

HIP - __126__

**GENERAL
CORRESPONDENCE**

**YEAR(S):
2013 to Present**

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of Check No. 3364004 dated 8/23/13

or cash received on 10/10/13 in the amount of \$ 700.00

from ENTERPRISE FIELD SERVICES, LLC

for HIP-126

Submitted by: BRAD JONES Date: 10/11/13

Submitted to ASD by: LUPE SHERMAN Date: 10/11/13

Received in ASD by: _____ Date: _____

Filing Fee ☒ New Facility: _____ Renewal: _____

Modification _____ Other ☒ PERMIT FEE

Organization Code 521.07 Applicable FY 14

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division



October 10, 2013

Ms. Shiver Nolan
Enterprise Products Operating LLC
P.O. Box 4324
Houston, Texas 77210

Re: Hydrostatic Test Discharge Permit
Permit: HIP-126
Enterprise Products Operating, LLC
Salt Lake Lateral
Locations: NE/4 and SE/4 of the NW/4 of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico

Dear Ms. Nolan:

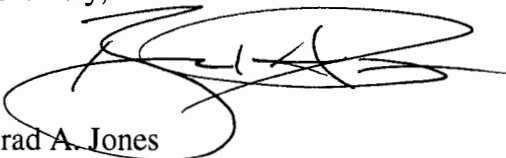
The New Mexico Oil Conservation Division (OCD) has received Enterprise Products Operating LLC's (Enterprise) notice of intent, dated October 7, 2013 and received by OCD on October 10, 2013, for authorization to discharge approximately 300,000 gallons of wastewater generated from a hydrostatic test of a new 12-inch diameter natural gas gathering system transmission pipeline approximately 9.1 miles (48,048 feet) long, located approximately 8 miles southeast of Loving, New Mexico. The proposed discharge/collection /retention location is on private property, located within NE/4 and SE/4 of the NW/4 of Section 15, Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico. The submittal provided the required information in order to deem the application "administratively" complete. OCD approves the Carlsbad Current-Argus as the newspaper of general circulation for the published notice and the discharge and/or collection location (on private property) and the post office in Loving, New Mexico as proposed posting locations.

Therefore, the July 2006 New Mexico Water Quality Control Commission (WQCC) regulations notice requirements (20.6.2.3108 NMAC) must be satisfied and demonstrated to the OCD. The hydrostatic test discharge event shall not be initiated until Enterprise's and OCD's notice periods pass, the permit is issued, and the additional permit fee is paid, if applicable.

Enterprise Products Operating LLC
Permit: HIP-126
October 10, 2013
Page 2 of 2

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brad A. Jones', written over a circular stamp or seal.

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District II Office, Artesia
 Mr. Jim Heap, Enterprise Products Operating, LLC, Midland, TX 79701



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

RECEIVED OCD

October 7, 2013

2013 OCT 10 A 10: 32

VIA Fed Ex

Mr. Brad Jones
New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division
1220 St. Francis Drive
Santa Fe, NM 87505

Dear Mr. Jones:

**RE: Enterprise Products Operating LLC
Submittal of Notice of Intent to Discharge Hydrostatic Test Water
Salt Lake Lateral
Eddy County, New Mexico**

Enterprise Products Operating LLC (Enterprise) will be constructing Salt Lake Lateral as an expansion to their natural gas gathering system. Please find enclosed an application for authorization to discharge hydrostatic test water following hydrostatic testing of the new pipeline. The enclosed application includes requested revisions to unofficial drafts that you reviewed and submitted comments on September 10 and 30, 2013, and October 2, 2013.

Thank you for your assistance with this request. If you have questions or require additional information, please feel free to call Enterprise's environmental consultant, Ms. Barbara Everett, (505) 344-7373, or myself at (713) 392-2458

Sincerely,

James G. White
Sr. Environmental Scientist

cc: Alberto Rodriguez, Enterprise
Shiver Nolan, Enterprise



October 7, 2013
Project No.: 131457

Mr. Brad Jones
New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division
1220 St. Francis Drive
Santa Fe, NM 87505

**SUBJECT: Submittal of a Notice of Intent to
Perform a Hydrostatic Test
Salt Lake Lateral
Eddy County, New Mexico**

Dear Mr. Jones:

On behalf of Enterprise Products Operating Company LLC (Enterprise), Kleinfelder West, Inc. (Kleinfelder) is submitting this Notice of Intent (NOI) for hydrostatic testing of a new Enterprise pipeline for your review.

Kleinfelder has included the required information for the NOI as stated in the "Guidelines for Hydrostatic Test Dewatering" dated January 11, 2007. Attached to this NOI are the following:

- Background Information;
- Notice of Intent Plan;
- Figure 1 – New Enterprise Pipeline Undergoing Hydrostatic Testing;
- Figure 2 – Discharge Location Map;
- Figure 3 – Hydrostatic Test Water Dispersion System;
- Appendix A - Certification of Siting Criteria;
- Appendix B – Water Feature, Water Well Information and Floodplain Information;
- Appendix C – Area Mine Information;
- Appendix D - Geology;
- Appendix E – Area Landownership;
- Appendix F – Public Notice;
- Appendix G – Landowner Consent Information; and
- Appendix H – Water Quality Results.

Checks made out to the New Mexico Water Quality Management Fund for the \$100 filing fee and \$600 general permit fee are included.

Kleinfelder prepared this NOI in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. The information provided in this document is based on our understanding of the information provided by Enterprise.

Should you have any questions, please feel free to contact Barbara Everett (Kleinfelder) at 505.344.7373 or Jimmy White (Enterprise) at 713.381.1785.

Respectfully submitted,

KLEINFELDER WEST, INC.

Reviewed by:


Jill Hernandez
Staff Engineer


Barbara Everett, PG
Program Manager

cc: James White, Enterprise Products Operating LLC, PO Box 4324, Houston, TX 77210

Background Information

- The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) requires periodic pressurized tests on all DOT-regulated pipelines and all newly installed pipelines to verify the integrity and safety of pipeline systems. Because the pipeline is part of a natural gas gathering system, waste water generated during hydrostatic testing is classified as RCRA-exempt waste water and does not require management as a RCRA waste or disposal at a RCRA-approved facility.
- The Salt Lake Lateral is located in the following sections of Eddy County, New Mexico:
 - Sections 11, 13, 14, and 24 of Township 23 South, Range 28 East;
 - Sections 19, 28, 29, 30, 33, and 34 of Township 23 South, Range 29 East; and
 - Sections 3, 10, and 15 of Township 24 South, Range 29 East.
- The Salt Lake Lateral is new, welded, steel 12-inch diameter pipeline, approximately 9.1 miles (48,048 feet) in length. The pipeline is part of a gathering system that transports natural gas from well sites to processing facilities. The southern end of the Salt Lake Lateral will terminate at the proposed Oxy Cedar Canyon Compressor Station, which is located on property leased by Enterprise.
- The source water for the hydrostatic testing is potable municipal water from the City of Carlsbad.
- The hydrostatic test of the Salt Lake Lateral is scheduled to be filled with test water on or about October 30, 2013. Upon completion of the hydrostatic test, the water will be tested for water quality parameters and then transferred to lined and bermed frac tanks for temporary storage on private property. Once the results have been received, the results will be forwarded to the NMOCD. Upon NMOCD concurrence that the test water meets the standards of NMAC 20.6.2.3103, it will be discharged to the ground surface on privately-owned land at the southern end of the Salt Lake Lateral. Approximately 300,000 gallons of test water are expected to be discharged to the ground surface on or about November 15, 2013.
- Per NMAC 20.6.2.3108, a sample of the public notice is included in Appendix F.
- Per NMAC 20.6.2.3108, public notice will be made in English and Spanish by the following methods:
 1. A 2 feet by 3 feet in size sign will be posted at the discharge location;
 2. Written notice will be posted at the Loving, New Mexico post office;
 3. Written notice of the discharge will be mailed to owners of record of the nearest adjacent properties not owned by the landowner of the discharge site;
 4. The notice will be sent by certified mail, return receipt requested, to the owner of the discharge site; and
 5. A synopsis of the notice will be published in a display ad at least three inches by four inches in size in the Carlsbad Current-Argus newspaper. Public notice is published every day but Monday, and the paper requires the information two days prior to publication.

Item a. Name and address of the proposed discharger;

Legally Responsible Party

Mr. Leonard W. Mallett, Group Sr. VP, Engineering
POC: Ms. Shiver Nolan, Sr. Compliance Administrator
P.O. Box 4324
Houston, Texas 77210
713.381.6595

Local Representative

Mr. James Heap
Enterprise Products Operating LLC
1031 Andrews Highway, Suite 320
Midland, TX 79701
432.686.5404

Item b. Location of the discharge, including a street address, if available, and sufficient information to locate the facility with respect to surrounding landmarks;

The pipeline to be tested is located in Eddy County. Water from the hydrostatic testing will be discharged to the ground on privately-owned property at the southern end of the Salt Lake Lateral in an area one acre in size (200x200 feet). The frac tanks will be stored on private property within secondary containment that is 127x127 feet in size. Permission to store the test water and discharge it to the ground surface has been granted by the landowner (Appendix G). The location of the pipeline to be hydrostatically tested and the discharge location are shown on Figures 1 and 2.

The discharge area will be located approximately eight miles southeast of Loving, New Mexico. Directions to the discharge area from Loving, New Mexico are:

- From the intersection of W. Cedar Street and S. 8th Street (US-285 S), head south on N. 8th Street (US-285 S) for approximately 4.8 miles;
- Turn left onto County Road 720/Duarte Road and continue for 0.8 miles;
- Turn left on to County Road 745/Harroun Road and continue for 1.0 mile;
- Turn right onto Bramble Road and continue for 2.1 miles;
- Turn right onto Dog Town Road and continue for 1.3 miles;
- Turn left on an unnamed road and continue for 1.0 mile;
- Turn left on an unnamed road and continue for 1.3 miles; and
- Turn right on an unnamed road and continue for 0.6 mile. The discharge area will be on the right side of the road.

Item c. Legal description of the discharge location;

The discharge location is located at:

NE/4 and SE/4 of the NW/4 of Section 15, Township 24 South, Range 29 East, Eddy County, New Mexico (Figure 1). The approximate coordinates for the discharge area location are: Latitude 32°13'19.04"N; Longitude 103°58'25.36"W.

Item d. Maps (site-specific and regional) indicating the location of the pipelines to be tested;

- Figure 1 – Regional map depicting topography, the pipeline section undergoing testing, and the hydrostatic test water discharge location.
- Figure 2 – Aerial map depicting the hydrostatic test water discharge area, the temporary frac tank staging area, and the secondary containment area (collectively referred to as the discharge area henceforth).
- Figure 3 – Detailed schematic depicting the water dispersion system in the discharge area.

Item e. A demonstration of compliance to the following siting criteria or justification for any exceptions:

Shapefiles downloaded from various electronic sources that were included in a Geographic Information System (GIS) database were used in the preparation of this NOI. The maps generated from this database were reviewed between July 1 and July 10, 2013. Detailed references for the various shape files are included in the Reference section. Sources used for preparation of the maps in this NOI are included on the individual figures

- i. Within 200 feet of a watercourse, lakebed, sinkhole, or playa lake;

No watercourses; lakebeds; sinkholes; or playa lakes were identified within 200 feet of the proposed discharge area during the site visit (Appendix A) or during the topographic map and Petroleum Recovery Research Center database review (Appendix B, Figures B-1 and B-2).

- ii. Within an existing wellhead protection area or 100-year floodplain;

A search for wellhead protection areas (water supply wells and springs) in the vicinity of the discharge area was conducted. No water supply wells were identified within 1,000 feet of the discharge area during the site visit (Appendix A) and New Mexico Office of the State Engineer (OSE) database review (Appendix B, Figure B-2). The nearest water supply wells reported in the OSE Waters database were located more than a mile away (Appendix B, Figure B-2).

The topographic map provided in the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) database was reviewed for identification of springs in the vicinity of the discharge area on July 1, 2013. No springs were identified on the topographic map within 1,000 feet of the discharge area (Appendix B, Figure B-1). The PRRC database was also reviewed on July 1, 2013 for evidence of springs in the discharge area. No springs were identified in the PRRC database (Appendix B, Figure B-2) or during the site inspection (Appendix A).

Federal Emergency Management Administration (FEMA) flood insurance rate maps were reviewed to identify 100-year floodplains at and in the vicinity of the proposed discharge area. According to the FEMA flood insurance rate maps, the proposed discharge area is not located within a 100-year floodplain. The discharge and surrounding area are located in Zone X in an area determined to be above the 500-year flood level (FEMA, fema.gov). An area designated as a Zone A floodplain is located approximately 200 feet to the southwest of the discharge area and is associated with the Pecos River. The Zone A floodplain will be protected using berms to prevent the

discharge flowing into the Zone A floodplain and the river. A copy of the floodplain map (Panel 35015C1625D) is included in Appendix B, Figure B-3.

- iii. Within, or within 500 feet of, a wetland;

The NWI was searched for wetlands in the vicinity of the temporary discharge area on July 1, 2013 (Figure B-1, Appendix B). Wetlands were not observed within 500 feet of the perimeter of the discharge area. In addition, no wetlands were visible within 500 feet of the discharge area in the April 19, 2011 aerial photograph of the area (see Figure 2) or during the site inspection (Appendix A).

- iv. Within the area overlying a subsurface mine; or

No active mines were identified at or in the vicinity of the proposed discharge area (Appendix C, Figure C-1). Mr. Mike Thompson with the New Mexico Abandoned Mine Lands Program was contacted on July 1, 2013 to assess the presence of abandoned subsurface mines in the vicinity of the proposed discharge area. According to Mr. Thompson, there is no record of abandoned subsurface mines within Sections 10 and 15 of Township 24 South, Range 29 East (see email, Appendix C).

- v. Within 500 feet from the nearest permanent residence, school, hospital, institution or church.

No permanent residences, schools, hospitals, institutions or churches were noted on aerial photographs of the area, dated April 19, 2011 (see Figure 2). A visual site inspection on July 9, 2013 confirmed the absence of permanent residences, schools, hospitals, institutions, and churches within 500 feet of the discharge area (Appendix A).

Item f. A brief description of the activities that produce the discharge;

Pressure testing with water, also known as hydrostatic testing, is one of the tools pipeline operators use to verify pipeline integrity. The purpose of hydrostatic testing of a pipeline is to determine the extent to which potential defects might threaten the pipeline's ability to sustain maximum allowable operation pressure. Because this is new piping, previous contents of the pipe do not need to be cleared. Potable water from the City of Carlsbad will be introduced into the pipeline and then the pipeline will be pressurized to a pressure greater than maximum operating pressure for approximately eight hours. If leaks or breaks occur, the pipeline is repaired or the affected piping is replaced, and then re-tested. Once the test is complete, the water will be temporarily stored in frac tanks on private property. Upon NMOCD approval, a hose will be fitted to a valve on the frac tank and the water will be discharged to the ground on privately-owned property at the southern end of the Salt Lake Lateral. Permission to discharge to the ground surface has been granted by the landowner (Appendix G).

Item g. The method and location for collection and retention of fluids and solids;

Because the piping is new, solids are not anticipated to be produced as a result of the hydrostatic testing. Once the hydrostatic testing has been conducted on the Salt Lake Lateral, the water will be tested for water quality as described in Item j and the water will be transferred to and temporarily stored in 15 clean $\pm 21,000$ -gallon frac tanks located in lined and bermed secondary containment within the discharge area (Figure 2).

Frac tanks will be interconnected but will have safety valves at each tank connection and will be located within lined and bermed secondary containment within the discharge area. Drip pans will be used under pumps and at hose connections. Secondary containment, consisting of plastic liners, will be used under frac tanks to prevent any leakage. The secondary containment will be sufficient to hold 1 1/3 of the total volume of the interconnected frac tanks, or the volume of the largest tank, whichever is greater. The tanks will be contained within a single containment area. Plastic will be draped over dirt berms or hay bales surrounding the frac tank staging area. An additional berm, approximately two feet high and 500 feet long, will be constructed to the southwest of the discharge area to prevent flow to the Pecos River (Figure 2).

Item h. A brief description of best management practices to be implemented to contain the discharge onsite and to control erosion;

Enterprise intends to transfer test water into lined and bermed frac tanks for temporary storage. The tanks will be staged approximately 10 to 15 feet apart throughout a single secondary containment area to distribute the weight of the tanks and discharge water over a larger area due to the potential for karst in the area (Figures 2 and D-2).

Water from the frac tanks will be released at a rate of 1,500 gallons per minute or less, as needed to prevent erosion of the ground surface. The water will be released into the dissipation and disposal system and allowed to flow onto the ground at a rate of less than 300 gallons per minute. A diagram of the hydrostatic test water dissipation and disposal system is depicted on Figure 3. Personnel will be present during transfer and dewatering operations to close valves in the event that leaks occur. Personnel will be located in the surrounding area while conducting pipeline construction and maintenance activities and can help prevent vandalism to the frac tanks. Visual inspections will be conducted while the hydrostatic test water is stored in the frac tanks to ensure the absence of leaks and damage due to vandalism. An additional berm, approximately two feet high and 500 feet long, will be constructed to the southwest of the discharge area to prevent flow to the Pecos River (Figure 2).

Item i. A request for approval of an alternative treatment, use, and/or discharge location (other than the original discharge site), if necessary;

No alternate use or discharge location is proposed.

Item j. A proposed hydrostatic test wastewater sampling plan;

Enterprise requests that it not be required to test for radium 226/228. The source water will be obtained from the City of Carlsbad. A copy of the most recently published analytical data for the City of Carlsbad Municipal Water System is included in Appendix H. According to Richard Aguilar, City of Carlsbad, the 2012 test results are the most recent available results per the City's regulatory requirements for sampling (see email from R. Aguilar in Appendix H). The new pipeline is not a source of radium; therefore, it is unlikely that post-hydrostatic test water sample concentrations would exceed the New Mexico Water Quality Control Commission (NMWQCC) Human Health Standard for radium.

Once the Salt Lake Lateral test has been completed, prior to discharge to frac tanks, Enterprise will collect and analyze a sample of the water obtained from the southern section of the pipeline. The sample will be analyzed using the methods identified in the following table:

| SAMPLING PLAN FOR COMPLIANCE WITH NMAC 20.6.3103 (A), (B), (C) | | |
|--|---------------|---|
| ANALYTES | METHOD | BOTTLE TYPE/PRESERVATIVE |
| Volatile Organics | 8260B | 3 x 40 ml VOA's / HCl |
| Ethylene dibromide | 504.1 | 2 x 40 ml VOA's / Na ₂ S ₂ O ₃ |
| Polychlorinated Biphenols | 8082 | 2 x liter amber / unpreserved |
| Polynuclear Aromatic Hydrocarbons | 8310 | 1 x liter amber / unpreserved |
| Phenols | 9067 | 1 x liter amber / H ₂ SO ₄ |
| Anions, TDS, pH | 300.0 | 1 x 500 ml plastic / unpreserved |
| | SM 2540C | 1 x 125 ml plastic / H ₂ SO ₄ |
| | SM 4500-H+B | |
| Mercury | 245.1 | 1 x 500 ml plastic / HNO ₃ |
| Dissolved Metals | 200.7 / 200.8 | 1 x 125 ml plastic + filter & syringe / HNO ₃ |
| Total Cyanide | 335.4 | 1 x 500 ml plastic amber / NaOH |

Once the analytical results have been received, they will be forwarded to the NMOCD. Upon NMOCD concurrence that the discharge water meets the water quality standards of NMAC 20.6.2.3103, Enterprise will discharge the water in accordance with the approved discharge permit. If discharge to the ground surface is approved, water from the frac tanks will be discharged into the dissipation structure and onto the ground surface on private property.

Item k. A proposed method of disposal of fluids and solids after test completion, including closure of any pits, in case the water generated from test exceeds the standards as set forth in Subsections A, B, and C of the 20.6.2.3103 NMAC (the New Mexico Water Quality Control Commission Regulations);

The fluids will be temporarily containerized as described under items g and h. If test water exceeds discharge requirements, waste water will be transferred from the frac tanks with a pump and hose into water trucks and hauled by Mesquite Services, Permit Number C133-211 to Dorstate SWD (Order #247-A, API #30-015-23728) for injection and disposal. Potable, municipal water from the City of Carlsbad is being used to test new piping; therefore, solids accumulation is not expected.

Item l. A brief description of the expected quality and volume of the discharge;

The volume of the hydrostatic test water expected to be discharged is approximately 300,000 gallons. The source of the test water being used to test new piping is potable municipal water from the City of Carlsbad; therefore, it is expected to meet the water quality standards of NMAC 20.6.2.3103; however, if the test water exceeds discharge requirements, the water will be disposed as indicated in Item k.

Item m. Geological characteristics of the subsurface at the proposed discharge site;

The site is located in the Delaware Basin region of the Permian Basin which extends from southeastern New Mexico and into west Texas. The Delaware Basin consists of primarily marine carbonates and includes the basal Leonard series, the overlying Guadalupe Series, and the uppermost Ochoan series which includes the Castile and Salado evaporates and the clastic Rustler Formation (Bjorklund, et.al., 1959).

Based on the United States Department of Agriculture (USDA) survey of Eddy County, soils in the area are dominated by the Arno-Harkey-Anthony association soils comprised of loamy, deep, nearly-level soils from recent, mixed, calcareous alluvium along the Pecos River (USDA, 1971). Salinity and depth to water vary within the surface soils. In uncultivated areas, gypsum

is generally visible throughout the soil profile. The surface soils overlie Quaternary eolian deposits and unconsolidated alluvial deposits that cover most of the underlying Quaternary older alluvium deposits of the upland plains and piedmont areas (Qa, Qe, and Qp on Figure D-1, Appendix D). Karst was identified in the database research in the area at and surrounding the discharge area (Appendix D, Figure D-2); however, no evidence of karst was identified during the site inspection (Appendix A) or on the topographic map review (Figure B-1, Appendix B).

Item n. The depth to and total dissolved solids concentration of the ground water most likely to be affected by the discharge;

Stock water wells can be installed at depths less than 250 feet below ground surface within the Rustler Formation, but are generally impotable and unfit for livestock (Hendrickson, 1952). The nearest water supply wells reported in the OSE Waters database were located more than a mile away (Appendix B, Figure B-2). Water was reported at depths at or greater than 150 feet below ground surface in the nearest wells to the east. Depth to water in the water supply wells located more than a mile to the west, along the Pecos River, ranged from 18 to 60 feet below the ground surface. The elevation of the Pecos River is approximately 2,905 feet above mean sea level (amsl). The elevation of the ground surface at the discharge area is approximately 2,935 feet amsl. The groundwater elevation at the discharge area is likely at least 30 feet below the ground surface, based on the surface elevations and surrounding surface water and groundwater elevations. Total dissolved solids (TDS) reports for these wells were not included in various databases checked (OSE, GoTech). Regionally, the TDS is approximately 4,000 milligrams per liter (Bjorklund, et al., 1959).

Item o. Identification of landowners at, and adjacent to, the discharge collection/retention site. Landowners within 1/3-mile of the boundary of the discharge area and temporary frac tank storage area:

According to the Eddy County Tax Assessors website, the landowners of the property where the discharge area is located are as follows:

John Draper Brantley Jr.
706 West Riverside Dr.
Carlsbad, NM 88220

Henry McDonald
P.O. Box 597
Loving, NM 88256

Property owners adjacent to and within a 1/3-mile radius of the property boundary are listed below and are depicted on Figure E-1 in Appendix E.

Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220

B&D Holdings, LLC
509 W Pierce St.
Carlsbad, NM 88220

Mahaffey, Tyson R and Lesli
PO Box 161
Loving, NM 88256

Forni, Thomas Earl
1013 S. Country Club Circle
Carlsbad, NM 88220

Devon Energy Production Co LP
PO Box 108838
Oklahoma City, OK 73101

Pardue Limited Company LLC
PO Box 2018
Carlsbad, NM 88221

Bryan, Ivor Dale and Thelma
5825 Bailey Lane
Amarillo, TX 79118

Berry, Chester Kent
2416 W. Union
Carlsbad, NM 88220

Burkham, Roy
PO Box 84
Malaga, NM 88263

Hannah, William Nelson
201 W. 122nd
Avondale, AZ 85323

Ruiz, Juan G, Et. al.
1612 W. Tansill
Carlsbad, NM 88220

Rustler Hills Limited Partnership
PO Box 72
Orla, TX 79770

Botros, Beth Ann
12403 Cobblestone
Houston, TX 77024

Faulk, Evelyn Kay & Donald
PO Box 115
Malaga, NM 88263

Walker, Lloyd Jr. and Frances G
PO Box 93 Malaga, NM 88263

Johnson Enterprises
PO Box 1713
Roswell, NM 88202

State of New Mexico
310 Old Santa Fe Trail
Santa Fe, NM 87504

Williams, Roxie L Trust Et. al.
Williams, Lindy C/O
2261 N. Kachina
Mesa, AZ 85203

Annis, George M & Sarah M Wisdom
PO Box 1316
Loving, NM 88256

City of Carlsbad
101 N. Halaqueno
Carlsbad, NM 88221

Eddy County
101 W. Greene St.
Carlsbad, NM 88220

Giovengo, Johnie Jr. & Sharon
PO Box 513
Loving, NM 88256

Intrepid Potash New Mexico LLC
707 17th Street, Suite 4200
Denver, CO 80202

References

Bjorklund, L.J., Motts, W.S., United States Department of the Interior, New Mexico State Engineer, 1959, "Geology and Water Resources of the Carlsbad Area, Eddy County, New Mexico", December, 1959.

Federal Emergency Management Agency website, accessed July 1, 2013,
<http://www.fema.gov/>.

Go-Tech, New Mexico Water database (NM WAIDS, accessed July 2, 2013,
<http://octane.nmt.edu/waterquality/data/gwatersearch.aspx>.

Hendrickson, G.E. and R.S. Jones, 1952, Geology and Groundwater Resources of Eddy County, New Mexico: New Mexico Bureau of Mines and Minerals; Ground-Water Report 3; 169 pgs.

New Mexico Mining and Minerals Division GIS Database, Mines in New Mexico, accessed on July 1, 2013, <http://www.emnrd.state.nm.us/maps/MMQActiveMinesIndex.html>.

Office of the State Engineer (OSE) database search accessed July 1, 2013, <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>.

Petroleum Recovery Research Center database (PRRC) database search accessed July 1, 2013, http://ford.nmt.edu/prrc_MF/index5.html.

U.S. Fish and Wildlife Service National Wetlands Inventory database, accessed on July 1, 2013, <http://www.fws.gov/wetlands/wetlands-mapper.html>.

United States Department of Agriculture, Soil Conservation Service and New Mexico Agricultural Experiment Station, 1971, "Soil Survey, Eddy Area, New Mexico", March 1971.

GIS References

New Mexico topographic 7.5' quadrangle maps:

- Farmington South, Horn Canyon, Bloomfield, Blanco, Cutter Canyon, Dellgadito Mesa, Hugh Lake, Gallegos Trading Post, East Fork Kutz Canyon, Huerfanito Peak, Fresno Canyon, Gould Pass, Moricisco Wash, Carson Trading Post, Huerfano Trading Post NW, Huerfano Trading Post, Thompson Mesa, Smouse Mesa, Alamo Mesa West, Alamo Mesa East, Huerfano Trading Post SW, Blanco Trading Post, Crow Mesa West, Crow Mesa East, Tanner Lake, Pretty Rock, Pueblo Bonito NW, Kimbeto, Lybrook NW, and Lybrook.

Basemap for inset on Figure 1.

- ESRI World Street Map. Sources: ESRI, DeLorme, NAVTEQ, TomTom, USGS, Intermap, iPC, NRCAN, ESRI Japan, METI, ESRI China (Hong Kong), ESRI (Thailand).

Aerial imagery on Figure 2, Salt Lake Lateral

- ESRI World Imagery; ESRI DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community. Date of image: 04/19/2011.

State and County boundaries

- ESRI Street Map North America dated August 17, 2010.

PLSS

- *BLM GIS dataset dated June 3, 2013.

Surface waters (streams and water bodies)

- *National Hydrography Dataset, USGS, GIS dataset downloaded May 4, 2011.

Wetlands

- *National Wetlands Inventory, USF&WS, GIS dataset downloaded May 4, 2011.

OSE Wells

- *New Mexico Office of the State Engineer, Excel spreadsheet dated of July 2011.

Floodplains

- *S_FLD_HAZ_LN downloaded from New Mexico Resource Geographic Information System Program, <http://rgis.unm.edu/> GIS shapefile downloaded June 5, 2013.

- FEMA DFIRM Panel 35015C1625D dated 6/4/2010.

Mines

- New Mexico Mining and Minerals Division, February 2012.
- *Coal mine permit boundaries shapefile from RGIS, downloaded June 17, 2013.
- Potash areas from BLM Carlsbad Field Office basemap, downloaded May 8, 2012.

Geology

- USGS OFR 2005-21351. Stoesser, D.B., G.N. Green, L.C. Morath, W.D. Heran, A.B. Wilson, D.W. Moore, and B.S. Van Gosen, 2005. Preliminary Integrated Geologic Map Databases for the United States; Central States: Montana, Wyoming, Colorado, New Mexico, Kansas, Oklahoma, Texas, Missouri, Arkansas, and Louisiana, - The State of New Mexico. U.S. Geological Survey Open-File Report 2005-1351.
- USGS Fault and Fold Database, GIS shapefiles downloaded November 3, 2010.
- BLM Carlsbad Field Office GIS Basemap GIS dataset downloaded on May 8, 2012.

Karst

- *USGS OF 2004-1352. Tobin, Bret D., and David J. Weary, 2004. Digital Engineering Aspects of Karst Map: A GIS version of Davies, W.E., Simpson, J.H., Ohlmacher, G.C., Kirk, W.S., and Newton, E.G., 1984, Engineering aspects of karst: U.S. Geological Survey, National Atlas of the United States of America, scale 1:7,500,000. U.S. Geological Survey Open-File Report 2004-1352.
- BLM Carlsbad Field Office GIS Basemap, Caves potential GIS shapefile downloaded on May 8, 2012.
- BLM NM GIS dataset, Karst potential, GIS shapefile provided by BLM on April 3, 2012.

Land Ownership

- BLM NM GIS dataset downloaded June 3, 2013.

*same source as used on Pit Rule Petroleum Recovery Research Center database (PRRC), http://ford.nmt.edu/prrc_MF/index5.html.

FIGURES



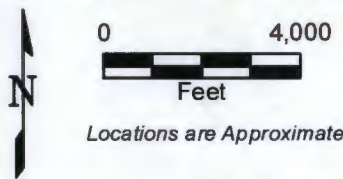
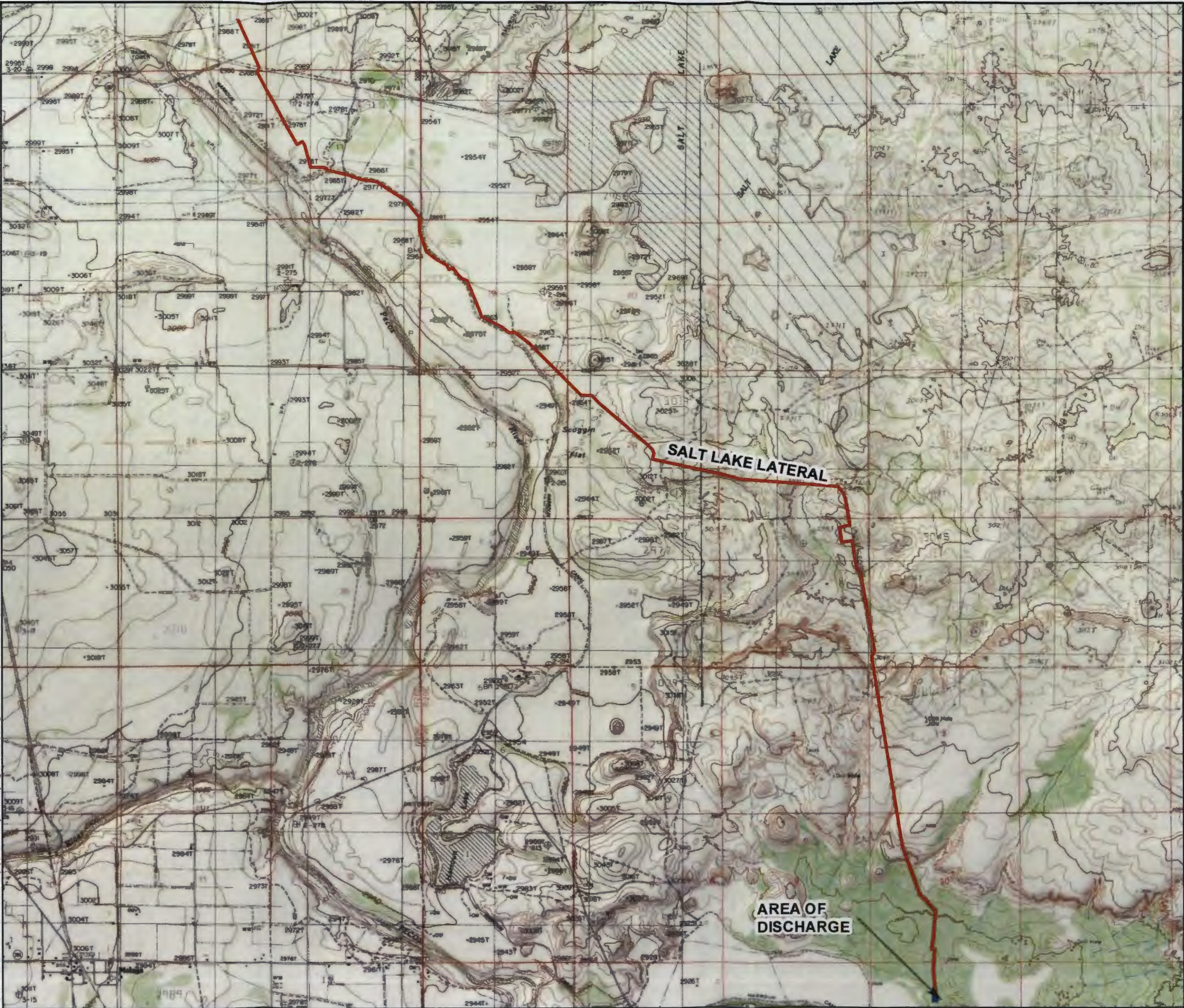
Source: ESRI World Street Map

APPROXIMATE
SITE LOCATION

LEGEND

- ★ APPROXIMATE SITE LOCATION
- APPROXIMATE LOCATION OF THE SALT LAKE LATERAL
- APPROXIMATE DISCHARGE LOCATION

Source: USGS 7.5' Quadrangle Topographic Maps
Loving, Rumuda Basin, Malaga and Pierce Canyon, NM
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013



PROJECT NO.: 131457
DRAWN: JUL 2013
DRAWN BY: CTH
CHECKED BY: JH
FILE NAME:
SaltLake_Figure1.mxd

NEW ENTERPRISE PIPELINE
UNDERGOING HYDROSTATIC TESTING
ENTERPRISE PRODUCTS OPERATING LLC
SALT LAKE LATERAL
EDDY COUNTY, NEW MEXICO
ORIGINATOR: J. HERNANDEZ
APPROVED BY: BE
DRAWING CATEGORY:
1

FIGURE
1

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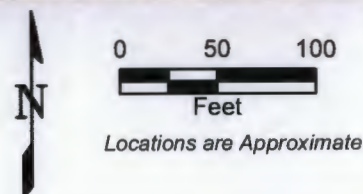


LEGEND

- DISSIPATION STRUCTURE
- APPROXIMATE LOCATION OF ENTERPRISE SALT LAKE LATERAL
- APPROXIMATE ENTERPRISE EASEMENT
- OXY CEDAR CANYON COMPRESSOR STATION LEASE BOUNDARY
- APPROXIMATE LOCATION OF SECONDARY CONTAINMENT
- AREA OF DISCHARGE
- TEMPORARY FRAC TANK STAGING AND DISCHARGE AREA
- APPROXIMATE LOCATION OF HYDROSTATIC TEST WATER FRAC TANKS

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, (Image Date: April 19, 2011).
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013

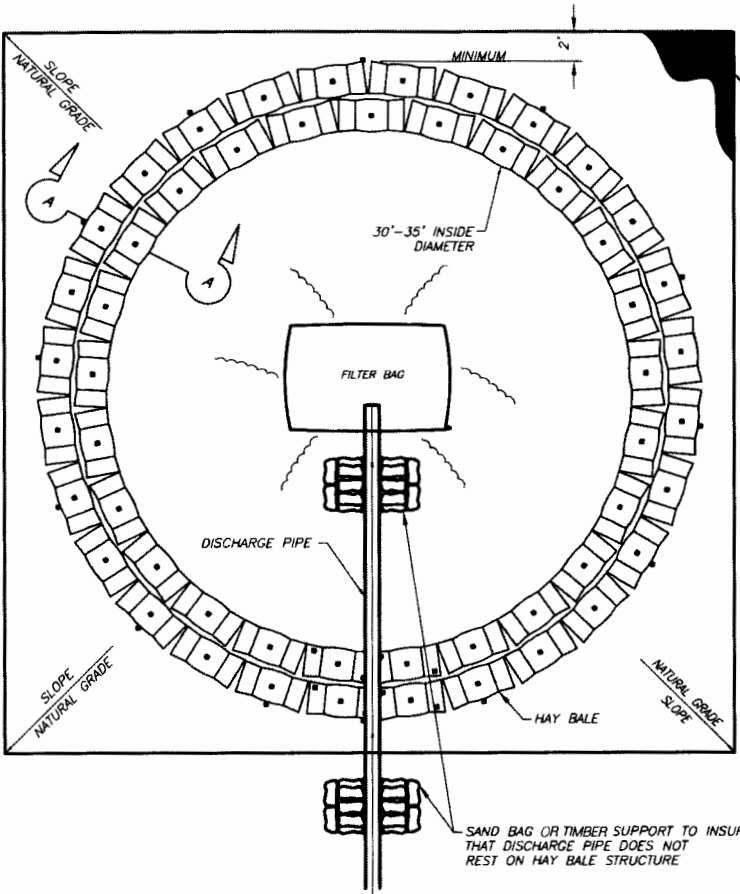
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PROJECT NO.: 131457
DRAWN: SEP 2013
DRAWN BY: CTH
CHECKED BY: JH
FILE NAME: SaltLake_Figure2.mxd

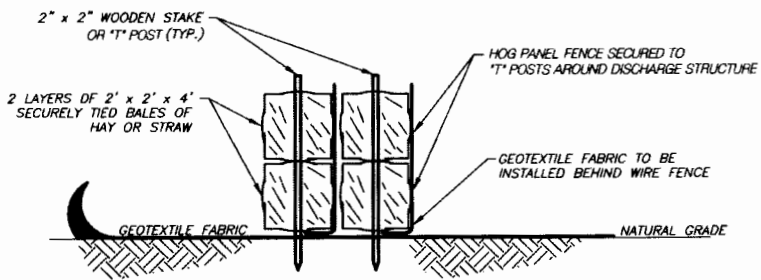
DISCHARGE LOCATION MAP
ENTERPRISE PRODUCTS OPERATING LLC
SALT LAKE LATERAL
EDDY COUNTY, NEW MEXICO
ORIGINATOR: J. HERNANDEZ
APPROVED BY: BE
DRAWING CATEGORY: 1

FIGURE
2



HYDROSTATIC DEWATERING DETAILS
PLAN VIEW
SCALE: NTS

INSTALL NON-WOVEN GEOTEXTILE FABRIC BENEATH ENTIRE DEWATERING STRUCTURE TO PREVENT SCOURING




SECTION A-A
FROM THIS DWG
SCALE: NTS

NOTE:
1" POSTS SECURING HOG PANEL FENCE ARE NOT SHOWN FOR CLARITY PURPOSES

- NOTE:
- 1. STRUCTURE SHALL BE PLACED ON A LEVEL, WELL VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM STRUCTURE AND ANY WORK AREAS.
 - 2. FLOW RATES THROUGH PIPES SHALL BE SUCH THAT STRUCTURE WILL NOT OVERFLOW.
 - 3. WHERE CONDITIONS WARRANT, A 30' x 30' RECTANGULAR STRUCTURE MAY BE SUBSTITUTED FOR THE CIRCULAR CONFIGURATION SHOWN.
 - 4. DIMENSIONS SHOWN ARE THE MINIMUM ACCEPTABLE VALUES AND MAY VARY DEPENDING ON SPECIFIC LOCATION.
 - 5. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF DEWATERING STRUCTURE IMMEDIATELY UPON COMPLETION OF DEWATERING PROCEDURE. UNDER NO CIRCUMSTANCES SHALL USED DEWATERING STRUCTURES BE LEFT IN PLACE FOR ANY PERIOD OF TIME GREATER THAN 48 HOURS PRIOR TO COMPLETION OF DEWATERING PROCEDURE.
 - 6. HOG PANEL FENCING SHALL BE INSTALLED AROUND THE HAYBALE STRUCTURE AND SECURED WITH TYPED POSTS
 - 7. ENTIRE DISCHARGE STRUCTURE SHALL BE UNDERLAIN WITH NON-WOVEN GEO-TEXTILE LINER.

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| | | | | |
|--|-----------------------------|---|------------------------|------------------------|
|  KLEINFELDER <i>Bright People. Right Solutions.</i> www.kleinfelder.com | PROJECT NO. 131457 | HYDROSTATIC TEST WATER DISPERSION SYSTEM | | FIGURE 3 |
| | DRAWN: JUL 2013 | | | |
| | DRAWN BY: CTH | ENTERPRISE PRODUCTS OPERATING LLC SALT LAKE LATERAL EDDY COUNTY, NEW MEXICO | | |
| | CHECKED BY: JH | | | |
| | FILE NAME: 131457_F3.dwg | ORIGINATOR: J. HERNANDEZ | DRAWING CATEGORY: 2 | |
| | APPROVED BY: BE | | | |

APPENDIX A
Certification of Siting Criteria

Certification of Siting Criteria

Hydrostatic Discharge Line

I, Jim Hughes, have performed a site visit to look for the presence of the items described below and have confirmed that evidence of these items was not observed within the specified distance from the discharge area. The discharge area will be located in the NE/4 and SE/4 of the NW/4 of Section 15, Township 24 South, Range 29 East in Eddy County, NM (see Figure 2).

1. Within 200 feet of a watercourse, lakebed, sinkhole or playa lake;
2. Within an existing wellhead protection area (200 feet from a private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or 1,000 feet from any other fresh water well or spring);
3. Within a surface expression of a subsurface mining operation or karst feature;
4. Within, or within 500 feet of, a wetland; or
5. Within 500 feet from the nearest permanent residence, school, hospital, institution or church.

On behalf of Enterprise Products, I state that the above information is complete and true to the best of my knowledge.



Signature

Environmental Scientist

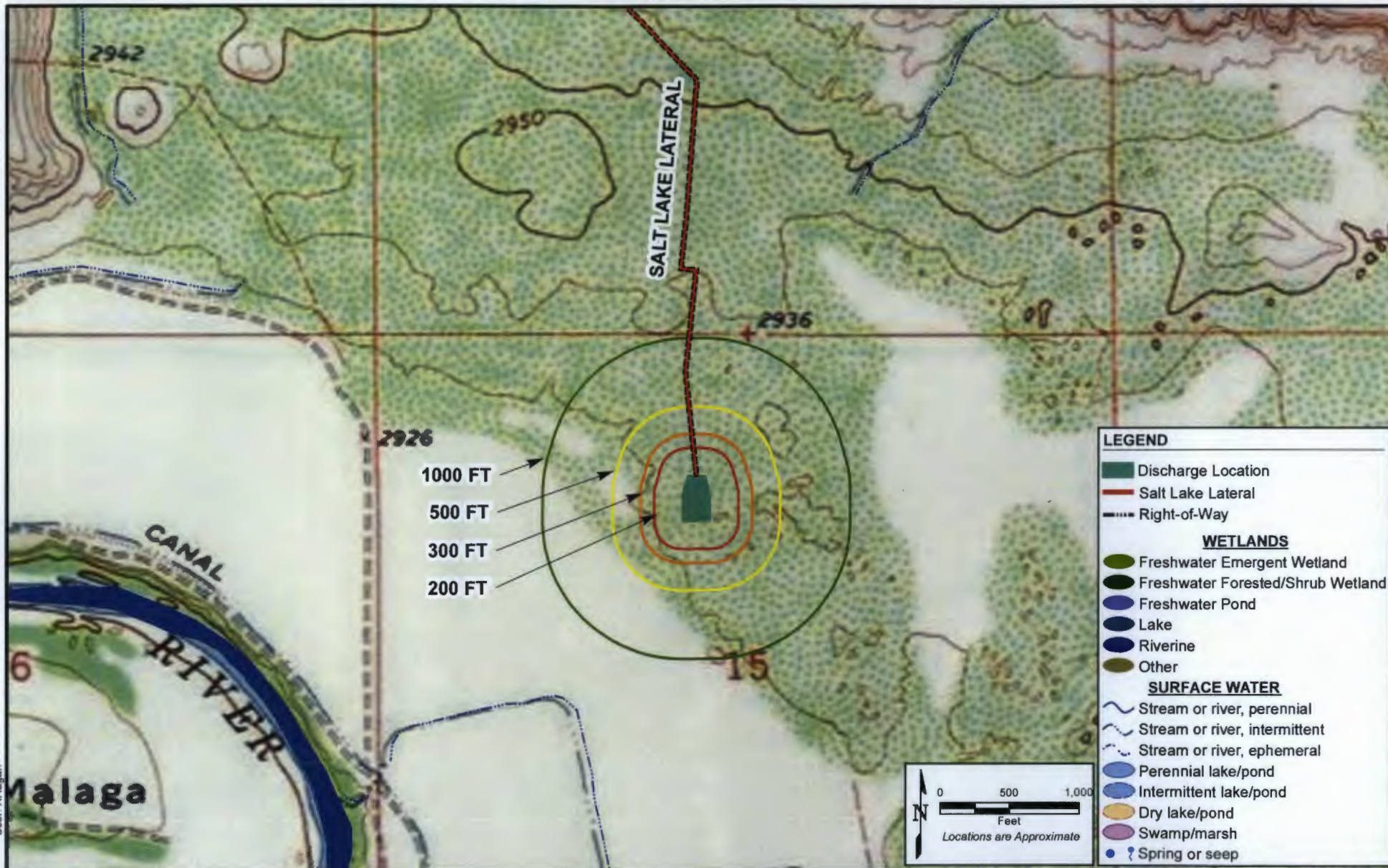
Title:

July, 9, 2013

Date of Site Visit

APPENDIX B

Water Feature, Water Well Information and Floodplain Information



Sources:
 Centarline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
 National Wetlands Inventory, USF&WS
 National Hydrography Dataset, USGS
 USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM



PROJECT NO. 131457

DRAWN: AUG 2013

DRAWN BY: CTH

CHECKED BY: JH

FILE NAME:
 SaltLake_FigureB1.mxd

**SURFACE WATER AND WETLANDS NEAR THE
 DISCHARGE AREA**

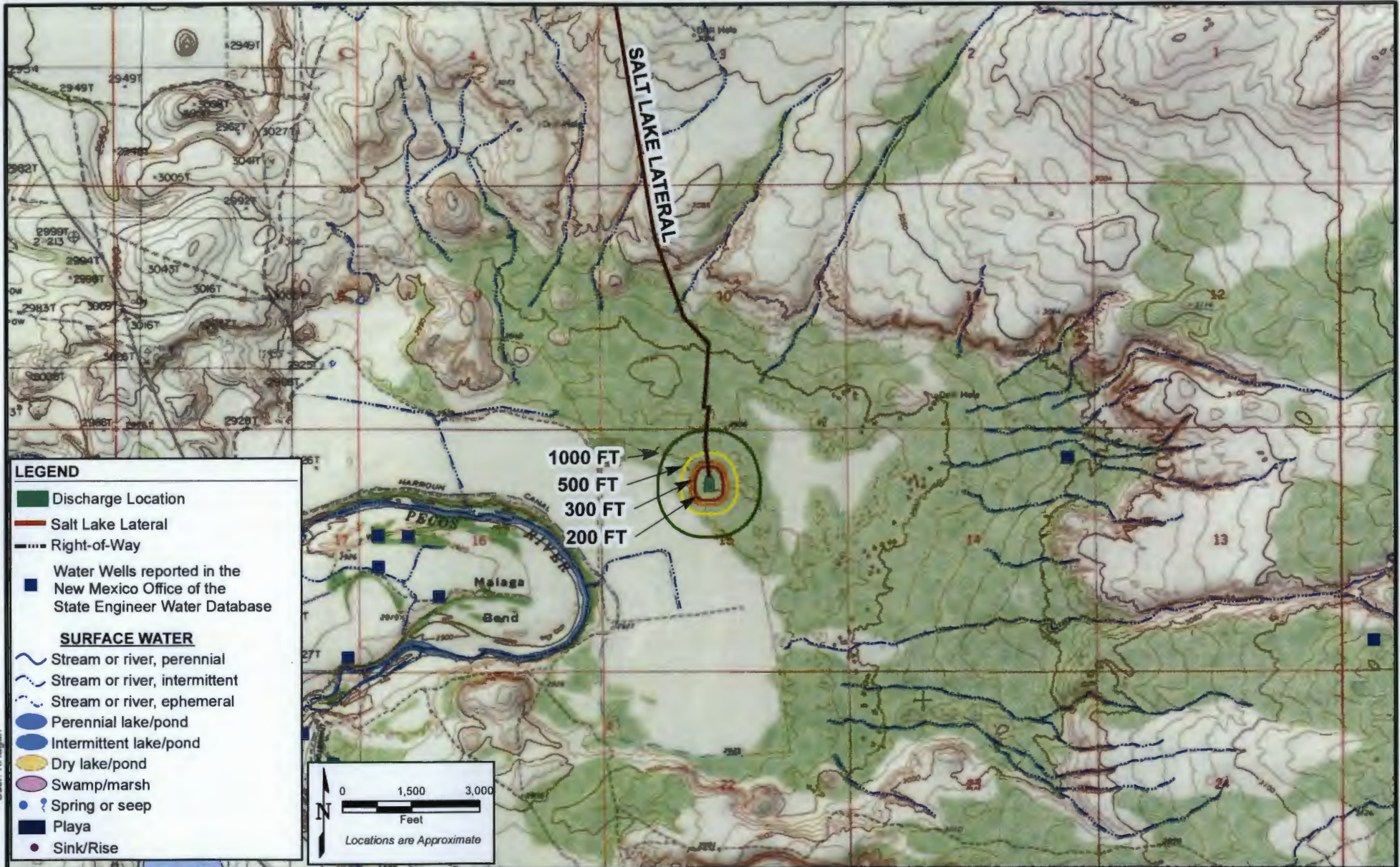
ENTERPRISE PRODUCTS OPERATING LLC
 SALT LAKE LATERAL
 EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
 APPROVED BY: BE

DRAWING CATEGORY:
 1

FIGURE

B-1



Sources:
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM



PROJECT NO. 134288

DRAWN: AUG 2013

DRAWN BY: CTH

CHECKED BY: JH

FILE NAME:
SaltLake_FigureB2.mxd

**WATER WELLS IN THE VICINITY
OF THE DISCHARGE AREA**

ENTERPRISE PRODUCTS OPERATING LLC
SALT LAKE LATERAL
EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ

APPROVED BY: BE

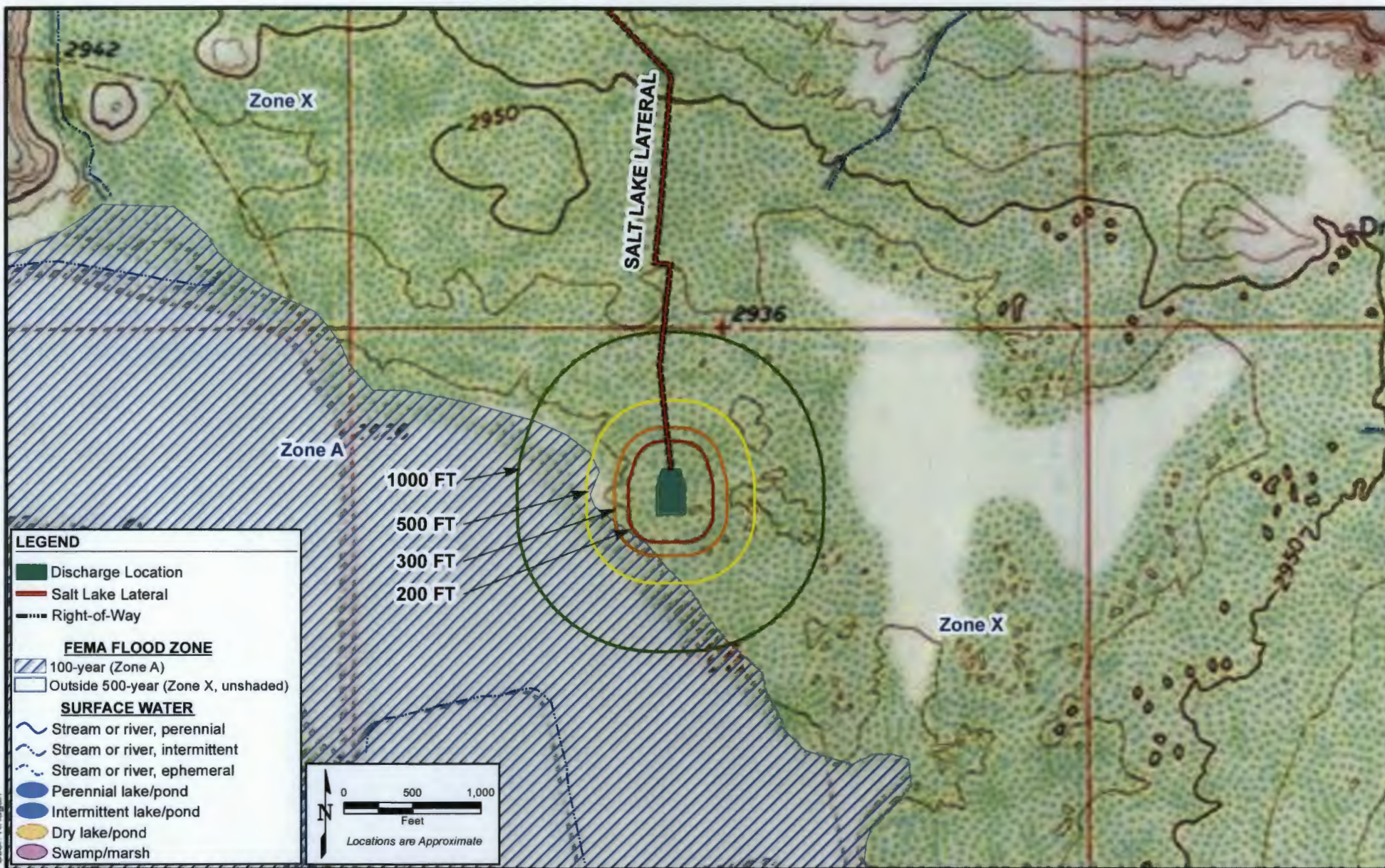
DRAWING CATEGORY:

1

FIGURE

B-2

User: K-Hagan
Date: 10/4/2013



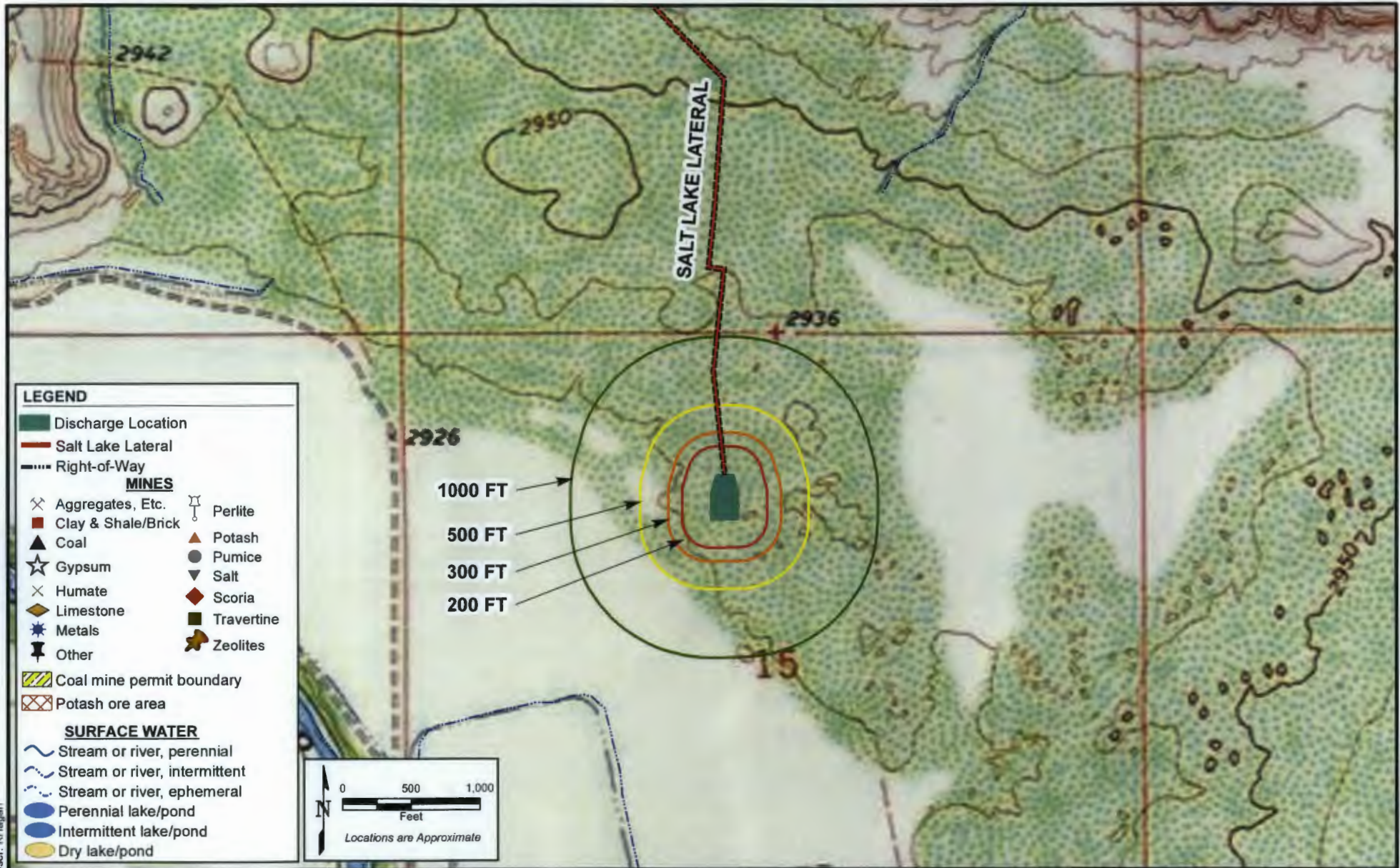
Sources:
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013.
FEMA DFIRM Panel 35015C1625D dated June 4, 2010.
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM

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| | | | | |
|-----------------------|--------------------------|---|---|----------------------------|
| PROJECT NO. | 131457 | FEMA FLOOD MAP FOR THE VICINITY OF THE DISCHARGE AREA, SALT LAKE LATERAL | | FIGURE B-3 |
| DRAWN: | OCT 2013 | | | |
| DRAWN BY: | CTH | ENTERPRISE PRODUCTS OPERATING LLC SALT LAKE LATERAL EDDY COUNTY, NEW MEXICO | | |
| CHECKED BY: | JH | | | |
| FILE NAME: | ORIGINATOR: J. HERNANDEZ | DRAWING CATEGORY: | | |
| SaltLake_FigureB3.mxd | APPROVED BY: BE | | 1 | |

APPENDIX C
Area Mine Information



Sources:
 Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
 National Hydrography Dataset, USGS
 USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM

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PROJECT NO. 131457
 DRAWN: AUG 2013
 DRAWN BY: CTH
 CHECKED BY: JH
 FILE NAME: SaltLake_FigureC1.mxd

ACTIVE MINES MAP

ENTERPRISE PRODUCTS OPERATING LLC
 SALT LAKE LATERAL
 EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
 APPROVED BY: BE

DRAWING CATEGORY:
 1

FIGURE

C-1

Jill Hernandez

From: Thompson, Mike, EMNRD <Mike.Tompson@state.nm.us>
Sent: Friday, July 05, 2013 11:03 AM
To: Jill Hernandez
Cc: Kretzmann, John, EMNRD
Subject: RE: Mines Located in Sections 10 and 15, Township 24 South, Range 29 East

Jill,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines in Sections 10 and 15 of Township 24 South, Range 29 East.

Please let me know if you have any other questions.

Mike

From: Jill Hernandez [<mailto:JHernandez@kleinfelder.com>]
Sent: Monday, July 01, 2013 1:54 PM
To: Tompson, Mike, EMNRD
Subject: Mines Located in Sections 10 and 15, Township 24 South, Range 29 East

Mike,
Kleinfelder has been contracted by Enterprise to prepare a hydrostatic discharge plan for an area located in Eddy County, New Mexico. I am researching whether or not there are abandoned mines in the vicinity of the discharge area. Municipal water from Carlsbad will be used to hydrostatically test the new 9.1-mile section of pipeline. After the testing, the test water will be discharged to the surface on privately-owned property.

The discharge area will be located at:

- NE ¼ of the NW ¼ of Section 15, Township 24 South, Range 29 East in Eddy County, New Mexico; or
- at Latitude 32° 13'19.0626"N; Longitude 103°58'25.4064"W.

I would also like to know of abandoned mines in the SW ¼ of Section 10 since that section is adjacent to Section 15.

I have already checked the NMTECH pit rule portal website and no mines are shown in the discharge area. I've attached a Google Earth file showing the new pipeline section location. The proposed discharge area will be located at the southern end of the Salt Lake Lateral shown on the attached file.

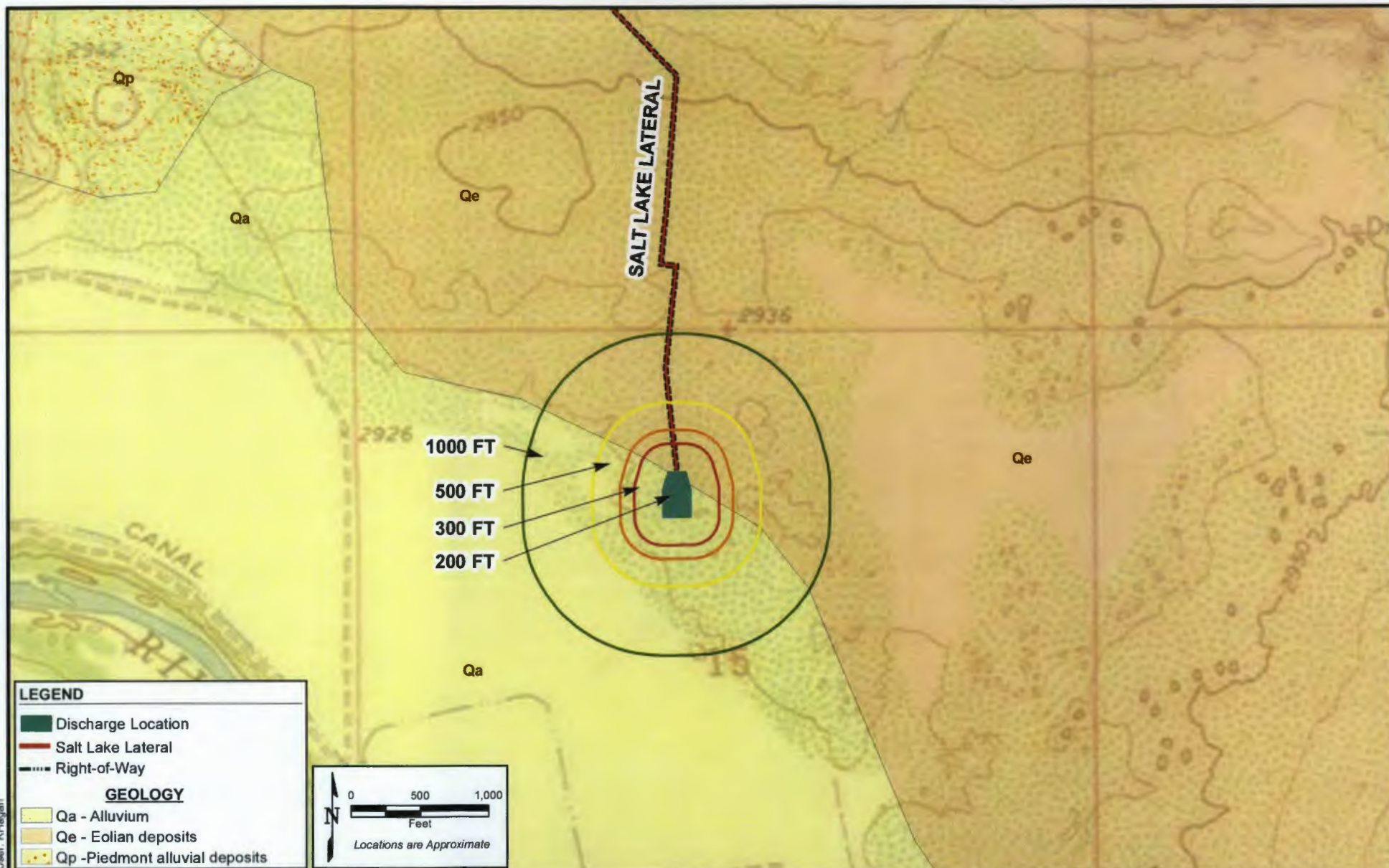
Thanks,

Jill Hernandez
Staff Engineer

Kleinfelder, Inc.
849 West LeVoy Drive, Suite 200
Taylorsville, Utah 84123
o| 801.261.3336 Ext. 231
d| 801.713.2872
c| 801.690-9620
f| 801.261.3306

APPENDIX D

Geology



Sources:
 Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
 National Hydrography Dataset, USGS
 USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM

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| | |
|-------------|-----------------------|
| PROJECT NO. | 131457 |
| DRAWN: | AUG 2013 |
| DRAWN BY: | CTH |
| CHECKED BY: | JH |
| FILE NAME: | SaltLake_FigureD1.mxd |

GEOLOGY IN THE VICINITY OF THE DISCHARGE AREA, SALT LAKE LATERAL

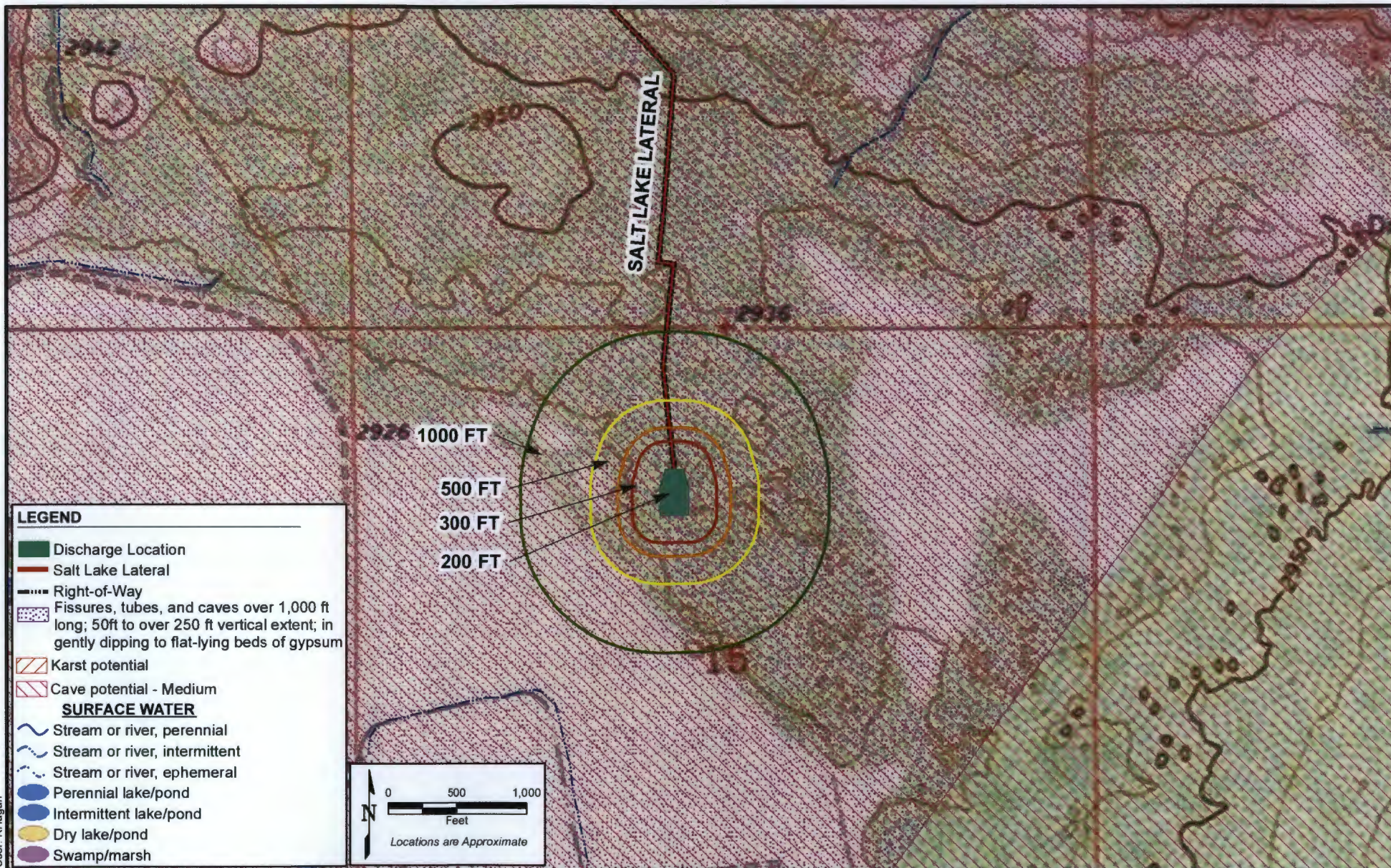
ENTERPRISE PRODUCTS OPERATING LLC
 SALT LAKE LATERAL
 EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
 APPROVED BY: BE

DRAWING CATEGORY:
 1

FIGURE

D-1



Sources:
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
National Wetlands Inventory, USF&WS
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM

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PROJECT NO. 131457

DRAWN: AUG 2013

DRAWN BY: CTH

CHECKED BY: JH

FILE NAME:
SaltLake_FigureD2.mxd

**KARST IN THE VICINITY OF THE
DISCHARGE AREA, SALT LAKE LATERAL**

ENTERPRISE PRODUCTS OPERATING LLC
SALT LAKE LATERAL
EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
APPROVED BY: BE

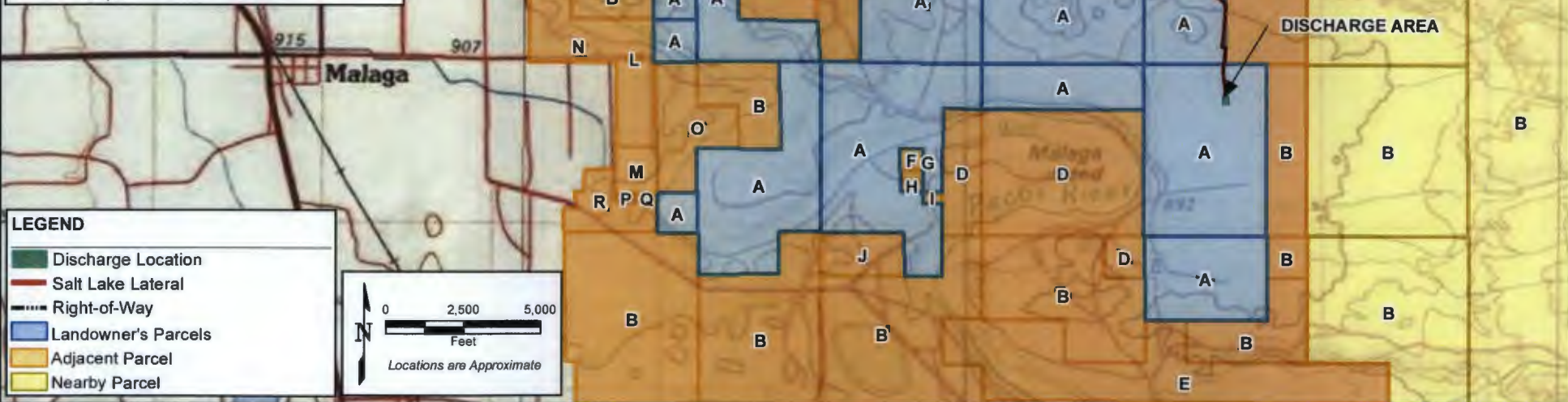
DRAWING CATEGORY:
1

FIGURE

D-2

APPENDIX E
Area Landownership

| Label | Owner |
|-------|---|
| A | Brantley, John Draper Jr; McDonald, Henry |
| B | US Bureau of Land Management |
| C | State of New Mexico |
| D | B & D Holdings LLC |
| E | Mahaffey, Tyson R & Lesli |
| F | Fomi, Thomas Earl |
| G | Devon Energy Production Co. LP |
| H | Pardue Limited Company LLC |
| I | Bryan, Ivor Dale & Thelma |
| J | Berry, Chester Kent |
| K | Johnson Enterprises |
| L | Walker, Lloyd Jr. & Frances G (JT) |
| M | Botros, Beth Ann |
| N | Faulk, Evelyn Kay & Donald (JT) |
| O | Burkham, Roy |
| P | Ruiz, Juan G, Et. al. |
| Q | Hannah, William Nelson |
| R | Ruster Hills Limited Partnership |
| S | Williams, Roxie L Trust, Et. al. |
| T | Annis, George M and Sarah M Wisdom |
| U | City of Carlsbad and Eddy County |
| V | Giovengo, Johnie Jr and Sharon |
| W | Intrepid Potash New Mexico LLC |



Sources:
Centerline: Salt Lake 07-02-13.shp provided by Surveying and Mapping, Inc. on July 2, 2013
National Wetlands Inventory, USF&WS
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, Pierce Canyon, NM

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PROJECT NO. 131457
DRAWN: OCT 2013
DRAWN BY: KFH
CHECKED BY: JH
FILE NAME: SaltLake_FigureE1.mxd

LAND OWNERSHIP IN THE VICINITY OF THE DISCHARGE AREA

ENTERPRISE PRODUCTS OPERATING LLC
SALT LAKE LATERAL
EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
APPROVED BY: BE

DRAWING CATEGORY: 1

FIGURE

E-1

APPENDIX F

Public Notice

PUBLIC NOTICE

The United States Department of Transportation (USDOT) requires periodic pressurized tests on all USDOT-regulated pipelines. Enterprise Products Operating LLC (Enterprise) hereby gives notice that the following discharge permit notification has been submitted to the New Mexico Oil Conservation Division (NMOCD) in accordance with Subsection B, C, E, and F of 20.6.2.3108 New Mexico Administrative Code. The local Enterprise mailing address is: Enterprise Products Operating LLC, 1031 Andrews Highway, Suite 320, Midland, TX 79701.

The purpose of hydrostatic (testing with water) pipeline testing is to confirm the the pipeline's ability to sustain maximum allowable operation pressure. The pipeline will be filled with water, and then pressurized to a level higher than the standard operating pressure for a specified duration.

Enterprise has submitted an application for hydrostatic test water discharge that will occur on private land within property leased by Enterprise at latitude 32.221607; longitude -103.97406 in Eddy County, New Mexico. The location of the discharge is approximately eight miles southeast of Loving, New Mexico. To reach the discharge location from the intersection of W. Cedar Street and S. 8th Street (US-285 S), head south on N. 8th Street (US-285 S) for approximately 4.8 miles; turn left onto County Road 720/Duarte Road and continue for 0.8 miles; turn left on to County Road 745/Harroun Road and continue for 1.0 mile; turn right onto Bramble Road and continue for 2.1 miles; turn right onto Dog Town Road and continue for 1.3 miles; turn left on an unnamed road and continue for 1.0 mile; turn left on an unnamed road and continue for 1.3 miles; turn right on an unnamed road and continue for 0.6 mile. The site will be on the right side of the road on private land. The hydrostatic test is scheduled to begin on or about October 30, 2013 with discharge of the test water scheduled on or about November 15, 2013.

Approximately nine miles of new, natural gas piping will be tested. Up to 300,000 gallons of potable, municipal water from the City of Carlsbad will be used in the hydrostatic test. Upon completion of the test, the water will be temporarily stored in 15 specially designed tanks on private property that is leased by Enterprise at the discharge location. Once the test has been completed, and prior to discharge, Enterprise will collect and analyze a sample of the water obtained from the end section of the pipeline. The sample will be analyzed for water quality and the results will be forwarded to the NMOCD. Upon NMOCD concurrence that the discharge water meets the water quality standards of NMAC 20.6.2.3103, Enterprise will discharge the water in accordance with the approved discharge permit. If discharge to the ground surface is approved, the water will be released from the pipeline and the test water will be discharged to a dissipation and discharge system and allowed to flow onto ground surface on the leased private property.

If test water exceeds discharge requirements, it will be transported from the project site in DOT-approved tanker trucks by an NMOCD-approved hauler to an NMOCD-approved waste water disposal facility.

Depth to water in the nearest water supply wells located more than a mile to the west, along the Pecos River, ranged from 18 to 60 feet below the ground surface. The elevation of the Pecos River is approximately 2905 feet above mean sea level (amsl). The elevation of the ground surface at the discharge area is approximately 2935 feet amsl. The first groundwater likely to be affected by a leak, accidental discharge, or spill exists at a depth of at least 30 feet below the ground surface, based on the ground surface elevations and surrounding surface water and

groundwater elevations. The aquifer system in this area has a total dissolved solids concentration of approximately 4,000 milligrams per liter.

The notice of intent and discharge plan outlines how produced water and waste will be properly managed, including handling, storage, and final disposition. The plan also includes procedures for the proper management of leaks, accidental discharges, and spills to protect the waters of the State of New Mexico.

For additional information, to be placed on a facility-specific mailing list for future notices, or to submit comments please contact:

Brad Jones, Environmental Engineer
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Phone: 505.476.3487

The NM Energy, Minerals and Natural Resources Department will accept comments and statements of interest regarding this hydrostatic test and will provide future notices for this pipeline upon request.

AVISO PUBLICO

El Departamento de Transporte de los Estados Unidos (United States Department of Transportation, USDOT) requiere hacer pruebas (presurizadas) periódicamente en toda tubería regulada por USDOT. La compañía Enterprise Products Operating, LLC (Enterprise) da aviso por este medio que la siguiente aplicación de permiso de descarga ha sido sometida al New Mexico Oil Conservation Division (NMOCD) de acuerdo con las Sub-Sección B, C, E, y F del Código Administrativo de Nuevo México (New Mexico Administrative Code, NMAC, 20.6.2.3108). La dirección de correo local de la compañía Enterprise es: Enterprise Products Operating LLC, 1031 Andrews Highway, Suite 320, Midland, Texas 79701.

El propósito de la prueba hidro-estática (prueba con agua) en la tubería es para confirmar la habilidad de la tubería de sostener la máxima presión de operación permisible. La tubería será llenada con agua, y luego presurizada a una presión mayor a la presión de operación estándar por un periodo de tiempo especificado.

Enterprise ha sometido una aplicación para descargar agua de pruebas hidro-estática que ocurrirá sobre propiedad privada rentada por Enterprise a una latitud de 32.221607°, y una longitud de -103.97406° en el Condado Eddy, Nuevo México. El lugar de la descarga está aproximadamente a 8 millas al sureste de Loving, Nuevo México. Para llegar al lugar de la descarga desde la intersección de W. Cedar Street y S. 8th Street (US-285 S), viajar hacia el sur sobre N. 8th Street (US-285 S) por aproximadamente 4.8 millas; vuelta a la izquierda sobre County Road 720/Duarte Road y continuar por 1.0 milla; vuelta a la derecha sobre Bramble Road y continuar por 2.1 millas; vuelta a la derecha sobre Dog Town Road y continuar por 1.3 millas; vuelta a la izquierda sobre una calle sin nombre y continuar por 1.0 milla; vuelta a la izquierda sobre una calle sin nombre y continuar por 1.3 millas; vuelta a la derecha sobre una calle sin nombre y continuar por 0.6 millas. El sitio estará en el lado derecho de la calle en propiedad privada. La prueba hidro-estática está programada para empezar en o aproximadamente Octubre 30, 2013 con la descarga del agua de prueba programada en o aproximadamente Noviembre 15, 2013.

Aproximadamente 9 millas de tubería nueva para gas natural será probada. Hasta 300,000 galones de agua municipal potable de la ciudad de Carlsbad será usada en la prueba hidro-estática. Una vez que la prueba se haya completado, el agua será temporalmente guardada en 15 tanques (especialmente diseñados) en propiedad privada rentada por Enterprise en el lugar de la descarga. Una vez que la prueba se haya completado, y antes de la descarga, Enterprise obtendrá y analizará una muestra de agua obtenida del extremo de la sección de tubería. La muestra será analizada para evaluar la calidad del agua. Una vez que se reciban los resultados, los resultados serán mandados a NMOCD. Al NMOCD concurrir que el agua de descarga cumple con los estándares de calidad de agua de NMAC 20.6.2.3103, Enterprise descargará el agua de acuerdo con el permiso de descarga aprobado. Si descarga en la superficie del suelo es aprobado, el agua será desalojada de la tubería y el agua de prueba será descargada al sistema de descarga y permitida fluir sobre la superficie del suelo en la propiedad privada rentada.

Si el agua de prueba excede los requisitos de descarga, será transportada del sitio del proyecto en camiones-pipa aprobados por el departamento de transporte por un transportista aprobado por NMOCD, Mesquite Services, Inc., a Dorstate SWD (API #30-015-23728), un lugar aprobado por NMOCD para deshacerse del agua de prueba.

La profundidad al nivel freático en los pozos de agua más cercanos situados más de una milla hacia el oeste, cerca del Río Pecos, variaba de 18 a 60 pies debajo de la superficie del suelo. La elevación del Río Pecos es aproximadamente 2,905 pies arriba del nivel promedio del mar (above mean sea level, amsl). La elevación de la superficie del suelo en el área de la descarga es aproximadamente 2,935 pies amsl. El primer nivel freático que posiblemente pueda ser afectado por una fuga, descarga accidental o derrame se encuentra a una profundidad de por lo menos 30 pies debajo de la superficie del suelo, basado en elevaciones de la superficie del suelo y elevaciones de agua y niveles freáticos en los alrededores. El sistema acuífero en esta área tiene una concentración total de sólidos disueltos de aproximadamente 4,000 miligramos por litro.

El aviso de intención y el plan de descarga resume como el agua que se produzca será manejada, incluyendo su guardado y el proceso final para deshacerse del agua. El plan también incluye procesos para el manejo apropiado de fugas, descargas accidentales, y derrames para proteger las aguas del Estado de Nuevo México (New Mexico).

Para información adicional, ser puesto en una lista de correo específica a este proyecto para avisos futuros, o para someter comentarios, favor de contactar:

Brad Jones, Environmental Engineer
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Teléfono: 505.476.3487

El Departamento de NM de Energía, Minerales y Recursos Naturales (NM Energy, Minerales and Natural Resources Department) aceptará comentarios al respecto de esta prueba hidro-estática y proporcionará avisos futuros para esta tubería en base a petición.

APPENDIX G

Landowner Consent Information



Enterprise Products™

P.O. Box 4324 Houston, Texas 77210-4324 713.381.6500
9420 West Sam Houston Parkway North Houston, Texas 77064 www.epplp.com

October 1, 2013

John Draper Brantley, Jr.
706 West Riverside Drive
Carlsbad, NM 88220

Henry McDonald
P.O. Box 597
Loving, NM 88256

**RE: Proposed Hydrostatic Water Discharge Site
Enterprise Field Services LLC's
Salt Lake Extension 12-inch Pipeline
Section 15, Township 24 South, Range 29 East
Eddy County, New Mexico**

Dear Mr. Brantley and Mr. McDonald,

Enterprise Field Services LLC, operated by and through Enterprise Products Operating LLC (collectively "Enterprise"), proposes to hydrostatically test approximately 9 miles of new 12-inch proposed pipeline in Eddy County, New Mexico. Approximately 300,000 gallons of water will be used for this test. The source of the test water will be from the City of Carlsbad.

Upon completion of the test, the water will temporarily be stored in 15 frac tanks on your property (parcel 4-172-141-198-265). Upon New Mexico Oil Conservation Division concurrence that the test water meets the discharge permit requirements, Enterprise plans to discharge the test water onto the ground on your property (parcel 4-172-141-198-265) in Section 15, Township 24 South, Range 29 East, approximately 2.89 miles west-northwest of the McDonald Road/Gavalin Road intersection. The water will be discharged at the maximum allowable rate, as directed by the Oil Conservation Division of the New Mexico Energy, Minerals, and Natural Resources Department into a dissipation structure of silt fence and hay bales and allowed to percolate onto the ground surface on your property. Discharge of the hydrostatic test water will be monitored by Enterprise personnel and its contractors. The test water will be tested and discharged in compliance with the guidelines of the Oil Conservation Division of the New Mexico Energy, Minerals, and Natural Resources Department. The discharge is scheduled to begin in November, upon completion of the pipeline construction and the hydrostatic testing.

The Oil Conservation Division of the New Mexico Energy, Minerals, and Natural Resources Department requires proof of the landowner's consent prior to hydrostatic water being discharged onto your private property.

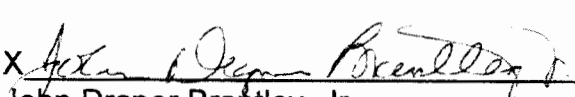
This letter, when executed, serves as proof of such consent to store and discharge test water on the ground surface of the particular property listed above within and/or outside Enterprise's pipeline right-of-way.

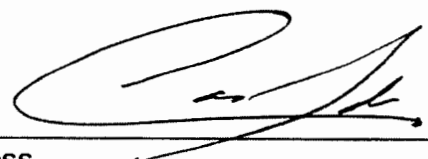
Should you have any questions or require additional information, please feel free to contact me at (479) 650-6511.


Sincerely,
Enterprise Field Services LLC
Enterprise Products Operating LLC

John R. Wagner
Right-of-Way Project Manager
Enterprise Field Services LLC
6010 Hwy. 191, Ste 250
Odessa, TX 79762

Your signatures indicate your approval to allow storage of the post-hydrostatic test water and discharge of hydrostatic test water on and across your property.

X  Dated: 4th day of October, 2013.
John Draper Brantley, Jr.

X  _____
Witness

X  Dated: 4th day of October, 2013.
Henry McDonald

X  _____
Witness

APPENDIX H
Water Quality Results

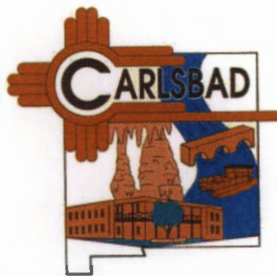


City of Carlsbad Municipal Water System

2012 Annual Consumer Report on the Quality of Your Drinking Water

**For areas serviced by the Carlsbad Municipal and
Double Eagle Water Systems**





City of Carlsbad Municipal Water System

2012 Annual Consumer Report on the Quality of Your Drinking Water

For areas serviced by the Carlsbad Municipal and Double Eagle Water Systems

This is an **US EPA-required report** that is a result of an unfunded mandate added under the federal Safe Drinking Water Act amendment of 1996. The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to assure that the nation's water supply systems serving the public meet minimum national standards for the protection of public health.

This brochure explains how drinking water provided by the City of Carlsbad is of high quality. Included is a listing of results from water-quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. This "Consumer Confidence Report" is required by law. We're proud to share our results with you. Please read them carefully.

Our drinking water currently meets or surpasses all federal and state drinking water quality standards.

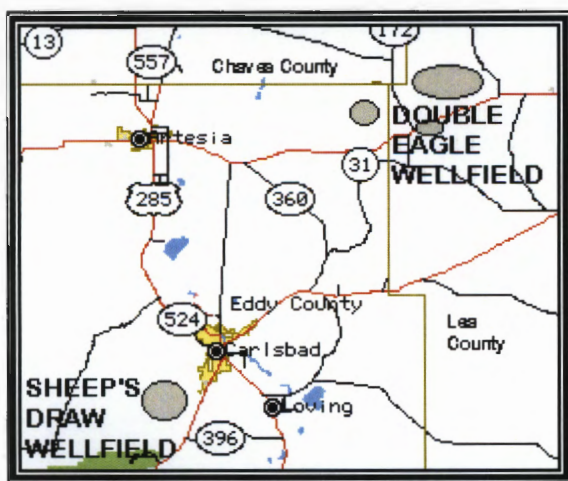
Overview

In 2012, your water department distributed 2.915 billion gallons of water to Carlsbad area customers. Our system consists of 1162 miles of water distribution and transmission lines spread throughout the Carlsbad area, Lea and Eddy Counties. The Water Department office is located at 1502 W. Stevens Street. City water main leaks should be reported to the Water Department Superintendent at 885-6313 (M-F, 7 AM to 4 PM) or the Police Department at 885-2111 (after hours, weekends, and holidays). Water billing is handled through the Finance Department at City Hall (101 N. Halagueno Street). Billing inquiries can be directed to Customer Service at 887-1191 (M-F, 8 AM to 5 PM).

Water Sources

The City of Carlsbad is serviced by two separate well fields - Sheep's Draw and Double Eagle (see Map below). Approximately 98% of Carlsbad's water (identified as Zone 1 in Table below) is supplied by groundwater pumped from 9 wells located 7 miles southwest of Carlsbad in an area called Sheep's Draw in the foothills of the Guadalupe Mountains. These wells range in depth from 500 to 900 feet and pull water from the same limestone formation that the Carlsbad Caverns was formed in. This aquifer is called the Capitan Aquifer. The City of Carlsbad, under the authority of its ordinance (Ordinance 2000-13) maintains and enforces a Wellhead Protection Program to protect your water from contamination and depletion.

Map A: Geographic Location of Sheep's Draw and Double Eagle



The Double Eagle well system serves the Ridgecrest Subdivision, Connie Road, Blackfoot Road, as well as the Hobbs Highway Industrial Park Area, Brantley Lake State Park, and the Waste Isolation Pilot Plant and is supplied by groundwater pumped from 11 wells near Maljamar, NM in northwestern Lea County. These wells are 150-350 feet in depth. Double Eagle water comes from a hydrologic formation known as the Ogallala Aquifer.

The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals. The SDWA directed the U.S. Environmental Protection Agency (EPA) to establish national drinking water standards. These standards limit the amount of certain contaminants provided by public water. Food and Drug Administration (FDA) regulations establish limits for contaminants

in bottled water. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791).

Table A: Well Field Service Areas

| ZONE 1- Serviced by the Sheep's Draw System | ZONE 2- Serviced by the Double Eagle System |
|---|--|
| Every service connection in City of Carlsbad located west of and on Muscatel Avenue | Oakwood Drive, Ridgecrest Drive, Connie Road, Old US Refinery Road, Blackfoot Road, and all service connections on Hobbs Hwy. east of Muscatel Avenue. |
| The La Huerta Area | The Waste Isolation Pilot Plant |
| Otis Water Coop customers using City water | Enron Pipeline Station off of US 62-180 |
| All Standpipe-area service connections | Brantley Lake State Park |

DEFINITIONS OF WATER QUALITY TERMS

Action Level - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picogram/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - Measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal -The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level Goal - The "Goal" (MRDLG) is the level of a drinking water disinfectant below which there is no known or expected risk to health.

Maximum Residual Disinfectant Level - The "Maximum" (MRDL) is the highest level of a disinfectant allowed in drinking water.

How to Read These Tables

This report is based upon tests conducted as of December 31, 2012 by City of Carlsbad Public Water System and the New Mexico Environment Department. The first table refers to water tested from the Sheep's Draw System (see Table A, Zone 1). The second table refers to water tested from the Double Eagle System (see Table A, Zone 2). Terms used in the Water-Quality Table and in other parts of this report are defined below.

Key To Tables B & C below:

| | |
|--|---|
| AL = Action Level | pci/l = picocuries per liter (a measure of radioactivity) |
| MCL = Maximum Contaminant Level | ppm = parts per million, or milligrams per liter (mg/l) |
| MCLG = Maximum Contaminant Level Goal | ppt = parts per trillion, or nanograms per liter |
| MFL = million fibers per liter | ppb = parts per billion, or micrograms per liter (µg/l) |
| NTU = Nephelometric Turbidity Units | ppq = parts per quadrillion, or picograms per liter |
| mrem/year = millirems per year (a measure of radiation absorbed by the body) | TT = Treatment Technique |

Table B: Sheep's Draw Contaminants. If you live or work in Zone 1 (see Table A above), use this table:

| Contaminant | Date Tested | Unit | MCL What's Allowed | MCLG | Detected Level What's in your Water | Range What's in your Water | Major Sources | Violation |
|--------------------------------------|-------------|-------|-----------------------|-------|--|-------------------------------|---|-----------|
| Inorganic Contaminants | | | | | | | | |
| Arsenic | 7/18/11 | ppb | 50 | 0 | ND | ND | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes | NO |
| Barium | 7/18/11 | ppm | 2 | 2 | 0.073 | 0.073 – 0.073 | Discharge of drilling wastes; Discharge from metal refineries | NO |
| Chromium | 7/18/11 | ppb | 100 | 100 | ND | ND | Erosion of natural formations | NO |
| Copper | 8/29/12 | ppm | AL=1.3 | 1.3 | 0.17 | 0.021- 0.24 | Discharge from steel and pulp mills. Erosion of natural formations | NO |
| Lead | 8/29/12 | ppb | AL= 15 | 0 | 0.0034 | 0.0 – 0.016 | Corrosion of household plumbing systems; erosion of natural deposits | NO |
| Selenium | 7/18/11 | ppb | 50 | 50 | 2.0 | 2.0 | Corrosion of household plumbing systems; erosion of natural deposits | NO |
| Thallium | 7/18/11 | ppb | 2.0 | 0.5 | ND | ND | Discharge from petroleum and metal refineries; Erosion of natural deposits | NO |
| Nitrate | 7/10/12 | ppm | 10 | 10 | 1.06 | 1.06 | Leaching from ore-processing sites; discharge from electronics, glass, and pharmaceutical companies | NO |
| Fluoride | 7/18/11 | ppm | 4 | 4 | 0.32 | 0.32 - 0.32 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Discharge from mines. Erosion of natural formations | NO |
| Nickel | 7/18/11 | ppm | 9,999 | 9,999 | ND | ND | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories | NO |
| Sulfate | 5/23/00 | ppm | 9,999 | 250** | 108 | 60 – 108 | Erosion of natural deposits | NO |
| Radioactive Contaminants | | | | | | | | |
| Uranium | 6/21/11 | ppb | 30 | 30 | <1.0 | <1.0 | Erosion of natural deposits | NO |
| Alpha emitters | 6/21/11 | pCi/L | 15 | 0 | 1.9 | 1.4 – 1.9 | Erosion of natural deposits | NO |
| Beta/photon emitters | 6/21/11 | pCi/L | 50 | 0 | 1.5 | 1.5 | Decay of natural and man-made deposits | NO |
| Combined Radium 226/226 | 6/21/11 | pCi/L | 5 | 0 | 0.12 | 0.12 | Erosion of natural deposits | NO |
| Volatile Organic Contaminants | | | | | | | | |
| THHMs [Total Trihalomethanes] | 7/10/12 | ppb | 80 | 0 | 1.85 | 1.85 | By-product of drinking water chlorination | NO |
| HAA5 | 7/10/12 | ppb | 60 | 0 | ND | ND | By-product of drinking water chlorination | NO |
| Disinfectant | | | | | | | | |
| Chlorine Residual | 12/31/12 | ppm | 4 | 4 | 0.62 | 0.62 | By-product of drinking water chlorination | NO |

Water-Quality Table Footnotes

* Below current EPA MCL, levels of 10.0 ppb

** Unregulated, however, below suggested EPA Maximum Contaminant Level (MCL) of 250 ppm

Although we ran many other tests, only the listed substances were found.

Table C: Double Eagle Contaminants. If you live or work in Zone 2 (see Table A above), use this table:

| Contaminant | Date Tested | Unit | MCL What's Allowed | MCLG | Detected Level What's in your Water | Range What's in your Water | Major Sources | Violation |
|--------------------------------------|-------------|-------|-----------------------|-------|--|-------------------------------|---|-----------|
| Inorganic Contaminants | | | | | | | | |
| Arsenic | 7/18/11 | ppb | 50* | 0 | ND | ND | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes | NO |
| Barium | 7/18/11 | ppm | 2 | 2 | 0.073 | 0.073 – 0.073 | Discharge of drilling wastes; Discharge from metal refineries | NO |
| Chromium | 7/18/11 | ppb | 100 | 100 | ND | ND | Erosion of natural formations; Discharge from steel and pulp mills | NO |
| Selenium | 7/18/11 | ppb | 50 | 50 | 1.1 | 1.1 – 1.1 | Erosion of natural deposits; Discharge from petroleum and metal refineries | NO |
| Thallium | 7/18/11 | ppb | 2.0 | 0.5 | ND | ND | Leaching from ore-processing sites; discharge from electronics, glass, and pharmaceutical companies | NO |
| Nitrate | 7/10/12 | ppm | 10 | 10 | 2.51 | 2.51 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Discharge from mines | NO |
| Fluoride | 7/18/11 | ppm | 4 | 4 | 0.33 | 0.33 – 0.33 | Erosion of natural formations; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories | NO |
| Nickel | 7/18/11 | ppm | 9,999 | 9,999 | ND | ND | Erosion of natural deposits, metal shops | NO |
| Sulfate | 5/4/00 | ppm | 9,999 | 250 | 51.00 | 51 – 51 | Erosion of natural deposits | NO |
| Radioactive Contaminants | | | | | | | | |
| Uranium | 6/21/11 | ppb | 30 | 30 | <1.0 | <1.0 | Erosion of natural deposits | NO |
| Alpha emitters | 6/21/11 | pCi/L | 15 | 0 | 1.5 | 1.1 – 1.5 | Erosion of natural deposits | NO |
| Beta/photon emitters | 6/21/11 | pCi/L | 50 | 0 | 2.7 | 2.6 – 2.7 | Decay of natural and man-made deposits | NO |
| Combined Radium 226/228 | 6/21/11 | pCi/L | 5 | 0 | 0.75 | 0.75 | Erosion of natural deposits | NO |
| Volatile Organic Contaminants | | | | | | | | |
| TTHMs [Total Trihalomethanes] | 7/10/12 | ppb | 80 | 0.8 | ND | ND | By-product of drinking water chlorination | NO |
| HAA5 | 7/10/12 | ppb | 60 | 0.0 | ND | ND | By-product of drinking water chlorination | NO |
| Disinfectant | | | | | | | | |
| Chlorine Residual | 12/31/12 | ppm | 4 | 4 | 2.20 | 2.20 | By-product of drinking water chlorination | NO |

Water-Quality Table Footnotes

* The current EPA regulated MCL level of Arsenic 10.0 ppb. Arsenic is a naturally occurring mineral known to cause cancer in humans in high concentrations.

** Unregulated, however, below suggested EPA Maximum Contaminant Level (MCL) of 250 ppm

Although we ran many other tests, only the listed substances were found.

Explanation of Violations

NO VIOLATIONS THIS PERIOD

Unregulated Contaminants

During testing in December of 1994, our water showed a mean radon level of 111 to 132 picocuries per liter (pCi/l) for the Sheep's Draw System. Testing in October of 1998 showed a radon level of 95 to 197 pCi/l for Double Eagle System. The U.S. Environmental Protection Agency (EPA) is preparing a regulation, which will specify a Maximum Contaminant Level for radon. Radon is a radioactive gas that occurs naturally in ground water and is released from water into the air during household use. At high exposure levels it can cause lung cancer. Radon readings in our water are low and should not cause concern.

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban stormwater runoff and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

(F) Arsenic above 5 up through 10 ppb: While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Other Important Water Characteristics

Other water characteristics, which are not categorized as contaminants, are also tested. This information can be valuable for those on very specifically restricted diets, for determining how the water would serve in special applications such as photo developing, water softeners and other chemistry sensitive areas, or in balancing chemical characteristics in sensitive environments such as aquariums. The following is a summary of the test results as of the end of 2012.

| Chemical Characteristic | Average Level | Comments |
|--------------------------------|---------------------------------------|--|
| pH | 7.22 | Normal |
| Total Hardness | 349 mg/L or about 20.40 grains/gallon | Moderately Hard |
| Chlorides | 25 mg/L | Normal |
| Sulfates | 83 mg/L | Normal for southeastern NM, above average nationally |
| Fluorides | .38 mg/L | Normal |
| Specific Conductance | 648 mmohs | Normal |
| Total Dissolved Solids | 311 mg/L | Normal |

National Primary Drinking Water Regulation Compliance

This report is an unfunded mandate required under the federal Safe Drinking Water Act amendment of 1996. Each year, the City is now required by the United States Environmental Protection Agency to distribute this report to all users of our water and publish a copy in the local newspaper. For more information, call the City of Carlsbad Environmental Services Department at 887-1191.

Public Participation:

Issues dealing with the planning for and protection of your water system are posted in the Council Agenda at the Carlsbad Municipal Building and decisions are made at the corresponding City Council Meetings. The Carlsbad City Council meets on the second and fourth Tuesday of every month at 6:00 PM in the Municipal Building's Council Chamber (101 N. Halagueno). If you are interested in participating in the planning and protection of Carlsbad's drinking water, please plan to attend one soon.

Other Water & Wastewater System News:

Water and Sewer Capital Improvement Plan Projects Update

The following projects funded by the \$45.3 million capital improvement plan are currently in progress:

1. Municipal Water Master Plan ~ \$220,000.00, the master plan has been completed.
2. High Pressure Loop Extension ~ \$3,622,282.00, design is currently under design.
3. Reservoir 1 Booster Station Upgrade ~ \$237,200.00, project is under construction.
4. Sewer Master Plan ~ \$206,713.00, has been completed.
5. Wastewater Treatment Plant Improvements ~ \$16,000,000.00, has been completed.
6. Sewer Lift Station Improvements ~ \$2,261,550.00, has been completed.
7. Double Eagle Waterline Improvements ~ \$14,255,184.00, project is under design.
8. Sewer Lift Stations to Stevens, Pate and Hall Addition ~ \$1,215,350.00, under design.
9. Elgin Road Water and Sewer ~ \$394,472.00, construction to start 2013.
10. Wastewater Effluent Reuse ~ \$529,591, Preliminary Engineering Report under.
11. Double Eagle Well Replacements Phase II ~ \$1,375,000.00, project under design for 5 new wells.

Groundwater Monitoring Program

The Water Department continues to monitor groundwater levels and ground water quality for any changes that may adversely impact your drinking water. Long, prolonged periods of drought such as the current event, have a negative impact on groundwater levels. The groundwater monitoring program supports the water conservation ordinance recently implemented by the City.

Source Water Assessment & Protection Program (SWAPP)

The Carlsbad Municipal water system is well maintained and operated, and sources of drinking water are generally protected from potential sources of contamination based on well construction, hydrogeologic settings, and system operations and management. The susceptibility rank of the entire water system is **Moderate**. The SWAPP Report is intended primarily to provide water utility companies, and water customers with information about the susceptibility of their water supplies to contamination. The report was provided to the Carlsbad Municipal Water System and is available through the State of New Mexico Environment Department Drinking Water Bureau, 525 Camino de Los Marquez, Suite 4, Santa Fe, NM 87505. Copies may also be requested by emailing the Drinking Water Bureau at SWAPP@nmenv.state.nm.us or by calling (505) 827-7536 (toll free 1-877-654-8720). Please include your name, address, telephone number, and email address, and the name of the Water System. NMED-DWB may charge a nominal fee for paper copies.

Leak Detection and Conservation Tips

Whose responsibility is it to fix leaks?

That depends on where the leak is located. The Water Department is responsible for leaks on the street side of the water meter and in the meter pit. Leaks from the connection to the water meter to the home, as well as leaks inside the home are the responsibility of the customer. It is very important to repair leaks as quickly as possible. Ignoring leaks can waste a great deal of water, cause significant property damage and can be costly to the consumer. Quickly addressing leaks will save water and money.

Check for leaking toilets

Leaking toilets are the number one source of wasted water in the home. A leaky toilet tank wastes between 300 gallons (slow leak) and 60,000 gallons (running toilet) per month. To detect a slow leak, put food coloring in the toilet tank and wait 15 minutes without flushing. If the water in the bowl turns color, your toilet tank is leaking. The Water Department recommends you perform this test at least twice a year.





Check for Underground Leaks

An underground water leak due to a broken pipe or faulty coupling can be very costly because the water loss is not always easy to spot. Careful attention to the signs of a water leak can help minimize costly water leaks.

1. Be aware of your normal consumption patterns. The new utility bill format (April 2004) provides your water usage for the previous year.
2. Search for unusual soggy spots in the general vicinity of your water line.

Check for leaky faucets, showers and hoses

Worn Plumbing fixtures waste a great deal of water and can be costly to the consumer. Check faucets and hose connections (i.e. at your washing machine) frequently. The figure below illustrates the potential water loss from leaky faucets:

| Even a Small Leak Costs You Money | | | |
|---|---|---|---|
| Slow Leak | Steady Drip | Slow Stream | Steady Stream |
|  |  |  |  |
| 450 gallons per month | 750 gallons per month | 3,000 gallons per month | 12,000 gallons per month |

High Water Bill? Here are some tips for lowering your water usage.

- Never use your toilet as a waste basket.
- Do not let the water run while shaving or brushing teeth.
- Take short showers instead of tub baths.
- Keep drinking water in the refrigerator instead of letting the faucet run until the water is cool.
- Operate the dishwasher only when completely full.
- Use the appropriate water level or load size selection on the washing machine.
- Sweep driveways, sidewalks and steps rather than hosing off.
- Wash the car with water from a bucket.
- If you have a swimming pool, consider a new water-saving pool filter.
- Lower pool water level to reduce amount of water splashed out.
- Use a pool cover to reduce evaporation when pool is not being used.
- Repair all leaks. A leaky toilet can waste 200 gallons per day. To detect leaks in the toilet, add food coloring to the tank water. If the colored water appears in the bowl, the toilet is leaking.
- Install ultra-low flow toilets, or place a plastic container filled with water or gravel in the tank of your conventional toilet. Be sure it does not interfere with operation of the toilet's flush mechanisms.
- Install low-flow aerators and showerheads.
- Consider purchasing a high efficiency washing machine, which can save over 50% in water and energy use.
- Try xeriscaping. Plants, which are adapted to live in arid or semi-arid areas, require less water.
- Water your lawn in the early pre-dawn hours. On a hot day in Carlsbad, up to 50% of the water sprayed onto your lawn in the middle of the day can be lost to evaporation.

Description of Photos:

Front Cover, Top: Water Department Field Office 1502 W Stevens.

Front Cover, Bottom Left: DE Water Well – Ambassador #1.

Front Cover, Bottom Right: DE 2 million gallon reservoir.

Back Cover, Top: DE New Water Well Development.

Back Cover, Bottom: Water Well #1 Maintenance.



Water is Life



Help us Conserve and Protect it.



Barbara Everett

From: Richard Aguilar <rlaguilar@cityofcarlsbadnm.com>
Sent: Thursday, October 03, 2013 7:05 AM
To: Barbara Everett
Subject: Re: 2013 water quality results for the City of Carlsbad

The results on the website are the latest. We are always a year behind cause we report the last calendar year every June per NMED regulations. If you have any further questions, please feel free to call me.

On Wed, Oct 2, 2013 at 4:08 PM, Barbara Everett <BEverett@kleinfelder.com> wrote:

Mr. Aguilar:

I need a copy of the latest water quality results – 2013, if they are available. I have the 2012 results that were posted to the web site. NMOCD is requesting that I obtain the latest water quality results to include in a permit application that I am preparing on behalf of Enterprise. Would you please send me a copy of the 2013 water quality results for the City of Carlsbad?

Barbara Everett

Program Manager

Kleinfelder West, Inc.

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[505-280-1079](tel:505-280-1079) cell

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Superintendent of Environmental Services

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