

**Associate Director for ESH**

Environment, Safety, and Health  
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**Environmental Management**

Los Alamos Field Office  
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(505) 665-5658/FAX (505) 606-2132

Date: JUN 27 2016

Refer To: ADESH-16-085

LAUR: 16-24355

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-4**

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the Fact Sheets for injection well CrIN-4. Injection Well CrIN-4 was completed on June 4, 2016. Injection well CrIN-4 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) 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-4 (EP2016-0089)

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  
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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)  
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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) 1159.8

DEPTH TO WATER  
FOLLOWING INSTALLATION (FT) 1078.9 (06/15/16)

DIAMETER OF BOREHOLE  
20.00 (IN) FROM 0 TO 61.3 (FT)  
18.00 (IN) FROM 61.3 TO 595.3 (FT)  
16.00 (IN) FROM 595.3 TO 821.8 (FT)  
15.00 (IN) FROM 821.8 TO 1202.5 (FT)

ANGLED WELL DRILLED  
11° FROM VERTICAL

FEET = LINEAR FEET

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

**SURFACE SEAL** 7.7 TO 60.1 (FT)

**BENTONITE SEAL** 60.1 TO 981.0 (FT)

**18-IN CSG AND SHOE** 588.1 TO 595.3 (FT)

**16-IN CSG AND SHOE** 815.3 TO 821.8 (FT)

**FINE SAND COLLAR** 981.0 TO 982.6 (FT)

**FILTER PACK** 982.6 TO 1139.0 (FT)

**SCREENED INTERVAL** 1083.0 TO 1133.0 (FT)

**BOTTOM OF CASING** 1154.4 (FT)

**BENTONITE** 1139.0 TO 1188.4 (FT)

**SLOUGH** 1188.4 TO 1202.5 (FT)

**BOTTOM OF BORING** 1202.5 (FT)

**SURFACE SEAL**

MIX (WT%) PORTLAND CEMENT 100  
QUANTITY USED 116.6 FT<sup>3</sup> CALC 93.1 FT<sup>3</sup>

**TYPE OF CASING**

MATERIAL PASSIVATED A304 STAINLESS STEEL  
ID (IN) 8.00 OD (IN) 8.625 (8 $\frac{3}{4}$ )  
JOINT TYPE WELDED

**HYDRATED BENTONITE SEAL**

FORM  $\frac{3}{8}$ -IN BENTONITE CHIPS  
QUANTITY USED 1239.5 FT<sup>3</sup> CALC 1081.6 FT<sup>3</sup>

**TYPE OF SCREEN(S)**

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

**FINE SAND COLLAR**

SIZE/TYPE 20/40 SILICA  
QUANTITY USED 1.5 FT<sup>3</sup> CALC 1.3 FT<sup>3</sup>

**FILTER PACK SAND**

SIZE/TYPE 10/20 SILICA  
QUANTITY USED 158.0 FT<sup>3</sup> CALC 128.4 FT<sup>3</sup>

**HYDRATED BENTONITE BACKFILL**

MATERIAL  $\frac{3}{8}$ -IN BENTONITE CHIPS  
AND 10/20 SAND  
QUANTITY USED 48.5 FT<sup>3</sup> CALC 54.4 FT<sup>3</sup>

**14-IN CSG AND SHOE**

1191.9 TO 1202.5 (FT)

**STAINLESS-STEEL CENTRALIZERS**

USED 4 ea. EVERY 60 FT ON BLANK CASING  
USED 4 ea. at 5 FT  
ABOVE AND BELOW WELL SCREEN

**WELL COMPLETION BEGAN**

DATE 05/13/16 TIME 0730h  
**WELL COMPLETION FINISHED**  
DATE 06/04/16 TIME 1630h



Prepared by: PTM  
Date: June 17, 2016  
File Name: CrIN-4\_AsBuiltDiagram\_FactSheet

**Well CrIN-4 As-Built Well Construction Diagram**

Technical Area 05 (TA-05)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

**Fact Sheet**

NOT TO SCALE

