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Date: **AUG 11 2016**
Refer To: ADEM-16-5207
LAUR: 16-25990

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 CrIN-1

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the fact sheets for injection well CrIN-1. Injection well CrIN-1 was completed on July 14, 2016. CrIN-1 was installed under the December 2015 Drilling Work Plan for Chromium Plume Control Interim Measure and Plume Center Characterization Injection Wells CrIN-1 through CrIN-6, approved with modifications by the New Mexico Environment Department (NMED) on January 22, 2016. The well completion report for injection wells CrIN-1 through 6 will be submitted 150 days after the last well is NMED-complete.

If you have any questions, please contact Stephani Swickley at (505) 606-1628 (sfuller@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,

Bruce Robinson, Program Director
Environmental Remediation Program
Los Alamos National Laboratory

Sincerely,

David S. Rhodes, Director
Office of Quality and Regulatory Compliance
Environmental Management
Los Alamos Field Office



BR/DR/SS:sm

Enclosures: Two hard copies with electronic files – Fact Sheets for CrIN-1 (EP2016-0105)

Cy: (w/enc.)

Cheryl Rodriguez, DOE-EM-LA
Stephani Swickley, ADEM ER Program

Cy: (w/electronic enc.)

Laurie King, EPA Region 6, Dallas, TX
Raymond Martinez, San Ildefonso Pueblo
Dino Chavarria, Santa Clara Pueblo
Steve Yanicak, NMED-DOE-OB, MS M894
emla.docs@em.doe.gov
Steve White, ADEP ER Program (w/ MS Word files on CD)
Ted Ball, ADEP ER Program
Danny Katzman, ADEP ER Program
Public Reading Room (EPRR)
ADESH Records
PRS Database

Cy: (w/o enc./date-stamped letter emailed)

lasomailbox@nnsa.doe.gov
Peter Maggiore, DOE-NA-LA
Kimberly Davis Lebak, DOE-NA-LA
David Rhodes, DOE-EM-LA
Bruce Robinson, ADEM ER Program
Randy Erickson, ADEM
Jocelyn Buckley, ADESH-EPC-CP
Mike Saladen, ADESH-EPC-CP
John McCann, ADESH-EPC-DO
Michael Brandt, ADESH
William Mairson, PADOPS
Craig Leasure, PADOPS

TOTAL LENGTH
OF CASING AND SCREEN (FT) 958.1
DEPTH TO WATER
FOLLOWING INSTALLATION (FT BGS) 871.4 (07/17/16)

DIAMETER OF BOREHOLE
24.00 (IN) FROM 0 TO 43 (FT BGS)
18.00 (IN) FROM 43 TO 307 (FT BGS)
17.00 (IN) FROM 307 TO 637 (FT BGS)
15.00 (IN) FROM 637 TO 1040 (FT BGS)

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

SURFACE SEAL 10.0 TO 100.0 (FT BGS)

20-IN CSG 0 TO 43 (FT BGS)

SURFACE SEAL
MIX (WT%) PORTLAND CEMENT 100
QUANTITY USED 193.3 FT³ CALC 136.2 FT³

BENTONITE SEAL 100.0 TO 783.0 (FT BGS)

TYPE OF CASING
MATERIAL PASSIVATED A304 STAINLESS STEEL
ID (IN) 8.00 OD (IN) 8.625 (8%)
JOINT TYPE WELDED

HYDRATED BENTONITE SEAL
FORM 3/8-IN BENTONITE CHIPS
QUANTITY USED 706.9 FT³ CALC 787.7 FT³

FINE SAND COLLAR 783.0 TO 785.0 (FT BGS)

TYPE OF SCREEN(S)
MATERIAL A304 STAINLESS STEEL
ID (IN) 8.00 OD (IN) 8.625
SLOT SIZE (IN) 0.040
JOINT TYPE WELDED

FILTER PACK 785.0 TO 940.0 (FT BGS)

FINE SAND COLLAR
SIZE/TYPE 20/40 SILICA
QUANTITY USED 2.5 FT³ CALC 1.7 FT³

SCREENED INTERVAL 883.9 TO 933.9 (FT BGS)

FILTER PACK SAND
SIZE/TYPE 10/20 SILICA
QUANTITY USED 244.0 FT³ CALC 127.2 FT³

BOTTOM OF CASING 955.5 (FT BGS)

HYDRATED BENTONITE BACKFILL
MATERIAL 3/8-IN BENTONITE CHIPS
QUANTITY USED 95.8 FT³ CALC 75.9 FT³

BENTONITE 940.0 TO 1007.0 (FT BGS)

SLOUGH 1007.0 TO 1040.0 (FT BGS)
BOTTOM OF BORING 1040.0 (FT BGS)

15-IN CSG AND SHOE 980 TO 1040 (FT BGS)

STAINLESS-STEEL CENTRALIZERS
USED 4 ea. AT 5 FT
ABOVE AND BELOW
WELL SCREEN

WELL COMPLETION BEGAN
DATE 06/23/16 TIME 0230h
WELL COMPLETION FINISHED
DATE 07/15/16 TIME 0830h

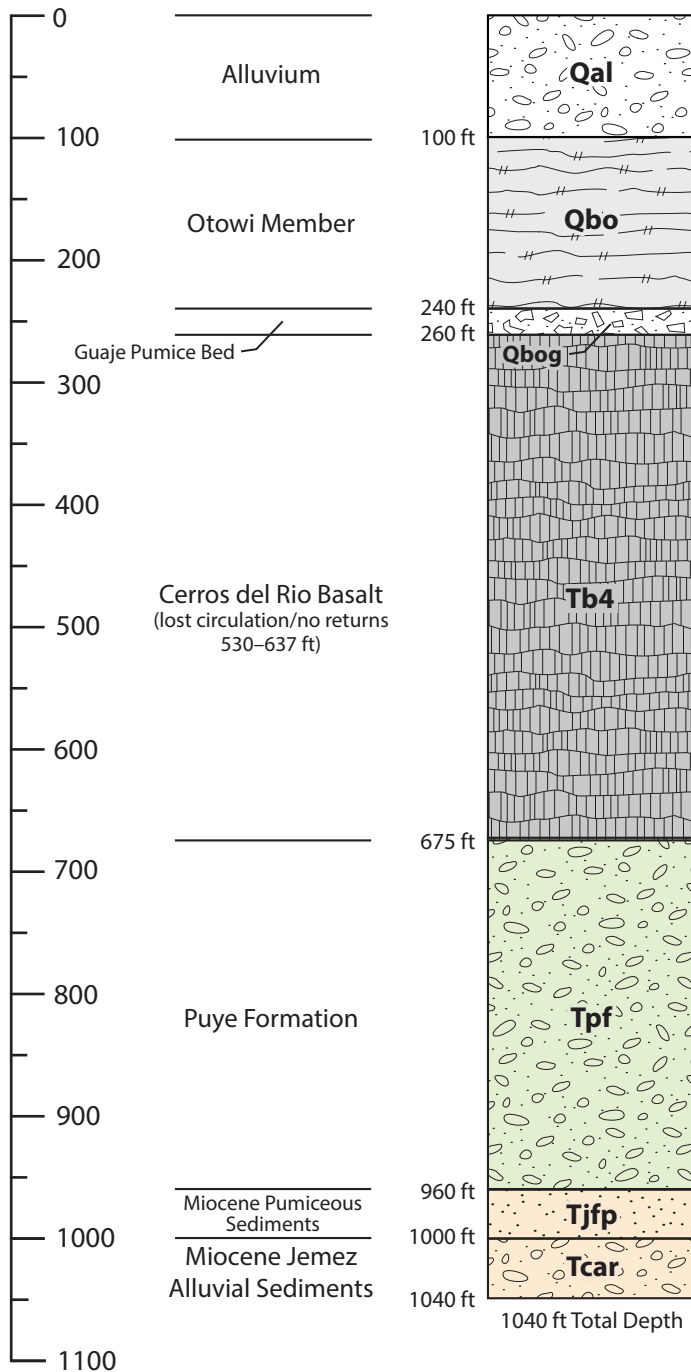


Prepared by: PTM
Date: July 28, 2016
File Name: CrIN-1_AsBuiltDiagram_FactSheet

Well CrIN-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. Lamon, S. Jorge, E. Johnson

DRILL RIG:

Foremost DR-24HD

DRILLING METHOD:

☒ 0–1040 ft bgs: DUAL ROTARY WITH CASING
ADVANCE USING AIR, WATER, AND FOAM

DRILLING FLUID TYPE:

0–1040 ft bgs
AIR, WATER, AQF-2 FOAMING AGENT

DRILLING START/FINISH:

DATE: 05/25/16
DATE: 06/21/16

▼ 879.0 ft bgs (06/21/16)
(prior to well installation)



Prepared by: PTM
Date: July 28, 2016
File Name: CrIN-1_Lithology_FactSheet

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

**Fact
Sheet**
NOT TO SCALE