITY USED 882.9 ft³ CALCULATED 898.6 ft³**TYPE OF CASING**MATERIAL 304 PASSIVATED STAINLESS STEELID (in.) 5.0 OD (in.) 5.6JOINT TYPE THREADED & COUPLED**HYDRATED 0.375-in. BENTONITE CHIP SEAL**QUANTITY USED 507.2 ft³ CALCULATED 536.6 ft³**FINE SAND COLLAR**SIZE/TYPE 20/40 SILICAQUANTITY USED 4.5 ft³ CALCULATED 2.4 ft³**FILTER PACK**SIZE/TYPE 10/20 SILICAQUANTITY USED 71.0 ft³ CALCULATED 43.0 ft³**TYPE OF SCREEN**MATERIAL 304 PASSIVATED STAINLESS STEELID (in.) 5.0 OD (in.) 5.6SLOT SIZE (in.) 0.020JOINT TYPE THREADED & COUPLED**HYDRATED 0.375-in. BENTONITE CHIP SEAL**QUANTITY USED 123.7 ft³ CALCULATED 143.0 ft³**FINE SAND COLLAR**SIZE/TYPE 20/40 SILICAQUANTITY USED 4.5 ft³ CALCULATED 4.1 ft³**FILTER PACK**SIZE/TYPE 10/20 SILICAQUANTITY USED 25.5 ft³ CALCULATED 23.1 ft³**HYDRATED 0.375-in. BENTONITE CHIP SEAL**QUANTITY USED 4.0 ft³ CALCULATED 3.9 ft³

BP2010-0411

**CdV-16-4ip WELL CONSTRUCTION DIAGRAM (AS BUILT)**

TA-16

LA-UR-10-6159

Los Alamos National Laboratory

Los Alamos, New Mexico

**Fig.
7.2-1**

NOT TO SCALE

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