HIP - __129__

GENERAL CORRESPONDENCE

YEAR(S): 2013 to Present

Jones, Brad A., EMNRD

From: White, James <JAGWHITE@eprod.com>
Sent: Tuesday, March 25, 2014 3:00 PM
To: Jones, Brad A., EMNRD
Cc: Barbara Everett; Rodriguez, Alberto; Tschirhart, Matthew; White, James
Subject: HIP-129, B-6 Lateral Replacement

Brad,

I received confirmation that hydrotest water from the B-6 lateral, that was being permitted under HIP-129, will not be discharged to ground and instead, will be hauled to disposal as outlined in the NOI. Therefore, Enterprise no longer needs a hydro discharge for the B-6 Lateral.

Thank you for your assistance,
Jimmy

Jimmy White
713-392-2458 Mobile
713-381-1785 Direct
jagwhite@eprod.com
Sent from iPhone

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

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

Jami Bailey
Division Director
Oil Conservation Division

November 7, 2013

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

Re: Hydrostatic Test Discharge Permit HIP-129
Enterprise Products Operating, LLC
B-6 Lateral Pipeline
Locations: SW/4 of the NW/4, Section 23, Township 20 South, Range 25 East, NMPM, Eddy County, New Mexico

Dear Ms. Nolan:

The New Mexico Oil Conservation Division (OCD) has received Enterprise Products Operating LLC's (Enterprise) revised notice of intent, dated November 4, 2013 and received November 6, 2013, for authorization to discharge approximately 360,000 gallons of wastewater generated from a hydrostatic test of approximately 11.06 miles (58,397) feet of a new 12.25-inch inner diameter natural gas transmission pipeline, approximately 15 miles northwest of Carlsbad, New Mexico. The proposed discharge/collection/retention location on private property near the northwestern end of the B-6 Lateral located in the SW/4 of the NW/4, Section 23, Township 20 South, Range 25 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 (private property near the northwestern end of the B-6 Lateral) and the post office in Lakewood, 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 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,

Brad A. Jones
Environmental Engineer

BAJ/baj

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

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of Check No. 3373647 dated 11/11/13

or cash received on 11/07/13 in the amount of $ 700.00

from ENTERPRISE FIELD SERVICES, INC.

for HIP-129

Submitted by: BRAD JONES Date: 11/07/13

Submitted to ASD by: LUPE SHERMAN Date: 11/07/13

Received in ASD by: _____ Date: _____

Filing Fee ✓ New Facility: _____ Renewal: _____

Modification _____ Other ✓ GENERAL PERMIT FEE

Organization Code 521.07 Applicable FY 14

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

NEW MEXICO ENVIRONMENT DEPARTMENT - ALBUQUERQUE FIELD OFFICE DAILY CHECK RECEIPT LOG

DATE RECEIVED	WALK-IN	MAIL	NAME ON CHECK	DATE OF CHECK	CHECK/MONEY ORDER#	PROGRAM ACCOUNT CODE	AMOUNT OF CHECK	DATE DEPOSITED	DEPOSITED BY:
11/7/13		X	ENTERPRISE FIELD SERVICES, INC.	11/11/13	3373647		$700.00		
TOTAL							$700.00		

REVENUE TRANSMITTAL SHEET

Description	Fund	Dept.	Share Acct	Sub Acct	Amount
Liquid Waste	34000	Z3200	496402		
Water Recreation Facilities	40000	Z8501	496402		
Food Permit Fees	99100	Z2600	496402		
OTHER	34100	232900		2329029000	

Enterprise Products

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

ENTERPRISE PRODUCTS OPERATING LLC

November 5, 2013

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
B-6 Replacement Lateral
Eddy County, New Mexico

Enterprise Products Operating LLC (Enterprise) will be constructing B-6 Replacement Lateral as an upgrade 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 revisions to the unofficial draft that you requested via telephone conversations on October 3 and 15, 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

P.O. BOX 4324
HOUSTON, TEXAS 77210-4324
713.381.6500

1100 LOUISIANA STREET
HOUSTON, TEXAS 77002-5227
www.enterpriseproducts.com

KLEINFELDER
Bright People. Right Solutions.

RECEIVED OCD
2013 NOV -6 P 4: 52

November 4, 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 B-6 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 –Enterprise Pipeline, Lateral B-6;
- Figure 2 – Enterprise Pipeline, Lateral B-6 Discharge Location;
- 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 – 2012 City of Carlsbad Municipal Water System.

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

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

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.

Jill Hernandez
Staff Engineer

Reviewed by:

Barbara Everett, PG
Program Manager

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

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

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 B-6 Lateral is located in the following sections of Eddy County, New Mexico:
    - Sections 4, 5, and 6 of Township 21 South, Range 26 East;
    - Sections 1, 2, 3, and 4 of Township 21 South, Range 25 East;
    - Sections 31, 32, and 33 of Township 20 South, Range 26 East; and
    - Sections 22, 23, 25, 26, and 36 of Township 20 South, Range 25 East.
- The B-6 Lateral is new, welded, steel 12.25-inch inner diameter pipeline, approximately 11.06 miles (58,397 feet) in length. The pipeline is part of a gathering system that transports natural gas from well sites to processing facilities.
- The source water for the hydrostatic testing is potable municipal water from the City of Carlsbad.
- The hydrostatic test of the B-6 Lateral is scheduled to be filled with test water on or about December 23, 2013. Upon completion of the hydrostatic test, the water will be stored in the pipeline. A sample will be collected from the northwestern end of the pipeline and tested for water quality parameters. 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 near the northwestern end of the B-6 Lateral (Figure 2). Approximately 360,000 gallons of test water are expected to be discharged to the ground surface on or about December 30, 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 sign 2 feet by 3 feet in size will be posted at the discharge location;
    2. Written notice will be posted at the Lakewood, 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.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

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 near the northwestern end of the B-6 Lateral in an area approximately 1.43 acres in size (250x250 feet) located at Latitude 32°33'39.33"N; Longitude 104°27'49.67"W. Permission to discharge the test water 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 15 miles northwest of Carlsbad, New Mexico. Directions to the discharge area from Carlsbad, New Mexico are:

- From the intersection of NM-524 W/W Lea St and S Canal St/US-285, head west on NM-524 W/W Lea St for approximately 2.4 miles;
- Take a slight right (northwest) onto NM-524 W/S Happy Valley Rd and continue for 6.1 miles;
- Turn northwest onto US-285 N/7 Rivers Hwy and continue for 9.3 miles;
- Turn west onto White Pine Rd and continue for 1.9 miles;
- Turn south onto Co Rd 28A/Salt Brush Rd and continue for 1.7 miles;
- Turn north onto the pipeline right-of-way and continue for 0.4 miles. 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:

SW/4 of the NW/4 of Section 23, Township 20 South, Range 25 East, Eddy County, New Mexico (Figure 1). The approximate coordinates for the discharge area location are: Latitude 32°33'39.33"N; Longitude 104°27'49.67"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 (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 September 23 and 27, 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 GIS database reviews (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) GIS database review (Appendix B, Figure B-2). The nearest water supply well reported in the OSE Waters database (RA 10141) was located approximately 1,600 feet to the southeast of the discharge area (Appendix B, Figure B-2).

The topographic map provided in the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) GIS database was reviewed for identification of springs in the vicinity of the discharge area on September 24, 2013. No springs were identified on the topographic map within 1,000 feet of the discharge area (Appendix B, Figure B-1). No springs were identified 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). A copy of the floodplain map (Panel 35015C0775D) is included in Appendix B, Figure B-3.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

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

The NWI GIS database was searched for wetlands in the vicinity of the discharge area on September 24, 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 March 17, 2011 aerial photograph of the area (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 Tompson with the New Mexico Abandoned Mine Lands Program was contacted on September 24, 2013 to assess the presence of abandoned subsurface mines in the vicinity of the proposed discharge area. According to Mr. Tompson, there is no record of abandoned subsurface mines within Sections 22 and 23 of Township 20 South, Range 25 East (see email, Appendix C).

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

No schools, hospitals, institutions or churches were noted on aerial photographs of the area, dated March 17, 2011 (see Figure 2). The nearest residence is located approximately 1,300 feet to the southeast. A visual site inspection on September 26, 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 confirm 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 level 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 the pipeline. Upon NMOCD approval, piping will be fitted to a valve on the pipeline and the water will be discharged to the ground on privately-owned property near the northwestern end of the B-6 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 B-6 Lateral, the water will be tested for water quality as described in Item j. The water will be temporarily stored in the pipeline prior to discharge (Figure 2). Drip pans will be used under piping connections.

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

Enterprise intends to store the test water in the pipeline upon completion of the hydrostatic testing. Drip pans will be used under piping connections.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

Water from the pipeline 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 pipeline. Visual inspections will be conducted while the hydrostatic test water is stored in the pipeline to ensure the absence of leaks and damage due to vandalism.

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;

Once the B-6 Lateral test has been completed, Enterprise will collect and analyze a sample of the water obtained from the northwestern 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
Ethlylene dibromide	504.1	2 x 40 ml VOA's / $Na_2S_2O_3$
Polychlorinated Biphenols	8082	2 x liter amber / unpreserved
Polynuclear Aromatic Hydrocarbons	8310	1 x liter amber / unpreserved
Phenols	9067	1 x liter amber / H_2S0_4
Anions, TDS, pH	300.0 SM 2540C SM 4500-H+B	1 x 500 ml plastic / unpreserved 1 x 125 ml plastic / H_2S04
Mercury	245.1	1 x 500 ml plastic / $HN0_3$
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 pipeline will be discharged into the dissipation structure and onto the ground surface.

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.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

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 stored in the pipeline, as described under items g and h. If the test water exceeds discharge requirements, waste water will be transferred from the pipeline 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 360,000 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 Reeves-Gypsum land-Cottonwood association soils comprised of loamy, very shallow to moderately deep, gently undulating soils located on plains and low hills and Gypsum land (USDA, 1971). The surface soils overlie Piedmont alluvial deposits (Qp on Figure D-1, Appendix D). Karst was not identified in the database review in the immediate discharge area, but was identified approximately 1,600 feet to the south (Appendix D, Figure D-2). High cave potential was identified in the GIS database search; however, no evidence of karst or caves 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;

Depth to water and water quality data could not be located for the nearest water supply well (RA 10141) located approximately 1,600 feet to the southeast of the discharge area. The nearest water supply well with a reported water depth is located approximately 0.5 mile to the east. The depth to water reported in that well (RA 05972) was 40 feet below the ground surface. The ground elevation at that well location is approximately 3,447 feet above mean sea level (amsl). The elevation of the ground surface at the discharge area is approximately 3,439 feet amsl. The shallowest groundwater likely to be affected by a leak or accidental discharge is likely found at a depth of 32 feet below grade, based on the ground surface and groundwater elevations. A total dissolved solids concentration of approximately 1,300 milligrams per kilogram is representative of the shallow aquifer in the discharge area (Cox, 1967).

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 **p|** 505.344.7373 **f|** 505.344.1711

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 landowner of the property where the discharge area is located is as follows:

Terpening, Henry
3612 E Castleberry Rd.
Artesia, NM 88210

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

Jarnigan, Dorothy J. Et al.
2717 NW 153rd Street
Edmond, OK 73013

Stagner Trust, Frances D.
8555 S Lewis #7D
Tulsa, OK 74137

Rigler, Elizabeth Claire Et al.
5305 Everett Ave.
Amarillo, TX 79106

Hobbs, Dorothy F.
1 Parkstone Cir. Apt. 215
North Little Rock, AR 72116

Garnhart 1994 Trust Et al.
509 Pineneedle Ct.
Roseville, CA 95747

Williamson, Greg L. & Kris (JT)
PO Box 498
Artesia, NM 88211

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.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

Cox, E.R., United States Department of the Interior, United States Geological Survey, Pecos River Commission, 1967, "Geology and Hydrology Between Lake McMillan and Carlsbad Springs, Eddy County, New Mexico", Geological Survey Water Supply Paper 1828.

Office of the State Engineer (OSE) database search accessed September 26, 2013, http://nmwrrs.ose.state.nm.us/nmwrrs/index.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:
- Seven Rivers, Lake Mcmillan South, Azotea Peak, and Carlsbad West
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, B-6 Lateral
- ESRI World Imagery; ESRI DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community. Date of image: 03/17/2011.

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 35015C0775D 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.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

Geology
- USGS OFR 2005-21351. Stoeser, 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.

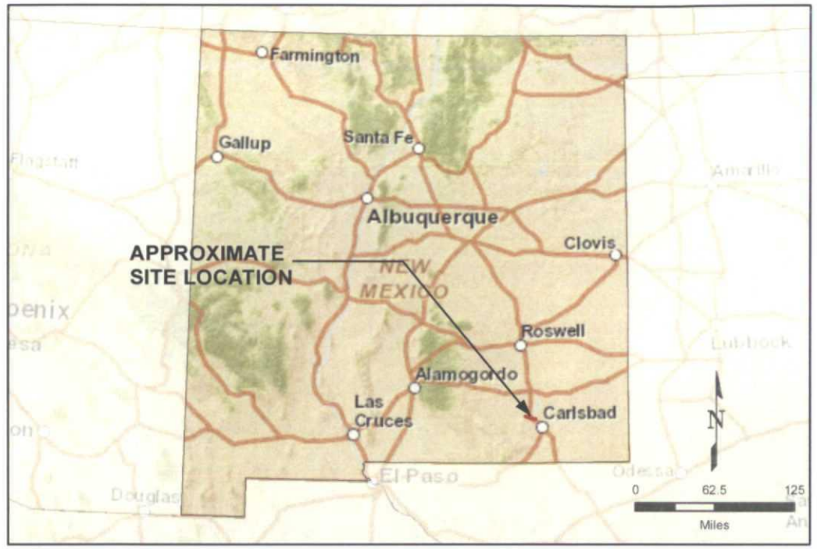
Karst
- *USGS OF 2004-1352. Tobin, Bret D., and David J. Weary, 2004. Digital Engineering Aspects of Karst Map: A GIS version of Davies, W.E., Simpson, J.H., Ohlmacher, G.C., Kirk, W.S., and Newton, E.G., 1984, Engineering aspects of karst: U.S. Geological Survey, National Atlas of the United States 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.

KLEINFELDER 9019 Washington St. NE Building A. Albuquerque, NM 87113 p| 505.344.7373 f| 505.344.1711

FIGURES

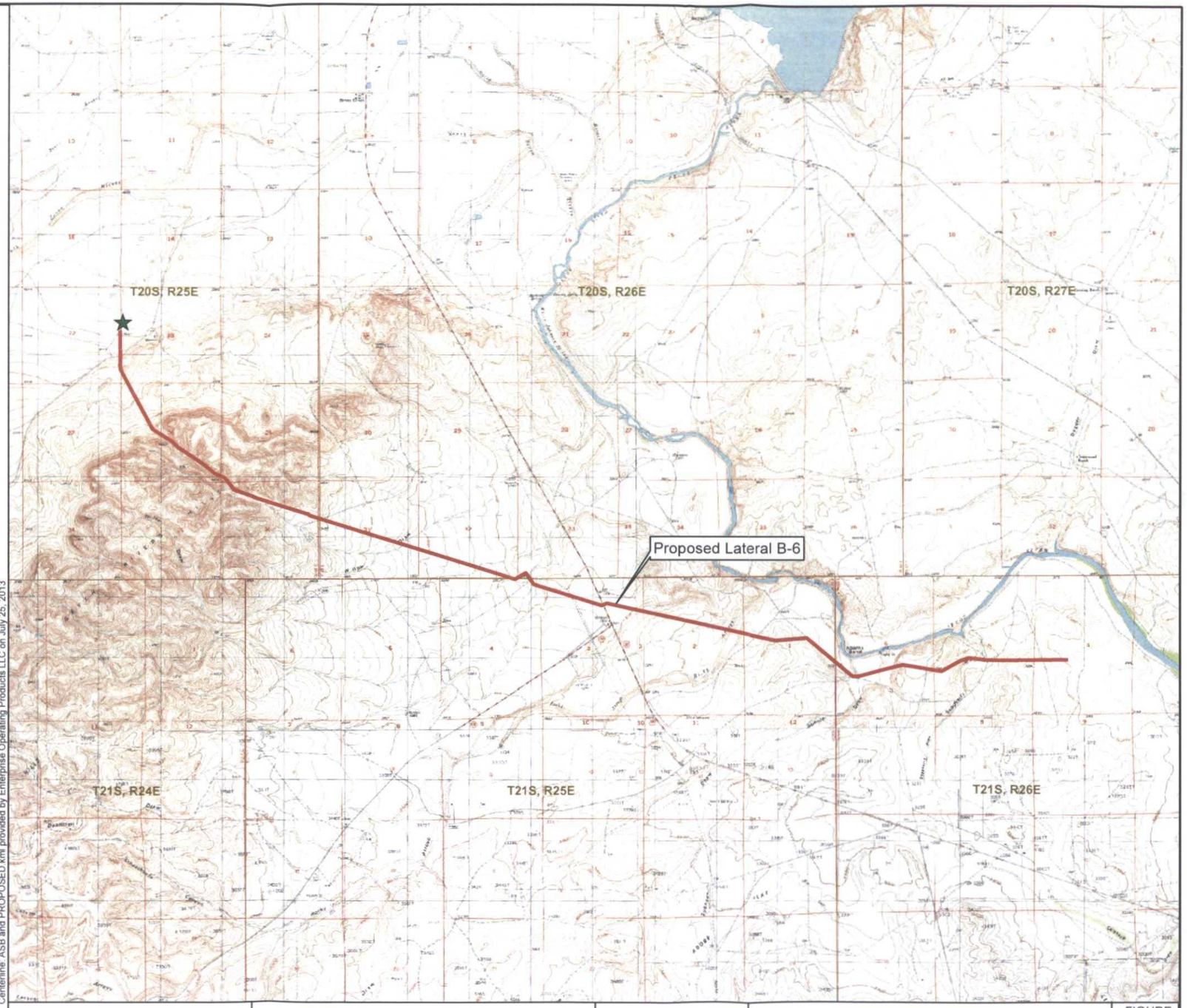


Source: ESRI World Street Map

LEGEND

★ DISCHARGE LOCATION

APPROXIMATE SEGMENT OF PIPELINE TO BE HYDROSTATICALLY TESTED



Source: USGS 7.5' Quadrangle Topographic Maps
Seven Rivers, Lake Mcmillan South, Azotea Peak, Carlsbad West, NM
Centerline ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013

N

3,000 0 3,000
Feet

Locations are Approximate

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.:	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_Figure1.mxd

ENTERPRISE PIPELINE
LATERAL B-6

ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

DRAWING CATEGORY: 1

FIGURE **1**

User: KHagan
Date: 9/27/2013

User: KHagan

Source: ESRI World Imagery, ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community
Date of image: 03/17/2011
ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013

Date: 9/27/2013

N

50 0 50 100
Feet

Locations are Approximate

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.:	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_Figure2.mxd

ENTERPRISE PIPELINE
LATERAL B-6 DISCHARGE LOCATION

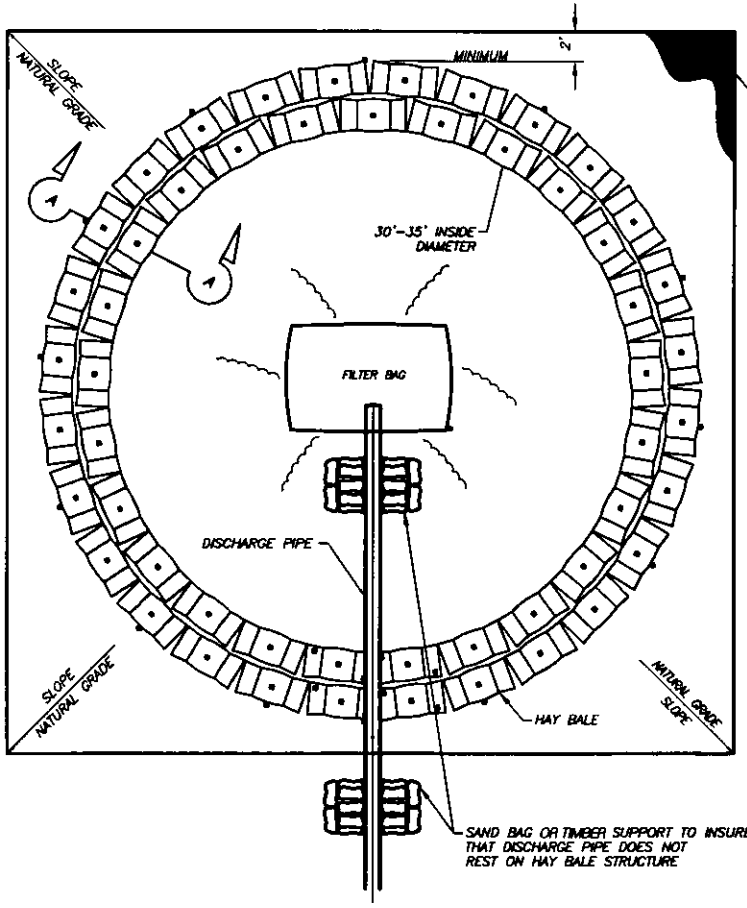
ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

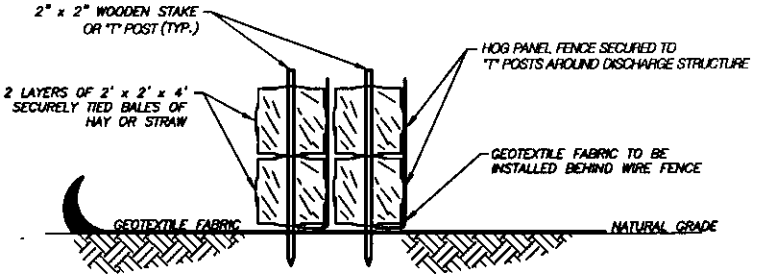
DRAWING CATEGORY: 1

FIGURE **2**

ATTACHMENTS:
ALBUQUERQUE, NM
CAD FILE: D:\GIS\Projects\131457-Crossover\11\ LAYOUT: Figure 3 PLOTTED: 27 Sep 2013, 3:57pm, KHagan



HYDROSTATIC DEWATERING DETAILS
PLAN VIEW
SCALE: NTS



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

SECTION A–A
FROM THIS DWG
SCALE: NTS

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 "T"POSTS
7. ENTIRE DISCHARGE STRUCTURE SHALL BE UNDERLAIN WITH NON-WOVEN GEO-TEXTILE LINER.

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	131457_F3.dwg

HYDROSTATIC TEST WATER DISPERSION SYSTEM

ENTERPRISE PRODUCTS OPERATING LLC
LATERAL B-6
EDDY COUNTY, NEW MEXICO

ORIGINATOR: J. HERNANDEZ
APPROVED BY:
DRAWING CATEGORY: 2

FIGURE 3

APPENDIX A

Certification of Siting Criteria

Certification of Siting Criteria

Hydrostatic Discharge Line

I, Meghan Vallejo, P.E., 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 distances from the secondary containment area, except as noted. The discharge area will be located in the SW 1/4 of the NW 1/4 of Section 23, Township 20 South, Range 25 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.

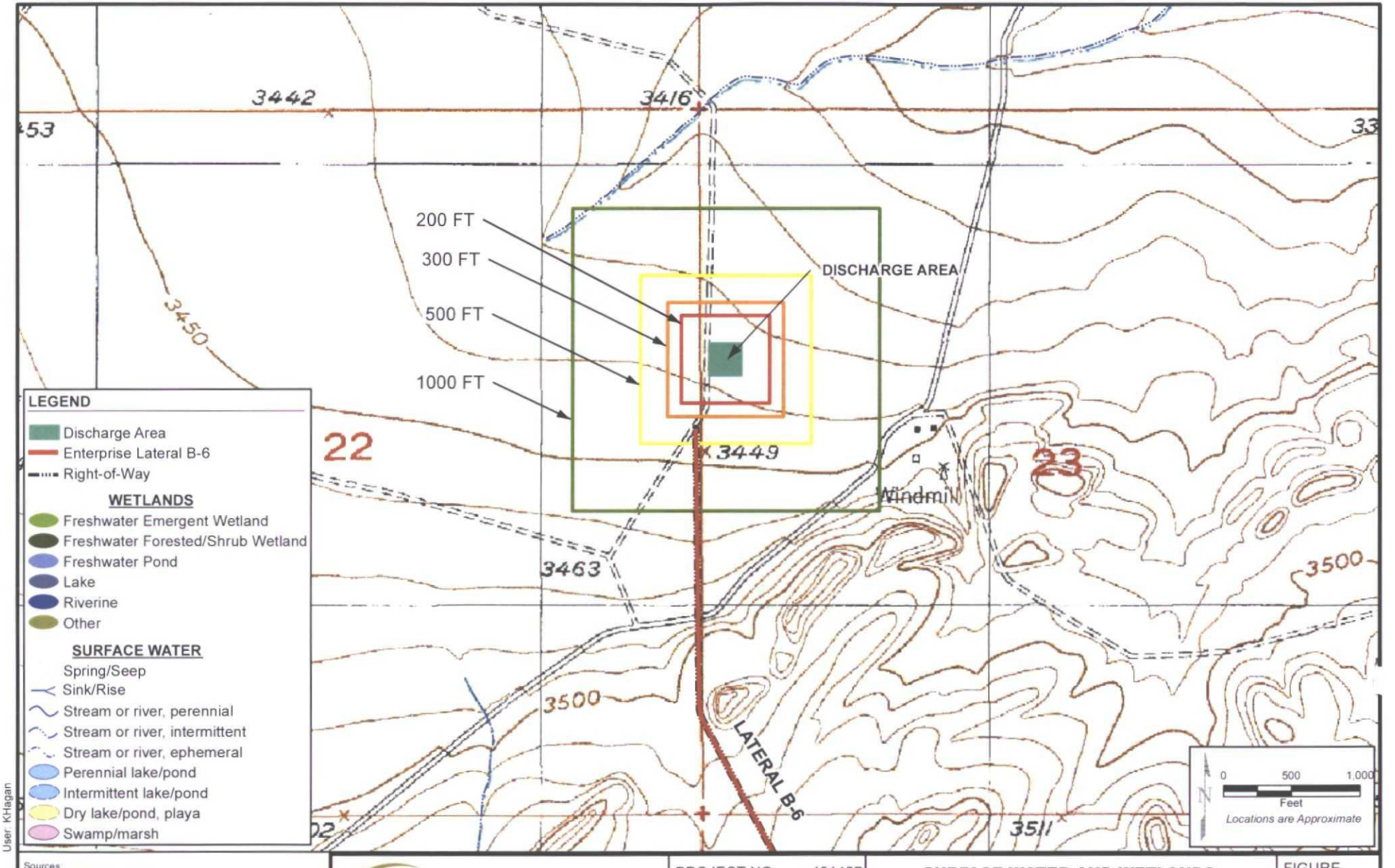
Meghan Vallejo
Signature

9/26/2013
Date of Site Visit

Project Engineer
Title:

APPENDIX B

Water Feature, Water Well Information and Floodplain Information



Sources:
ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013
National Wetlands Inventory, USF&WS
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureB1.mxd

SURFACE WATER AND WETLANDS NEAR THE DISCHARGE AREA, LATERAL B-6

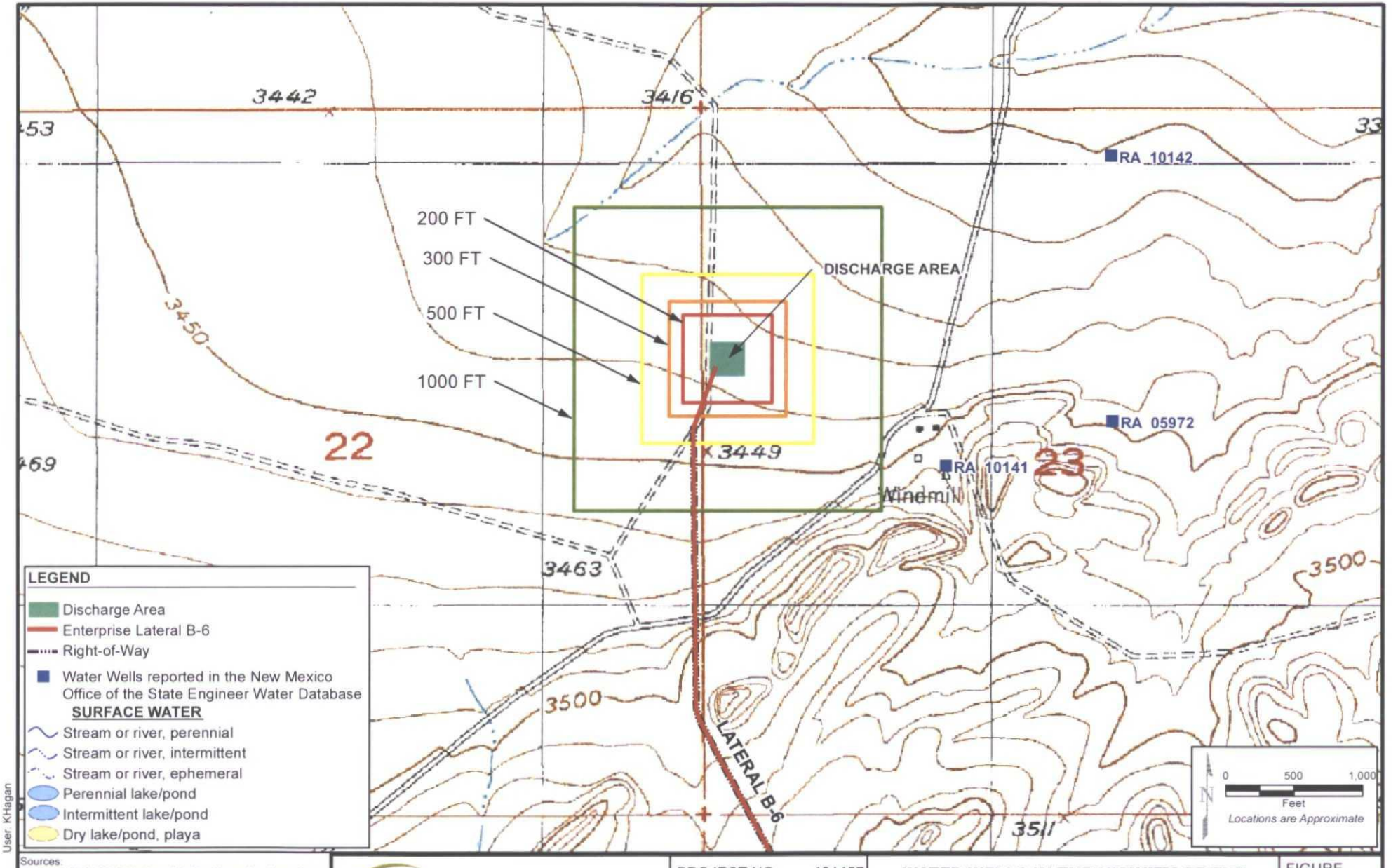
ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

DRAWING CATEGORY: 1

FIGURE
B-1

User: KHagan
Date: 9/27/2013



Sources:
ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013
New Mexico Office of the State Engineer, data as of 07/2011
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureB2.mxd

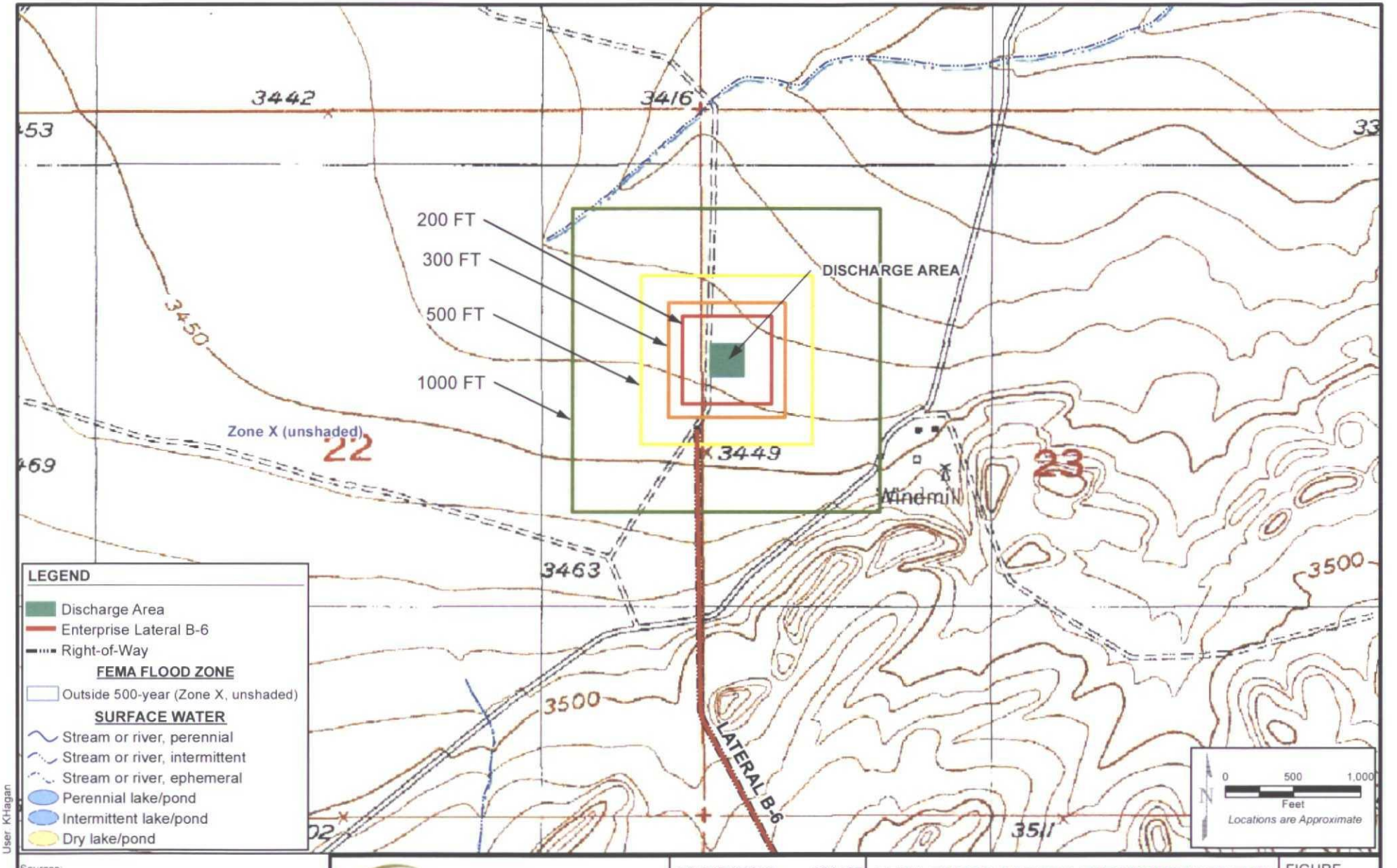
WATER WELLS IN THE VICINITY OF THE DISCHARGE AREA, LATERAL B-6

ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:
DRAWING CATEGORY: 1

FIGURE
B-2

User: KHagan
Date: 9/27/2013



Sources:
ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013
FEMA FIRM panel 35015C0775D dated 6/4/2010
USGS National Hydrography Dataset
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureB3.mxd

FEMA FLOOD MAP FOR THE VICINITY OF THE DISCHARGE AREA, LATERAL B-6

ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

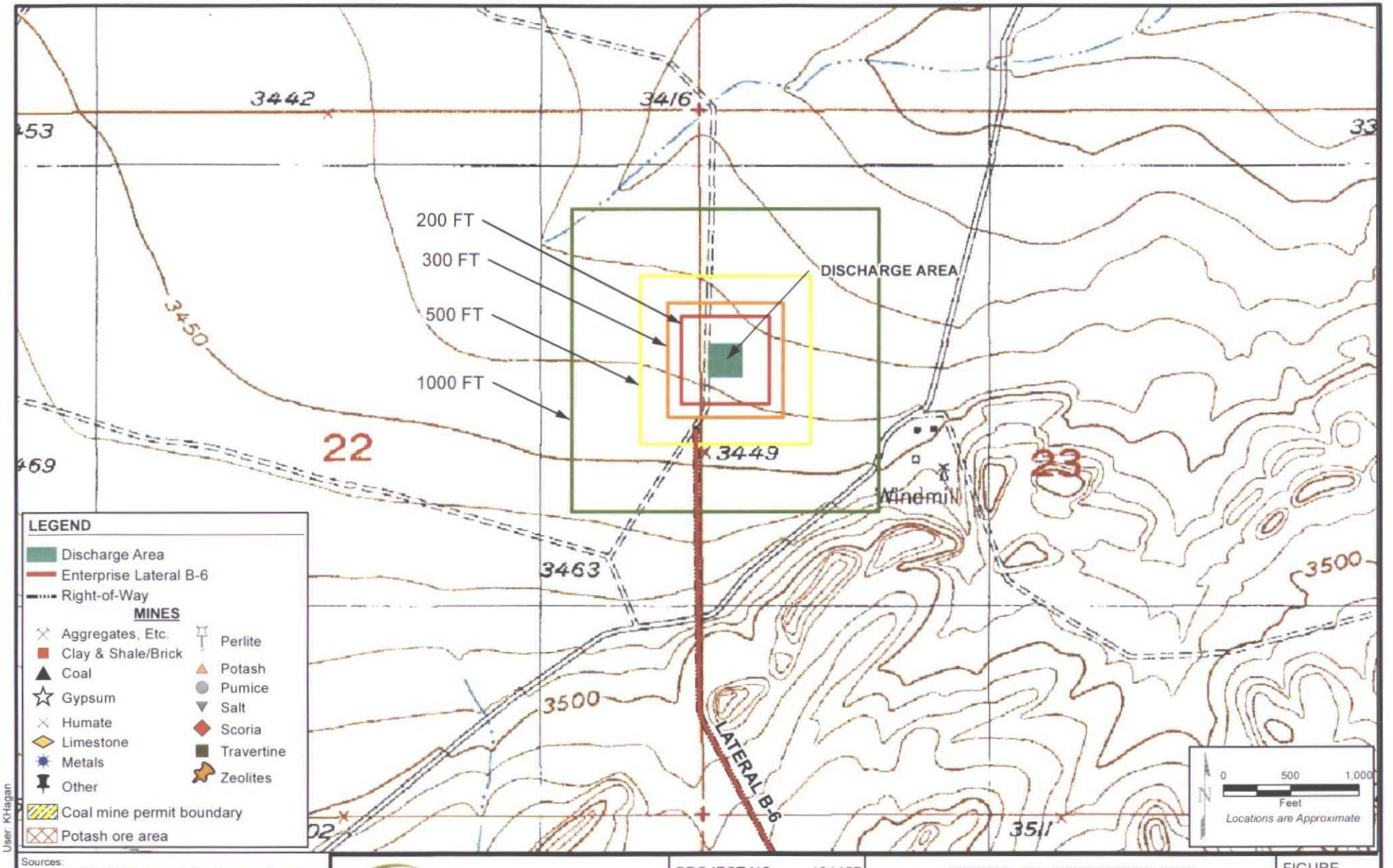
DRAWING CATEGORY: 1

FIGURE
B-3

User: KHagan
Date: 9/27/2013

APPENDIX C

Area Mine Information



Sources:
ASB and PROPOSED.kml provided by Enterprise Operating Products LLC on July 25, 2013
New Mexico Mining and Minerals Division, February 2012
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureC1.mxd

MINING ACTIVITY NEAR THE DISCHARGE AREA, LATERAL B-6

ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:
DRAWING CATEGORY: 1

FIGURE
C-1

User: KHagan
Date: 9/27/2013

Jill Hernandez

From: Tompson, Mike, EMNRD <Mike.Tompson@state.nm.us>
Sent: Wednesday, September 25, 2013 8:19 AM
To: Jill Hernandez
Cc: Kretzmann, John, EMNRD
Subject: RE: Abandoned Mines in Section 22 and 23, Township 20 South, Range 25 East

Hi Jill,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines in these two sections.

Please let me know if you have any other questions.

Mike Tompson
New Mexico AML Program

From: Jill Hernandez [mailto:JHernandez@kleinfelder.com]
Sent: Tuesday, September 24, 2013 10:18 PM
To: Tompson, Mike, EMNRD
Subject: Abandoned Mines in Section 22 and 23, Township 20 South, Range 25 East

Mike,
Kleinfelder has been contracted by Enterprise to prepare a hydrostatic discharge plan for an area located in Eddy County, New Mexico. Do you have records of abandoned mines in the vicinity of the discharge area and vicinity, as identified below:

The discharge area will be located at:

- NW/4 of Section 23, Township 20 South, Range 25 East in Eddy County, New Mexico; or Latitude 32°33'39.33"N; Longitude 104°27'49.67"W; and
- NE/4 of Section 22.

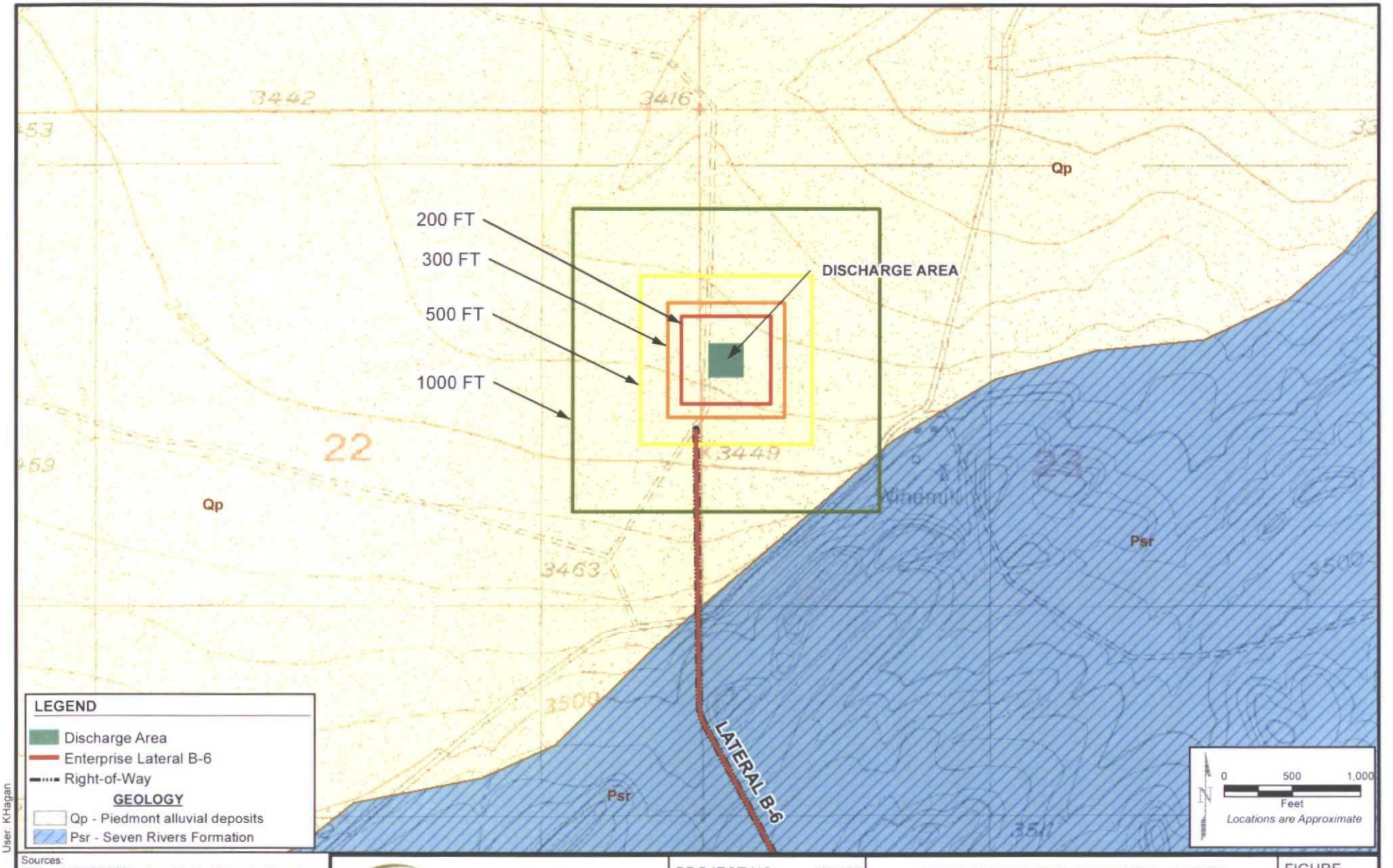
Thanks,

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:
ASB and PROPOSED kml provided by Enterprise Operating Products LLC on July 25, 2013
USGS OFR 2005-21351
USGS 7.5' Topographic Quadrangle Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureD1.mxd

GEOLOGY IN THE VICINITY OF THE DISCHARGE AREA, LATERAL B-6

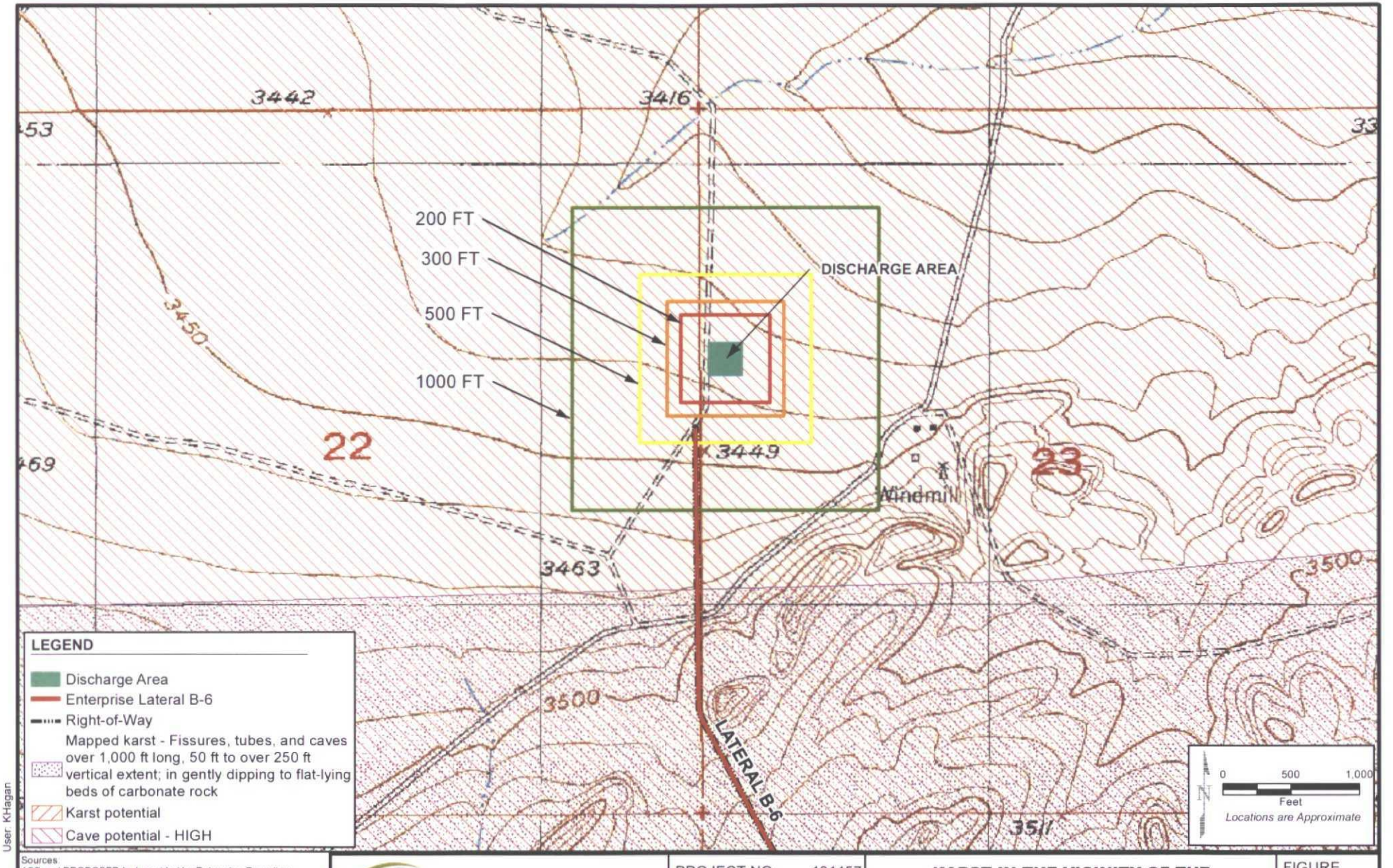
ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

DRAWING CATEGORY: 1

FIGURE
D-1

User: KHagan
Date: 9/27/2013



User: KHagan

Date: 9/27/2013

Sources:
ASB and PROPOSED kml provided by Enterprise Operating Products LLC on July 25, 2013
USGS OFR 2004-1352
New Mexico BLM GIS Basemap
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureD2.mxd

KARST IN THE VICINITY OF THE DISCHARGE AREA, LATERAL B-6

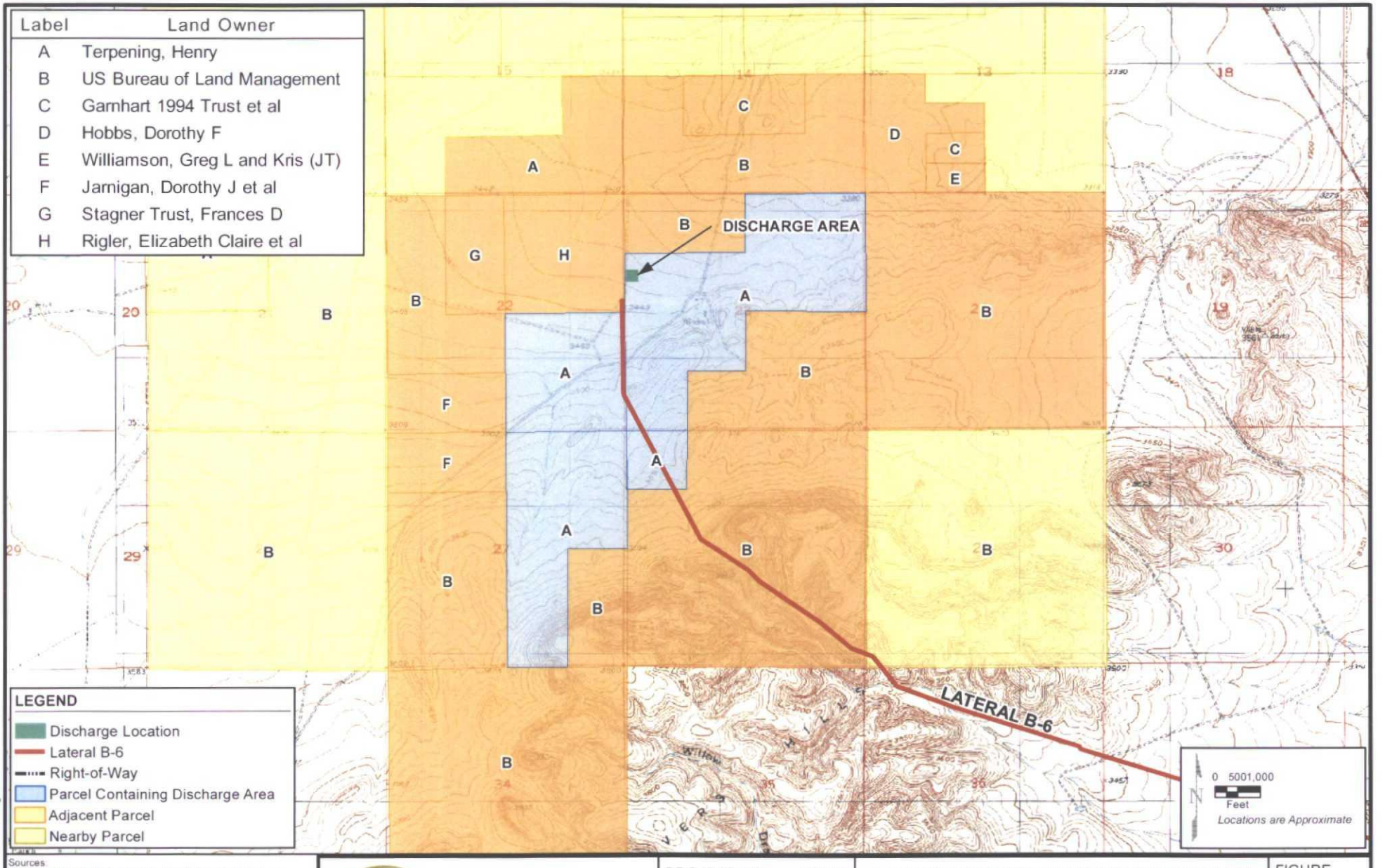
ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:
DRAWING CATEGORY: 1

FIGURE
D-2

APPENDIX E

Area Landownership



Sources
ASB and PROPOSED kml provided by Enterprise Operating Products LLC on July 25, 2013
USGS OFR 2004-1352
New Mexico BLM GIS Basemap
USGS 7.5' Topographic Quadrangle, Seven Rivers, NM

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	131457
DRAWN:	SEP 2013
DRAWN BY:	KFH
CHECKED BY:	JH
FILE NAME:	LateralB6_FigureE1.mxd

LAND OWNERSHIP IN THE VICINITY OF THE DISCHARGE AREA, LATERAL B-6

ENTERPRISE PRODUCTS OPERATING LLC
EDDY COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

DRAWING CATEGORY: 1

FIGURE
E-1

User: KHagan
Date: 9/27/2013

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 application 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 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 at latitude 32.560925°, longitude -104.463797° in Eddy County, New Mexico. The location of the discharge is approximately 15 miles northwest of Carlsbad, New Mexico. To reach the discharge location from the intersection of NM-524 and US-285 in Carlsbad: head west on NM-524 W/W Lea Street for approximately 2.4 miles; take a slight right (northwest) onto NM-524 W/S Happy Valley Road and continue for 6.1 miles; turn northwest onto US-285 N/7 Rivers Highway and continue for 9.3 miles; turn west onto White Pine Road and continue for 1.9 miles; turn south onto County Road 28A/Salt Brush Road and continue for 1.7 miles; turn north onto the pipeline right-of-way and continue for 0.4 miles; The discharge area will be on the right side of the road. The hydrostatic test is scheduled for December 23, 2013 with discharge of the test water scheduled on or about December 30, 2013.

Approximately eleven miles of new, natural gas piping will be tested. Up to 360,000 gallons of potable, municipal water from the City of Carlsbad will be used in the hydrostatic test. 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. 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 a pipeline via a hose, discharged to a dissipation and discharge system, and allowed to flow onto ground surface on private property, as approved by the landowner.

If the concentrations in the water exceed 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.

The nearest water supply well with a reported water depth is located approximately 0.5 mile to the east. The depth to water reported in that well was 40 feet below the ground surface. The ground elevation at that well location is approximately 3,447 feet above mean sea level (amsl). The elevation of the ground surface at the discharge area is approximately 3,439 feet amsl. The shallowest groundwater likely to be affected by a leak or accidental discharge is likely found at a depth of 32 feet below grade, based on the ground surface and groundwater elevations. A total dissolved solids concentration of approximately 1,300 milligrams per kilogram is representative of the shallow aquifer in the discharge area.

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 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 prueba hidro-estática que ocurrirá sobre propiedad privada a una latitud de 32.560925°, y una longitud de -104.463797° en el Condado Eddy, Nuevo México. El lugar de la descarga está aproximadamente a 15 millas al noroeste de Carlsbad, Nuevo México. Para llegar al lugar de la descarga desde la intersección de NM-524 y US-285 en Carlsbad: viajar hacia el oeste sobre NM-524 W/W Lea Street por aproximadamente 2.4 millas; dar un poco de vuelta a la derecha (noroeste) sobre NM-524 W/S Happy Valley Road y continuar por 6.1 millas; vuelta al noroeste sobre US-285 N/7 Rivers Highway y continuar por 9.3 millas; vuelta al oeste sobre White Pine Road y continuar por 1.9 millas; vuelta hacia el sur sobre County Road 28A/Salt Brush Road y continuar por 1.7 millas; vuelta al norte sobre la servidumbre de la tubería y continuar por 0.4 millas. El área de descarga estará en el lado derecho de la calle. La prueba hidro-estática está programada para Diciembre 23, 2013 con la descarga del agua de prueba programada en o aproximadamente Diciembre 30, 2013.

Aproximadamente 11 millas de tubería nueva para gas natural será probada. Hasta 360,000 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, y antes de descargar, Enterprise obtendrá y analizara una muestra de agua obtenida del extremo de la sección de tubería. La muestra será analizada para evaluar la calidad del agua. Al NMOCD concurrir que el agua de descarga cumple con los estándares de calidad de agua de NMAC 20.6.2.3103, Enterprise descargara 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 con una manguera y el agua de prueba será descargada al sistema de descarga y permitida fluir sobre la superficie del suelo en la propiedad privada, en base a la aprobación del propietario.

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 a un lugar aprobado por NMOCD para deshacerse del agua de prueba.

El pozo (fuente de agua) más cercano con una profundidad de agua reportada está localizado a aproximadamente 0.5 millas hacia el este. La profundidad al agua reportado en este pozo era 40 pies debajo de la superficie del suelo. La elevación de la superficie del suelo en el lugar del pozo es aproximadamente 3,447 pies arriba del nivel promedio del mar (above mean sea level, amsl). El nivel freático menos profundo que posiblemente pueda ser afectado por una fuga o descarga accidental se encuentra probablemente a una profundidad de 32 pies debajo de la

superficie del suelo, basado en elevaciones de la superficie del suelo y elevaciones de agua. Una concentración total de solidos disueltos de aproximadamente 1,300 miligramos por kilogramo es representativo del nivel freático en el área de descarga.

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 Energia, 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 16, 2013

Henry Terpening
3612 E Castleberry Rd.
Artesia, NM 88210

RE: Proposed Hydrostatic Water Discharge Site
Enterprise Field Services LLC's
B-6 Replacement Pipeline
Section 23, Township 20 South, Range 25 East
Eddy County, New Mexico

Dear Mr. Terpening,

Enterprise Field Services LLC, operated by and through Enterprise Products Operating LLC (collectively "Enterprise"), proposes to hydrostatically test approximately 11 miles of new 12.75-inch proposed pipeline in Eddy County, New Mexico. Approximately 360,000 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 the pipeline. 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 4-149-118-264-196) in Section 23, Township 20 South, Range 25 East. 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 (parcel 4-149-118-264-196). Discharge of the hydrostatic test water will be monitored by Enterprise personnel and its contractors. The test water will be discharged and tested 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 December, 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 discharge test water on the particular property listed above outside Enterprise's pipeline right-of-way.

Should you have any questions or require additional information, please feel free to contact me at (432) 270-0056.

Sincerely,
Enterprise Field Services LLC
Enterprise Products Operating LLC

Brandon Luce
Contract Land Representative
Enterprise Field Services LLC
1031 Andrews Hwy Ste. 320
Midland, TX 79701

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 Henry Terpening Dated: 31 day of October, 2013.
Henry Terpening

X Brandon Luce
Witness

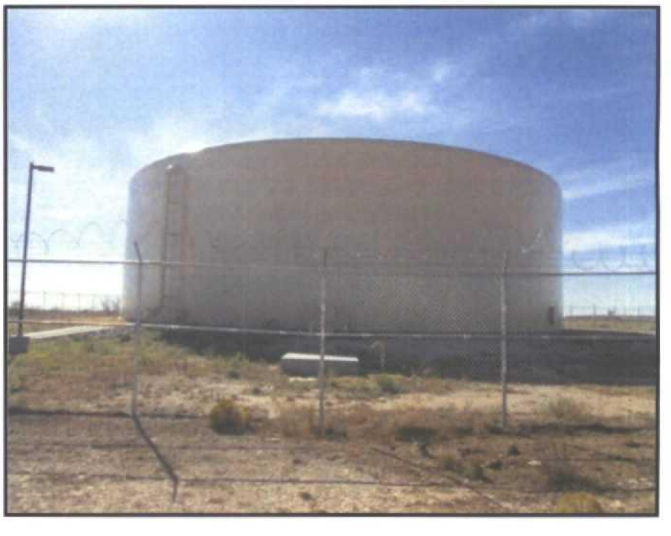
APPENDIX H

2012 City of Carlsbad Municipal Water System

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.

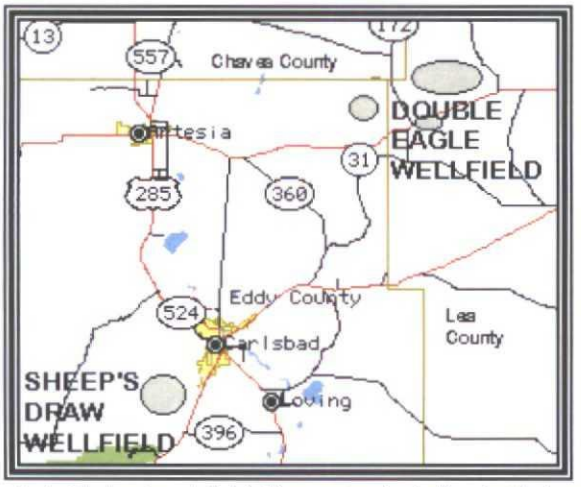
Overview

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 inquires 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
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
NTU = Nephelometric Turbidity Units
mrem/year = millirems per year (a measure of radiation absorbed by the body)
pci/l = picocuries per liter (a mesure of radioactivity)
ppm = parts per million, or milligrams per liter (mg/l)
ppt = parts per trillion, or nanograms per liter
ppb = parts per billion, or micrograms per liter (µg/l)
ppq = parts per quadrillion, or picograms per liter
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 Erosion of natural formations	NO
Chromium	7/18/11	ppb	100	100	ND	ND	Discharge from steel and pulp mills. Erosion of natural formations	NO
Copper	8/29/12	ppm	AL=1.3	1.3	0.17	0.021- 0.24	Corrosion of household plumbing systems; erosion of natural deposits	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	Discharge from petroleum and metal refineries; Erosion of natural deposits	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	1.06	1.06	Runoff from fertilizer use; Leaching from septic tanks, sewage; Discharge from mines. Erosion of natural formations	NO
Fluoride	7/18/11	ppm	4	4	0.32	0.32 - 0.32	Erosion of natural deposits; 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	5/23/00	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								
TTHMs [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 Erosion of natural formations	NO
Chromium	7/18/11	ppb	100	100	ND	ND	Discharge from steel and pulp mills. Erosion of natural formations	NO
Selenium	7/18/11	ppb	50	50	1.1	1.1 – 1.1	Discharge from petroleum and metal refineries; Erosion of natural deposits	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. Erosion of natural formations	NO
Fluoride	7/18/11	ppm	4	4	0.33	0.33 – 0.33	Erosion of natural deposits; 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 can occur naturally 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.

escription of Photos:

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

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

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

ack Cover, Top: DE New Water Well Development.

Back Cover, Bottom: Water Well #1 Maintenance.

Water is Life

Help us Conserve and Protect it.