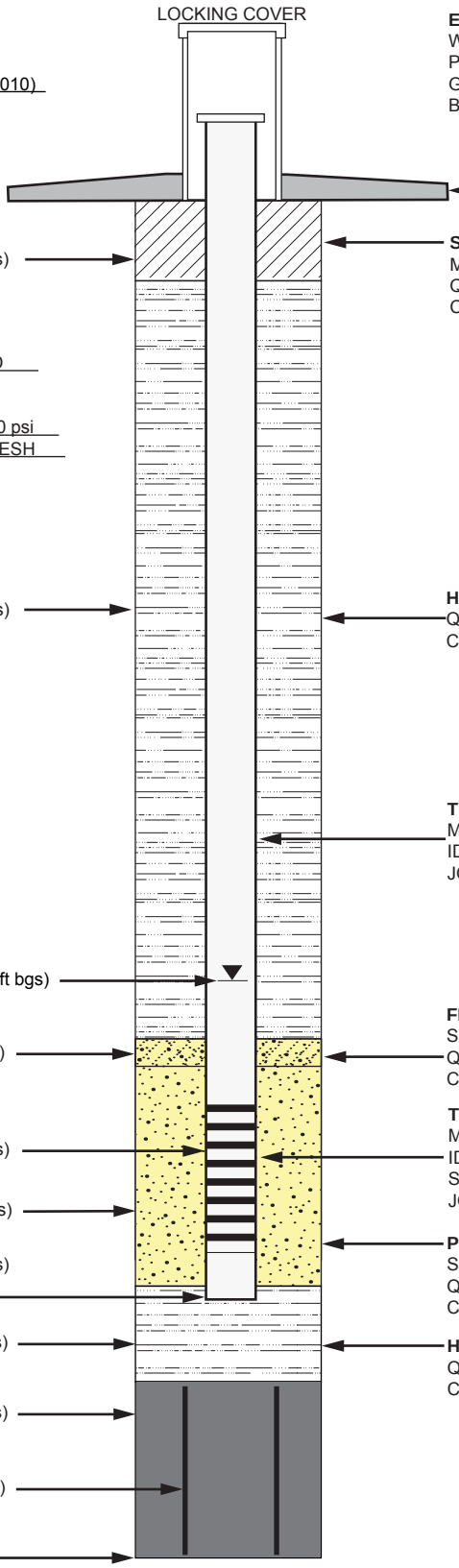
TOTAL LENGTH
CASING AND SCREEN (ft) 1009.3

DEPTH TO WATER
FOLLOWING INSTALLATION (ft bgs) 652.9 (6/3/2010)

DIAMETER OF BOREHOLE
23.0 (in.) FROM 0 TO 53.3 (ft bgs)
22.0 (in.) FROM 53.3 TO 626.9 (ft bgs)
17.0 (in.) FROM 626.9 TO 764.3 (ft bgs)
14.0 (in.) FROM 764.3 TO 1077.7 (ft bgs)

SURFACE SEAL 0.0 TO 73.5 (ft bgs)

SURFACE COMPLETION INFORMATION
PROTECTIVE CASING
TYPE STEEL SIZE 16.0 (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)



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

SLOPED CONCRETE SURFACE COMPLETION PAD

SURFACE SEAL
MIX (WT%) CEMENT 100
QUANTITY USED 160.7 ft^3
CALCULATED VOLUME 190.1 ft^3

BENTONITE SEAL 73.5 TO 961.6 (ft bgs)

HYDRATED 0.375-in. BENTONITE CHIP SEAL
QUANTITY USED 1968.2 ft^3
CALCULATED VOLUME 1627.7 ft^3

TYPE OF WELL CASING
MATERIAL PASSIVATED 304 STAINLESS STEEL
ID (in.) 5.047 OD (in.) 5.563
JOINT TYPE THREADED AND COUPLED

STATIC WATER LEVEL POST INSTALLATION 652.9 (ft bgs)

FINE SAND COLLAR 961.6 TO 967.8 (ft bgs)

FINE TRANSITION SAND COLLAR
SIZE/TYPE 20/40 SILICA
QUANTITY USED 31.6 ft^3
CALCULATED VOLUME 3.9 ft^3

SCREENED INTERVAL 974.5 TO 995.0 (ft bgs)

TYPE OF SCREEN(S)
MATERIAL 304 STAINLESS STEEL
ID (in.) 5.047 OD (in.) 5.563
SLOT SIZE 0.020
JOINT TYPE THREADED AND COUPLED

FILTER PACK 967.8 TO 1003.6 (ft bgs)

STAINLESS STEEL CENTRALIZERS USED
☒ YES AT 974.0 & 996.1 (ft bgs)

PRIMARY FILTER PACK SAND
SIZE/TYPE 10/20 SILICA
QUANTITY USED 46.2 ft^3
CALCULATED VOLUME 34.3 ft^3

BOTTOM OF WELL CASING 1006.8 (ft bgs)

BENTONITE BACKFILL 1003.6 TO 1022.5 (ft bgs)

HYDRATED 0.375-in. BENTONITE CHIP SEAL
QUANTITY USED 15.9 ft^3
CALCULATED VOLUME 14.9 ft^3

SLOUGH 1022.5 TO 1077.7 (ft bgs)

12-in. CASING AND SHOE 1024.0 TO 1077.6 (ft bgs)

BOTTOM OF BORING 1077.7 (ft bgs)

WELL DEVLOPMENT BEGAN
Date 06/26/10 Time 0800
WELL DEVELOPMENT FINISHED
Date TBD Time TBD

DEVELOPMENT METHOD
☒ Swabbing ☒ Bailing
☒ Pumping
Total Purge Volume TBD gal

PARAMETER MEASUREMENTS
(pending further development)
pH TBD
Temperature (°C) TBD
Specific Conductance (µS/cm) TBD
Turbidity (NTU) TBD

WELL COMPLETION BEGAN
Date 5/29/10 Time 2140
WELL COMPLETION FINISHED
Date 6/21/10 Time 1232

EP2010-0331

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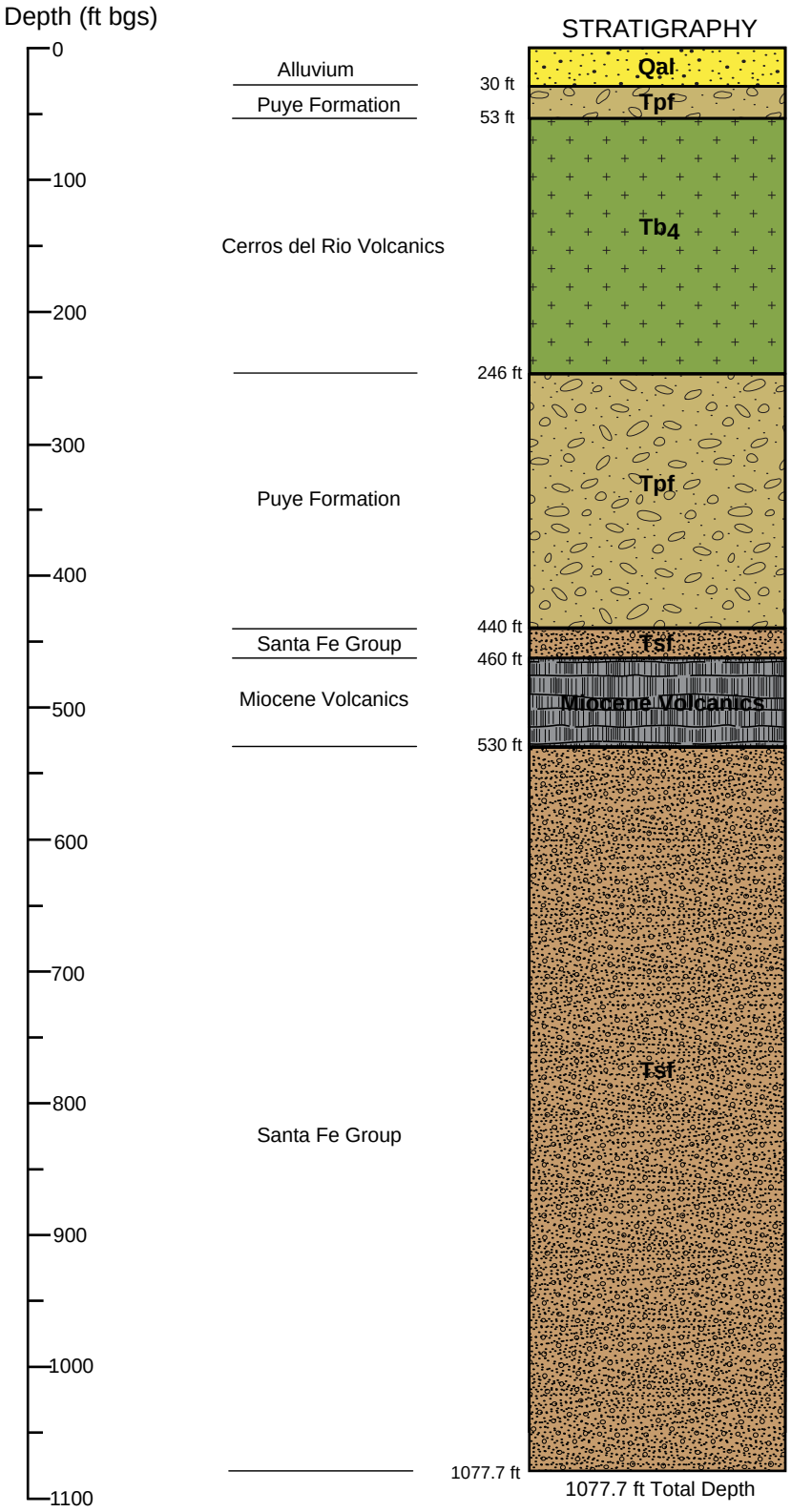
Drafted by: North Wind, Inc.
Project Number: 10005.004.19

Date: July 16, 2010
Filename: R3_WellSchematic(AsBuilt)071610.ai

R- 3 WELL CONSTRUCTION DIAGRAM (AS BUILT)

Pueblo Canyon (TA-74) *LA-UR-10-4930*
Los Alamos National Laboratory
Los Alamos, New Mexico

FACT SHEET
NOT TO SCALE



DRILLING INFORMATION

DRILLING COMPANY/PERSONNEL:
Layne Christensen Company
H. Waddell, R. Wall, K. Keller, E. Applegarth

DRILL RIG: Schramm T130XD

DRILLING METHOD:
☒ AIR ROTARY
☒ DUAL ROTARY
☒ REVERSE CIRCULATION

DRILLING FLUID TYPE

0.0 - 769.3 ft bgs	0.0 - 1077.7 ft bgs
☒ WATER	☒ WATER
☒ AIR	☒ AIR
☒ AQF-2 FOAM™	
☒ MUD	

(Bariod™ main components
QUIK GEL
QUIK TROL
EZ MUD)

DRILLING START/FINISH:
DATE: 04/22/10 TIME: 0345
DATE: 05/26/10 TIME: 1945

▼ 643.6 ft bgs (05/29/10)
(pre well installation)

EP2010-0331

North Wind

Drafted by: North Wind, Inc.
Project Number:10005.004.19

Date: July 16, 2010
Filename: R3_LithLog_1078_071610.ai

WELL SUMMARY DATA SHEET
R-3 Borehole Stratigraphy
Pueblo Canyon (TA-74)
Los Alamos National Laboratory
Los Alamos, New Mexico

LA-UR-10-4930

FACT SHEET

NOT TO SCALE