

TOTAL LENGTH
CASING AND SCREEN (ft) 1194.3

DEPTH TO WATER
FOLLOWING INSTALLATION (ft bgs) 1149.4 (03/04/2010)

DIAMETER OF BOREHOLE
24.0 (in) FROM 0 TO 52.4 (ft bgs)
17.5 (in) FROM 52.4 TO 1060.0 (ft bgs)
14.3 (in) FROM 1060.0 TO 1195.0 (ft bgs)
11.6 (in) FROM 1195.0 TO 1248.0 (ft bgs)

SURFACE SEAL 0.0 TO 74.0 (ft bgs)

SURFACE COMPLETION INFORMATION
PROTECTIVE CASING
TYPE STEEL SIZE 16.75 (in) OD
PAD AND PROTECTIVE POSTS INSTALLED TBD
SURFACE SEAL AND PAD
CHECK FOR SETTLEMENT TBD
PAD MATERIAL REINFORCED CONCRETE ~3000 psi
REINFORCED WITH REBAR WITH 1/8-in WIRE MESH
PAD DIMENSIONS (ft) 10.0 (L) 10.0 (W) 0.5 (H)

UPPER BENTONITE SEAL 74.0 TO 1162.4 (ft bgs)

STATIC WATER LEVEL POST INSTALLATION 1149.4 (ft bgs)

FINE SAND COLLAR 1162.4 TO 1165.2 (ft bgs)

SCREENED INTERVAL 1170.0 TO 1180.0 (ft bgs)

FILTER PACK 1165.2 TO 1184.8 (ft bgs)

BOTTOM BENTONITE SEAL 1184.8 TO 1202.1 (ft bgs)

BOTTOM OF WELL CASING 1191.8 (ft bgs)

BOREHOLE FILL 1202.1 TO 1247.3 (ft bgs)

STAINLESS STEEL CENTRALIZERS USED
 YES AT 1168.9 & 1182.4 (ft bgs)

SLOUGH 1247.3 TO 1248.0 (ft bgs)

BOTTOM OF BORING 1248.0 (ft bgs)

WELL DEVELOPMENT BEGAN
Date 03-16-10 Time 1430
WELL DEVELOPMENT FINISHED
Date 03-25-10 Time 0800

DEVELOPMENT METHOD
 Swabbing Bailing
 Pumping
Total Purge Volume 15,134.8 gal

PARAMETER MEASUREMENTS
pH 9.42
Temperature (°C) 13.82
Specific Conductance (µS/cm) 147
Turbidity (NTU) 4.27

WELL COMPLETION BEGAN
Date 02-28-10 Time 0016
WELL COMPLETION FINISHED
Date 03-12-10 Time 1157

ELEVATIONS (ft amsl)
WELL CASING TBD
PROTECTIVE CASING TBD
GROUND SURFACE TBD
MONUMENT MARKER TBD

SLOPED CONCRETE SURFACE COMPLETION PAD

SURFACE SEAL
MIX (WT%) CEMENT 98 IDP-381 2
QUANTITY USED 137.2 ft³
CALCULATED VOLUME 181.7 ft³

HYDRATED 0.375-in BENTONITE CHIP SEAL
QUANTITY USED 1427.4 ft³
CALCULATED VOLUME 1575.0 ft³

TYPE OF WELL CASING
MATERIAL PASSIVATED A304 STAINLESS STEEL
ID (in) 5.047 OD (in) 5.563
JOINT TYPE THREADED AND COUPLED

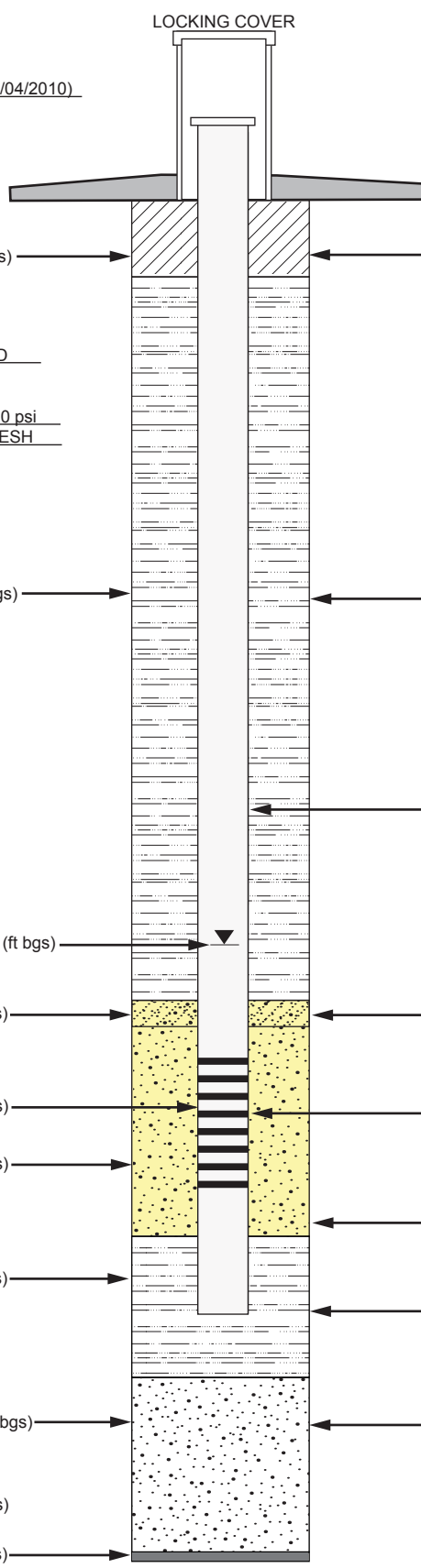
FINE SAND COLLAR
SIZE/TYPE 20/40 SILICA
QUANTITY USED 2.0 ft³
CALCULATED VOLUME 2.6 ft³

TYPE OF SCREEN(S)
MATERIAL A304 STAINLESS STEEL
ID (in) 5.047 OD (in) 5.563
SLOT SIZE 0.020
JOINT TYPE THREADED AND COUPLED

FILTER PACK SAND
SIZE/TYPE 10/20 SILICA
QUANTITY USED 21.0 ft³
CALCULATED VOLUME 18.4 ft³

HYDRATED 0.375-in BENTONITE CHIP SEAL
QUANTITY USED 15.2 ft³
CALCULATED VOLUME 15.4 ft³

CLEAN SILICA SAND
QUANTITY USED 35.0 ft³
CALCULATED VOLUME 33.5 ft³



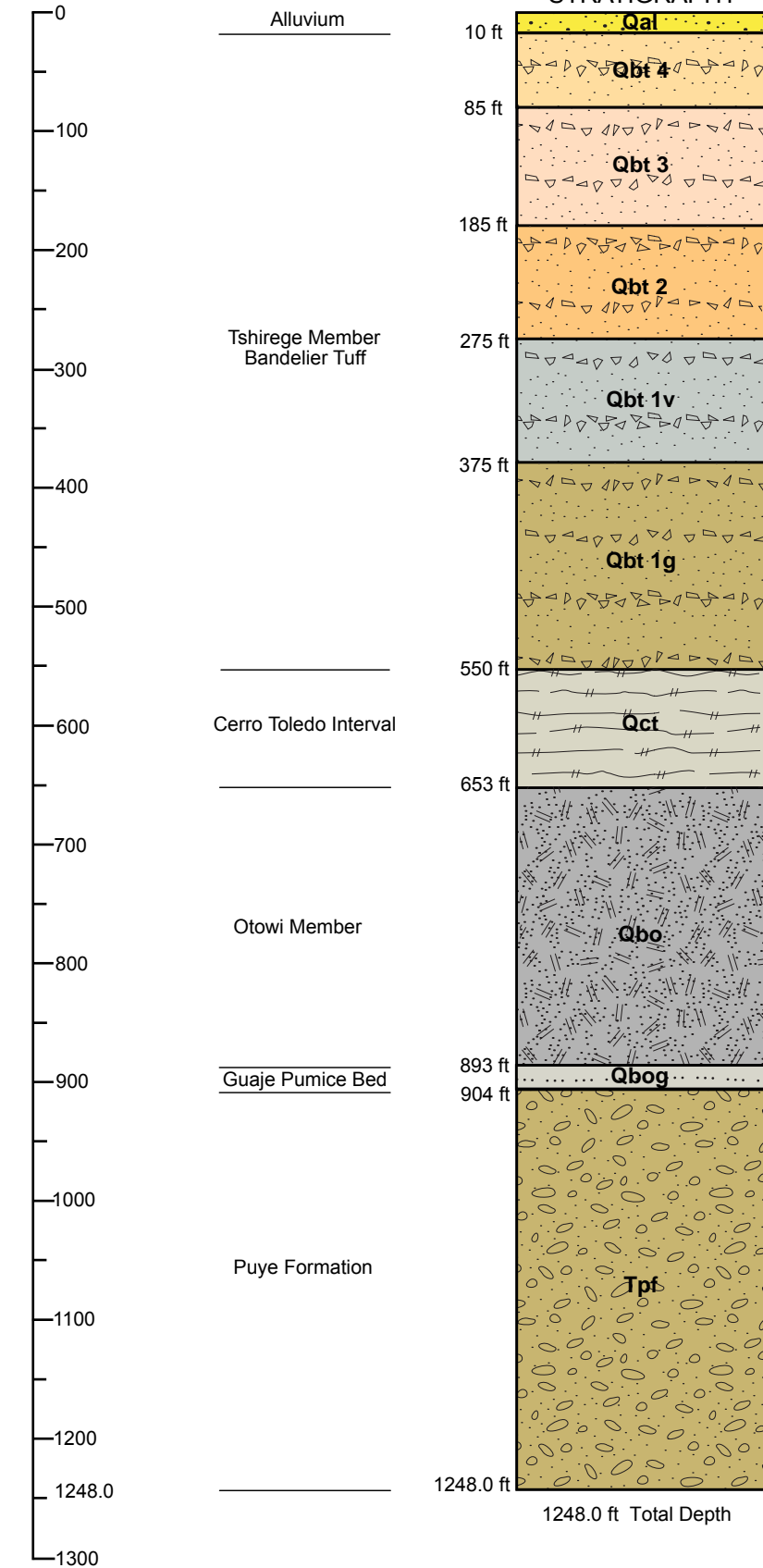
R- 29 WELL CONSTRUCTION DIAGRAM (AS BUILT)
TA-49
April 2010

Los Alamos National Laboratory
Los Alamos, New Mexico

FACT SHEET
NOT TO SCALE

Depth (ft bgs)

STRATIGRAPHY



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL:

Layne Christensen Company
H. Waddell, R. Wall, K. Keller

DRILL RIG: Schramm T130XD

DRILLING METHOD:

- AIR ROTARY
- DUAL ROTARY

DRILLING FLUID TYPE

- | | |
|---|---|
| 0.0 - 1047.0 ft bgs | 1047.0 - 1248.0 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: 02/12/10 TIME: 0800
DATE: 02/25/10 TIME: 1415

▼ 1151.5 ft bgs (02/17/10)
(prior to well installation)

1248.0 ft Total Depth