

**RECEIVED**

**Associate Director for ESH**  
Environment, Safety, and Health  
P.O. Box 1663, MS K491  
Los Alamos, New Mexico 87545  
505-667-4218/Fax 505-665-3811

**DEC 10 2014**

**NMED**  
**Hazardous Waste Bureau**

**National Nuclear Security Administration**  
Los Alamos Field Office, MS A316  
Environmental Projects Office  
Los Alamos, New Mexico 87544  
(505) 667-4255/FAX (505) 606-2132

Date: **DEC 10 2014**

Refer To: ADESH-14-129

LAUR: 14-28995

Locates Action No.: N/A

John Kieling, Bureau Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

**Subject: Submittal of the Fact Sheets for Chromium Corehole 1**

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the fact sheets for chromium corehole 1 (CrCH-1). This corehole is the first of six to be completed as part of the New Mexico Environment Department- (NMED-) approved Drilling Work Plan for Chromium Project Coreholes. The attached completion details reflect the corehole-specific NMED-approved work plan design.

If you have any questions, please contact Stephani Swickley at (505) 606-1628 (sfuller@lanl.gov) or Hai Shen at (505) 665-5046 (hai.shen@nnsa.doe.gov).

Sincerely,

Michael T. Brandt, DrPH, CIH, Associate Director  
Environment, Safety, and Health  
Los Alamos National Laboratory

Sincerely,

Peter Maggiore, Assistant Manager  
Environmental Projects Office  
Los Alamos Field Office

MB/PM/DM/SS:sm

Enclosures: Two hard copies with electronic files – Fact Sheets for CrCH-1

Cy: (w/enc.)

Hai Shen, DOE-NA-LA, MS A316  
Cheryl Rodriguez, DOE-NA-LA, MS A316  
Stephani Swickley, EP-CAP, MS M992  
Public Reading Room (EPRR)  
ADESH Records (electronic copy)

Cy: (Letter and CD and/or DVD)

Laurie King, EPA Region 6, Dallas, TX  
Steve Yanicak, NMED-DOE-OB, MS M894  
Vern Christensen, Yellow Jacket Drilling  
Ted Ball, EP-CAP, MS M992  
PRS Database

Cy: (w/o enc.)

Tom Skibitski, NMED-DOE-OB (date-stamped letter emailed)  
lasomailbox@nnsa.doe.gov  
Annette Russell, DOE-NA-LA (date-stamped letter emailed)  
David Rhodes, DOE-NA-LA (date-stamped letter emailed)  
Kimberly Davis Lebak, DOE-NA-LA (date-stamped letter emailed)  
Dave McInroy, EP-CAP (date-stamped letter emailed)  
Randy Erickson, ADEP (date-stamped letter emailed)  
Tony Grieggs, ADESH-ENV-CP (date-stamped letter emailed)  
Alison Dorries, ADESH-ENV-CP (date-stamped letter emailed)  
Michael Brandt, ADESH (date-stamped letter emailed)

TOTAL LENGTH  
OF CASING AND SCREEN (FT) 1141.6  
DEPTH TO WATER  
FOLLOWING INSTALLATION (FT BGS) 1118.0 (11/8/14)

DIAMETER OF BOREHOLE  
20.00 (IN) FROM 0.0 TO 60.0 (FT BGS)  
12.00 (IN) FROM 60.0 TO 585.0 (FT BGS)  
10.00 (IN) FROM 585.0 TO 905.0 (FT BGS)  
6.00 (IN) FROM 905.5 TO 1158.0 (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** 4.0 TO 61.0 (FT BGS)

**BENTONITE SEAL** 61.0 TO 1115.5 (FT BGS)

**FINE SAND COLLAR** 1115.5 TO 1117.5 (FT BGS)

**FILTER PACK** 1117.5 TO 1145.0 (FT BGS)

**SCREENED INTERVAL** 1122.9 TO 1132.9 (FT BGS)

**BOTTOM OF CASING** 1138.0 (FT BGS)

**SLOUGH** 1145.0 TO 1158.0 (FT BGS)

**BOTTOM OF BORING** 1158.0 (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

**16-IN CSG** 0 TO 60 (FT BGS)

**SURFACE SEAL**  
MIX (WT%) PORTLAND CEMENT 92 BENTONITE 8  
QUANTITY USED 79.0 FT<sup>3</sup> CALC 77.8 FT<sup>3</sup>

**TYPE OF CASING**  
MATERIAL PASSIVATED A304 STAINLESS STEEL  
ID (IN) 2.00  
JOINT TYPE THREADED

**12-IN CSG/SHOE** 580.0 TO 585.0 (FT BGS)

**HYDRATED BENTONITE SEAL**  
FORM 3/8-IN BENTONITE CHIP  
QUANTITY USED 743.4 FT<sup>3</sup> CALC 596.9 FT<sup>3</sup>

**10-IN CSG/SHOE** 866.0 TO 886.0 (FT BGS)

**TYPE OF SCREEN(S)**  
MATERIAL A304 STAINLESS STEEL  
ID (IN) 2.00  
SLOT SIZE (IN) 0.040  
JOINT TYPE THREADED

**FINE SAND COLLAR**  
SIZE/TYPE 20/40 SILICA  
QUANTITY USED 1.3 FT<sup>3</sup> CALC 0.3 FT<sup>3</sup>

**FILTER PACK SAND**  
SIZE/TYPE 10/20 SILICA  
QUANTITY USED 10.0 FT<sup>3</sup> CALC 4.8 FT<sup>3</sup>

**STAINLESS-STEEL CENTRALIZERS**  
USED YES  
ABOVE AND BELOW SCREEN AND  
EVERY 40 FT FROM SCREEN TO 102 FT BGS

**WELL COMPLETION BEGAN**  
DATE 10/25/14 TIME 1515h  
**WELL COMPLETION FINISHED**  
DATE 11/08/14 TIME 1900h

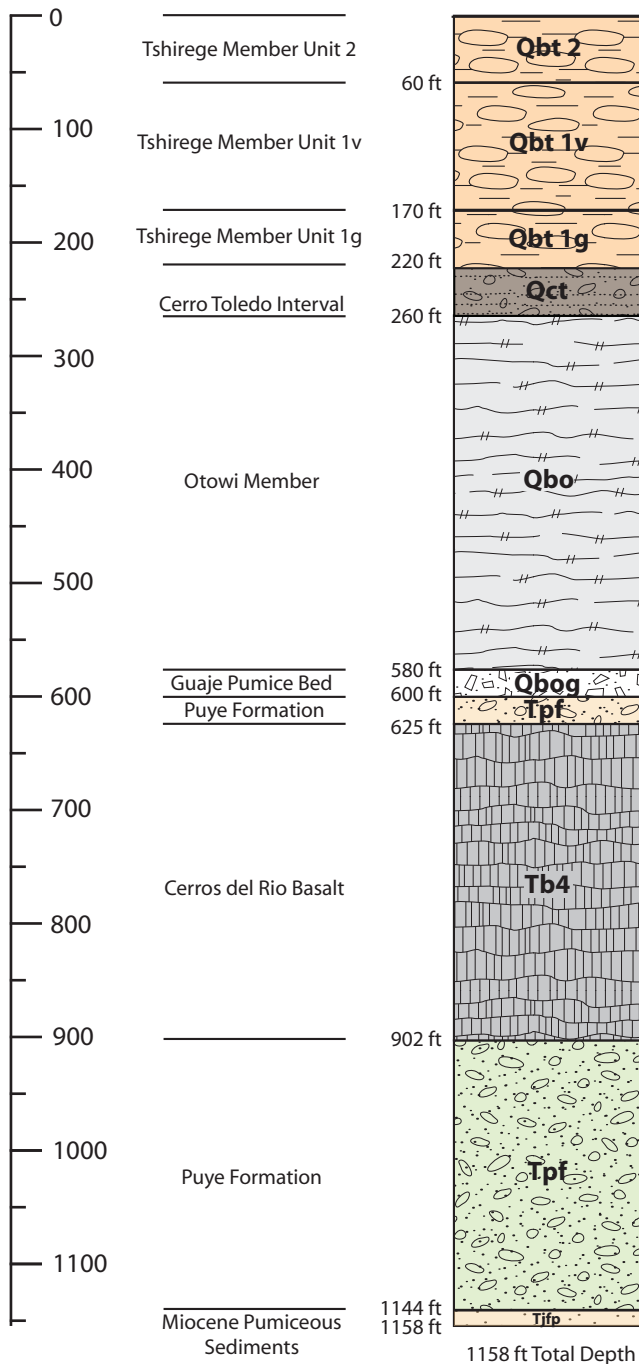


Drafted By: PTM  
Date: December 2, 2014  
File Name: CrCH-1\_AsBuiltDiagram\_FactSheet

**Well CrCH-1 As-Built Well Construction Diagram**  
Technical Area 05 (TA-05)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

**Fact Sheet**  
NOT TO SCALE

DEPTH (FT BGS)



**DRILLING INFORMATION**

**DRILLING COMPANY/PERSONNEL:**

Yellow Jacket Drilling  
A. Adams, A. Lamon, S. Walker, J. Saldana,  
S. Jorge, M. Williams, C. Hillman

**DRILL RIGS:**

0–944 ft bgs: Foremost DR-24HD  
944–1158 ft bgs: Terrasonics 150T

**DRILLING METHOD:**

- ☒ 0–944 ft bgs: DUAL ROTARY WITH CASING ADVANCE USING AIR AND WATER
- ☒ 944–1158 ft bgs: SONIC CORING WITH CASING ADVANCE

**DRILLING FLUID TYPE:**

- |   |   |
|---|---|
| 0–944 ft bgs  | 944–1158 ft bgs   |
| <input checked="" type="checkbox"/> WATER               | <input checked="" type="checkbox"/> NONE DURING CORING; |
| <input checked="" type="checkbox"/> AIR                 | WATER USED TO REMOVE                                    |
| <input checked="" type="checkbox"/> AQF-2 FOAMING AGENT | SLOUGH BETWEEN CORE RUNS                                |

**DRILLING START/FINISH:**

DATE: 08/19/2014  
DATE: 10/13/2014

▼ 1114 ft bgs (10/14/14)  
(in corehole prior to  
well installation)



Prepared By: GW and DB  
Date: December 2, 2014  
File Name: CrCH-1\_Lithology\_FactSheet

**Well Summary Data Sheet**  
**CrCH-1 Borehole Stratigraphy**  
Technical Area 05 (TA-05)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

**Fact Sheet**  
NOT TO SCALE