

HIP - __121__

**GENERAL
CORRESPONDENCE**

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

**ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH**

I hereby acknowledge receipt of Check No. 087867 dated 6/14/13
or cash received on 7/29/13 in the amount of \$ 700.00
from Kleinfelder West Inc.
for HIP-121

Submitted by: Brad Jones Date: 7/29/13

Submitted to ASD by: Rachel Herr Date: 7/30/13

Received in ASD by: _____ Date: _____

Filing Fee ✓ 100 New Facility: _____ Renewal: _____

Modification _____ Other X Permit Fee \$600

Organization Code 521.07 Applicable FY FY14

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

New Mexico Environment Department Revenue Transmittal

Description	Fund	CES	DFA Org.	DFA ED Acct. Org.	ED Acct.	Amount
1 CY Reimbursement Project Tax	064	01				1
2 Gross Receipt Tax	064	01		2329 900000	2329134	2
3 Air Quality Title V	092	13		1690 900000	4169134	3
4 PRP Prepayments	248	14		9690 900000	4969014	4
5 Climax Chemical Co.	248	14		9690 900000	4969015	5
6 Circle K Reimbursements	248	14		9690 900000	4969248	6
7 Hazardous Waste Permits	339	27		1690 900000	4169027	7
8 Hazardous Waste Annual Generator Fees	339	27		1690 900000	4169339	8
9 Water Quality - Drinking Water	340	28		1690 900000	4169028	9
10 Water Quality - Oil Conservation Division	341	29		2329 900000	2329029	700.00
11 Water Quality - GW Discharge Permit	341	29		1690 900000	4169029	11
12 Air Quality Permits	631	31		1690 900000	4169031	12
13 Payments under Protest	651	33		2919 900000	2919033	13
* 14 Xerox Copies	652	34		2349 900000	2349001	14
15 Ground Water Penalties	652	34		2349 900000	2349002	15
16 Witness Fees	652	34		2349 900000	2349003	16
17 Air Quality Penalties	652	34		2349 900000	2349004	17
18 OSHA Penalties	652	34		2349 900000	2349005	18
19 Prior Year Reimbursement	652	34		2349 900000	2349006	19
20 Surface Water Quality Certification	652	34		2349 900000	2349009	20
21 Jury Duty	652	34		2349 900000	2349012	21
22 CY Reimbursements (i.e.: telephone)	652	34		2349 900000	2349014	22
* 23 UST Owners List	783	24		9690 900000	4969201	23
* 24 Hazardous Waste Notifiers List	783	24		9690 900000	4969202	24
* 25 UST Maps	783	24		9690 900000	4969203	25
* 26 UST Owners Update	783	24		9690 900000	4969205	26
* 28 Hazardous Waste Regulations	783	24		9690 900000	4969207	28
* 29 Radiologic Tech. Regulations	783	24		9690 900000	4969208	29
* 30 Superfund CERCLIS List	783	24		9690 900000	4969211	30
* 31 Solid Waste Permits Fees	783	24		9690 900000	4969213	31
32 Smoking School	783	24		9690 900000	4969214	32
* 33 SWQB - NPS Publications	783	24		9690 900000	4969222	33
* 34 Radiation Licensing Regulations	783	24		9690 900000	4969228	34
* 35 Sale of Equipment	783	24		9690 900000	4969301	35
* 36 Sale of Automobile	783	24		9690 900000	4969302	36
** 37 Lust Recoveries	783	24		9690 900000	4969614	37
** 38 Lust Prepayments	783	24		9690 900000	4969615	38
39 Surface Water Publication	783	24		9690 900000	4969801	39
40 Exxon Reese Drive Ruidoso - CAF	783	24		9690 900000	4969242	40
41 Emerg. Hazardous Waste Penalties NOV	957	32		1640 900000	4164032	41
42 Radiologic Tech. Certification	987	05		1690 900000	4169005	42
44 UST Permit Fees	989	20		1690 900000	4169020	44
45 UST Tank Installers Fees	989	20		1690 900000	4169021	45
46 Food Permit Fees	991	26		1690 900000	4169026	46
43 Other						43

* Gross Receipt Tax Required ** Site Name & Project Code Required

TOTAL:

Contact Person: Glenn VanGonten Phone #: 476-3488 Date: 7/30/13

Received in ASD By: _____ Date: _____ RT #: _____ ST# _____

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:
7/29/13		X	Kleinfelder West	6/14/13	1087867		700.00		
TOTAL							700.00 \$0.00		

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					

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



August 6, 2013

Mr. Leonard W. Mallett
POC: Ms. Shiver Nolan
Enterprise Products Operating LLC
P.O. Box 4324
Houston, Texas 77210

Re: Hydrostatic Test Discharge Permit
Permit: HIP-121
Enterprise Products Operating, LLC
Western Expansion Pipeline III, Segment 2B
Locations: Ojo Del Espiritu Santo Land Grant
Sandoval County, New Mexico

Dear Ms. Nolan:

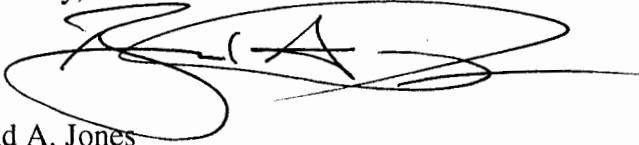
The New Mexico Oil Conservation Division (OCD) has received Enterprise Products Operating LLC's (Enterprise) notice of intent, dated July 22, 2013, and a revised submittal dated August 5, 2013, for authorization to discharge approximately 260,000 gallons of wastewater generated from a hydrostatic test of two new 16-inch natural gas gathering system transmission pipelines approximately 11.4 miles long, located approximately 30 miles northwest of San Ysidro, New Mexico. The proposed discharge/collection /retention location is within Enterprise's pipeline easement right-of-way located in the Ojo Del Espiritu Santo Land Grant at Latitude 35.633833°; Longitude -107.025963° (approximately 2.25 miles southwest of the southwest corner of Township 16 North, Range 1 West, NMPM, Sandoval County, New Mexico). The submittal provided the required information in order to deem the application "administratively" complete. OCD approves the Albuquerque Journal as the newspaper of general circulation for the published notice and the discharge and/or collection location (within Enterprise's pipeline easement right-of-way) and the post office in San Ysidro, 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-121
August 6, 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', with a large, stylized flourish extending to the right.

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District III Office, Aztec
 Mr. James White, Enterprise Products Operating, LLC, Houston, TX 77210-4324
 Ms. Runell Seale, Enterprise Products Operating, LLC, Farmington, NM 87401



TRANSMITTAL

To: Enterprise Products Operating LLC
1100 Louisiana St. Room 13.61
Attn: Ms. Shiver Nolan
Houston TX 77002
713.381.6595

Date:
Reference No:
Copies to:

8/5/13
134288
Jimmy White (email of
transmittal)

Subject: WEP III – Segment 2B Notice of Intent

We are sending the following: ☒ **Attached** ☐ **Under separate cover**

- 1 Notice of Intent for Discharge >25K gallons Revision 1

Instructions Submit the following to:

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

Via:

- ☐ Messenger/Courier
- ☐ First Class Mail
- ☒ FedEx

Transmitted:

- ☒ As Requested
- ☐ For Approval
- ☐ For Your Use
- ☐ For Review & Comment

Please note:

Hard copy will follow FedEx overnight (8/5/13).

By: Eileen Shannon
Project Manager

RECEIVED OGD
2013 AUG -6 A 11:57



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

ENTERPRISE PRODUCTS OPERATING LLC

August 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
Western Expansion Pipeline III, Segment 2B
Sandoval County, New Mexico**

Enterprise Products Operating LLC (Enterprise) will be constructing Segment 2B of the Western Expansion Pipeline III 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 the requested revisions to the drafts that you reviewed and submitted comments on July 12, August 1, and August 5, 2013.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'J. G. White'.

James G. White
Sr. Environmental Scientist

cc: Runell Seale, Enterprise
Shiver Nolan, Enterprise



August 5, 2013
Project No.: 134288

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 Hydrostatic Test
WEP III – Segment 2B
Sandoval 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 a hydrostatic test to be conducted on Segment 2B of Enterprise's Western Expansion Pipeline III (WEP III). Modifications to the previous submitted version dated July 22, 2013, include the following:

- Change in source well to the Homestake Well;
- Minor modifications to Figure 2;
- Addition of radium analytical data from source well; and
- Updates to the Public Notice.

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 Detail;
- Figure 3 – Dissipation and Discharge Area;
- 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; and
- Appendix F – Public Notice (English and Spanish).

A check totaling \$700 made out to the New Mexico Water Quality Management Fund has already been submitted for this NOI for the \$100 filing fee and the \$600 permit fee (check no. 687867).

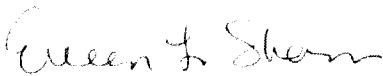
Kleinfelder prepared this NOI in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. The information provided in this document is based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

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

Respectfully submitted,

KLEINFELDER WEST, INC.

Reviewed by:



Eileen L. Shannon, PG
Project Manager



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 Enterprise Western Expansion Pipeline (WEP) III line is a new, welded, steel 16-inch diameter line. The section to be hydrostatic testing, Segment 2B of the WEP III pipeline is 11.4 miles or 60,192 feet long (Figure 1);
- The pipeline is part of a gathering system that transports natural gas from the Piceance and San Juan Basins to processing facilities located in Hobbs, New Mexico and Houston, Texas;
- The source water for the hydrostatic testing is the Homestake Well, located at:
 - Latitude 35.571789°; longitude -107.204811°; and
 - NE/4 of SE/4 of Section 36, Township 16 North, Range 4 West.
- Placement of water into the northern portion of Segment 2B (MP 320.6 to MP 324.2) is scheduled to start on August 25, 2013 (Figure 1). Water will be added to the pipeline near State Highway NM-279 (approximately MP 320.6). After the testing of the northern portion of the pipeline is complete, the water will be held in that portion of the pipeline until the construction of the next portion of Segment 2B (MP 320.6 to MP 317.5) is completed. The test water will then be moved to the central portion of Segment 2B and the central section of the line will be hydrostatically tested. Upon completion of hydrostatic tests from the central location, the test water will then be moved to the southern section (MP 317.5 to 312.8) and hydrostatically tested (additional municipal water may need to be added). Upon completion of test, the water will be analyzed for water quality (discussed in *item j*). Provided that the test water meets the requirements NMAC 20.6.3012, it will be discharged to the ground surface within the Enterprise right-of-way at MP 317.5. Approximately 260,000 gallons are expected to be discharged to the ground surface on approximately September 10, 2013.
- Per NMAC 20.6.2.3108, a sample of the public notice is included in Appendix F; and
- 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 San Ysidro, New Mexico post office;
 3. Written notice of the discharge by mail to owners of record of all properties within a 1/3 mile distance from the boundary of the property where the discharge site is located;
 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 *Albuquerque Journal* newspaper. Public notice is

published every day, and the paper requires the information five days prior to publication.

Notice of Intent Plan

On behalf of Enterprise, Kleinfelder is submitting this NOI plan as outlined in NMOCD Guidance document, "Guidelines for Hydrostatic Test Dewatering," (revised January 11, 2007). The NOI plan includes the following items:

Item a. Name and address of the proposed discharger:

Legally Responsible Party

Mr. Leonard W. Mallett, Sr. VP
POC: Ms. Shiver Nolan, Sr. Compliance Administrator
P.O. Box 4324
Houston, Texas 77210
713-381-6595

Local Representative

Ms. Runell Seale
Enterprise Products Operating LLC
614 Reilly Ave.
Farmington, NM 87401
505-599-2124

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 sections of the pipeline to be tested are located Sandoval County. Water from the hydrostatic testing will be discharged to the ground in the 125-foot right-of-way at the central portion of WEP III Segment 2B at MP 317.5. The location of the pipeline to be hydrostatically tested and the proposed discharge location are shown on Figure 1.

The location of the hydrostatic discharge area is located approximately 30 miles northwest of San Ysidro, New Mexico. Directions to the discharge site from San Ysidro, New Mexico are:

- From the intersection of NM-4 and US-550 in San Ysidro, New Mexico, head north on US-550 toward NM-279 for 18 miles;
- Turn left on NM-279W and go 4.1 miles;
- Turn left for 0.1 miles, then turn right for 3.3 miles (all unnamed roads);
- Make a slight right onto an unnamed road and continue for 1.1 miles; and
- Turn left on another unnamed road for approximately 2.2 miles.

The approximate coordinates for the discharge area location are: Latitude 35.633833°; Longitude -107.025963.

Item c. Legal description of the discharge location:

The discharge location is located:

- In the Ojo Del Espiritu Santo Land Grant, approximately 2.25 miles southwest of the southwest corner of Township 16 North, Range 1 West. The discharge location has no township, range or section description (Figure 1).

- The latitude and longitude coordinates are provided in *item b*.

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

- Figure 1 – Regional map showing topography, the pipeline section undergoing testing, and the hydrostatic test water discharge location.
- Figure 2 – Site-specific map showing the hydrostatic test water discharge area.

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

Shapefiles were downloaded from various electronic source were included in a Geographic Information System (GIS) database for preparation of this NOI. The maps generated from this database were reviewed between June 7 and June 14, 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 (rivers, creeks, arroyos, canyons, draws, washes, or other channels having definite banks and a bed with visible evidence of the occasional flow of water); lakebeds (perennial, intermittent, and dry lakes); sinkholes; or playa lakes were observed within 200 feet of the discharge area during the site visit (Appendix A).

No watercourses, lakebeds, sinkholes, or playa lakes were identified within 200 feet of the discharge area. (Figure B-1, Appendix B)

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

No springs were identified on the topographic map within 1,000 feet of the discharge area (Figure B-1, Appendix B) and no springs were observed during the site inspection (Appendix A). No water supply wells are located within 1,000 feet of the discharge area (Figure B-2, Appendix B).

The New Mexico Office of the State Engineer (OSE) website was checked for water supply wells located in the vicinity of the site. Based on data obtained from the OSE and Go-Tech websites, accessed on June 7, 2013, domestic and livestock wells are located approximately 2.8 to 3.7 miles to the northwest and west of the proposed discharge area (Figure B-2, Appendix B).

According to the Federal Emergency Management Administration (FEMA) DFIRM Panel 35043C1075D map, the discharge area is not located within a 100-year floodplain. The discharge and surrounding areas are located in Zone X (areas determined to be outside the 0.2% annual chance floodplain) (FEMA, fema.gov). An area located approximately 3,000 feet to the southeast of the proposed discharge area is mapped as Zone A (areas with 1% change of annual flooding and a 26% of flooding over a 30 year time period). Figure B-3 illustrates the above findings and is included in Appendix B.

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

Wetlands were not observed in or within 500 feet of the perimeter of the discharge area (Figure B-1, Appendix B) and none were observed during the site inspection (Appendix A).

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

No active or inactive mines were located at or in the vicinity of proposed discharge area (Figure C-1 in Appendix C). Mr. Mike Thompson, with the New Mexico Abandoned Mine Lands Program, was contacted on June 10, 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 a half mile radius of the proposed discharge site (see email, Appendix C).

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

No permanent residences, school, hospital, institution or church were noted on aerial photographs of the area (Figure 2), nor were they noted during the site visit (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 will be introduced into the pipeline and then the pipeline will be pressurized to a pressure higher than the standard 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 discharged from the pipeline into the dissipation and discharge system.

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, the water will be tested for water quality as described in *item j*. Once approval to discharge has been received, the test water will be allowed to flow from the pipeline into the 125-foot right-of-way (ROW).

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

Non-woven geotextile fabric will be installed beneath the dissipation structure to prevent scouring. Hay bales will be used to control erosion as the water is discharged from the pipeline at a rate of 1,500 gallons per minute (gpm) into the hydrostatic waste water dissipation and discharge system. A connector pipe is attached to the end of the pipeline and to a buffer "T" located within the dissipation structure. Pipeline water will gradually be released from the dissipation structure at a low flow rate onto the 125-foot ROW. The dissipation and discharge structure will be built to maintain the proper flow rate to avoid scaring the landscape. A 200-foot long berm will be built along the east side of the 125-foot ROW. The actual construction details

of the berm will be modified during construction to meet the conditions at the site and to prevent discharge water flow towards the east of the discharge area. A diagram of the hydrostatic waste water dissipation and discharge system is shown in Figure 3.

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 Homestake Well, sampled on May 8, 2013, has the following results for radium (in pCi/L): Radium – 226 at 0.0899 ± 0.466 ; and Radium – 228 at -0.147 ± 0.392 . These levels are below the 30 pCi/L standard in NMAC 20.6.2.3103.

Prior to discharge, Enterprise will collect and analyze a sample of the water used in the hydrostatic testing. The sample will be analyzed using the following methods.

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 SM 4500-H+B	1 x 125 ml plastic / H ₂ SO ₄
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
Radium 226/228	E903.0 / E904.0	2 x liter plastic / HNO ₃

Once the 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.

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);

If test water exceeds discharge requirements, the water will be transported from the project site in DOT-approved tanker trucks to either Basin Disposal, Inc. (API 30-045-26862, disposal well No. 1: IPI-149-0) in Aztec, New Mexico or Agua Moss, LLC (Permit No. UICI-005) on Crouch Mesa, New Mexico. The water will be transported by one or more of the following NMOCD-approved haulers: Dawn Trucking Co. (C133-31), M&R Trucking, Inc. (C133-399), Three Rivers Trucking, Inc. (C133-335) or Triple S Trucking Co., Inc. (C133-372).

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

The volume of the hydrostatic test water is expected to be discharged is approximately 260,000 gallons. The source of water used for the hydrostatic test will be potable water from the Homestake Well. New piping will be tested which should not impact the quality of the water to be discharged.

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

Soils in the area are dominated by Sandoval-Querencia-Zia surface soils comprised of moderately well-drained, fine sandy loam and clay loam. The loam is formed by eolian deposits over stream and fan alluvium derived from sandstone and shale [United States Department of Agriculture (USDA), 2008]. The soil overlies the Cretaceous Mulatto Tongue of Mancos Shale formation (Kmm) (Figure D-1, Appendix D). Mancos Shale is located approximately 1,700 feet to the northeast of the discharge area.

Karst features were identified at and in the area surrounding the discharge area. The karst is described as fissures, tubes and caves generally less than 1,000 feet (300 meters) long with a vertical extent 50 feet (15 meters) or less with gently dipping to flat-lying beds of carbonate rock (Figure D-2, Appendix D).

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

The site is bordered by the Mancos Shale formation, an aquitard. The first water bearing zone is the Dakota Sandstone. The following properties are given for water encountered in the Dakota Sandstone formation (Stone et al, 1980):

- The depth to water is approximately 2,000 feet below ground surface;
- Total dissolved solids (TDS) concentrations in the ground water from the Dakota sandstone generally range from 1,340 parts per million (ppm) near recharge areas to over 6,700 ppm in deeper parts of the basin (Stone et al, 1983).

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 point or temporary frac tank storage area within the Enterprise pipeline easement:

According to GIS database the landowner of properties located at and surrounding the proposed discharge area, is the Bureau of Land Management (Figure E-1, Appendix E). The landowner's address is:

Bureau of Land Management
Rio Puerco Field Office
435 Montano Road NE
Albuquerque, NM 87107

References

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

Go-Tech, New Mexico Water database (NM WAIDS, accessed June 10, 2013, <http://octane.nmt.edu/waterquality/data/gwatersearch.aspx>

Office of the State Engineer (OSE) database search accessed in June 10, 2013, <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., Padgett, E.T., 1983, Hydrology and Water Resources of the San Juan Basin, New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6

United States Department of Agriculture, Natural Resources Conservation Service and New Mexico Agricultural Experiment Station, 2008 "Soil Survey of Sandoval County Area, New Mexico, Parts of Los Alamos, Sandoval, and Rio Arriba Counties", 2008

United States Geological Survey, Mineral Resources On-Line Spatial Data, accessed June 10, 2013, <http://mrdata.usgs.gov/geology/state/state.php?state=NM>

GIS References

Topographic 7.5' quadrangle maps (Segment 2B)

- Arroyo Empedrado, NM
- San Luis, NM
- Holy Ghost Spring, NM
- Guadalupe, NM
- Cabezón Peak, NM
- Ojito Spring, NM

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, Segment 2B

- ESRI World Imagery; ESRI DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community. Date of image: 05/22/2010

State and County boundaries

- ESRI Street Map North America dated August 17, 2010

Cities and Towns; Urban areas

- *TIGER urban areas 2010 (tl_2010_35_place10.shp) 2010 Census data
- 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
- Unable to find the USGS wells listed on the PRRC references sheet

Floodplains, Segment 2B

- *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 35043C1075D dated 3/18/2008

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. 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

FIGURES

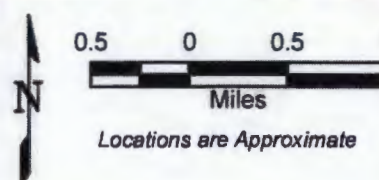


Source: ESRI World Street Map

LEGEND

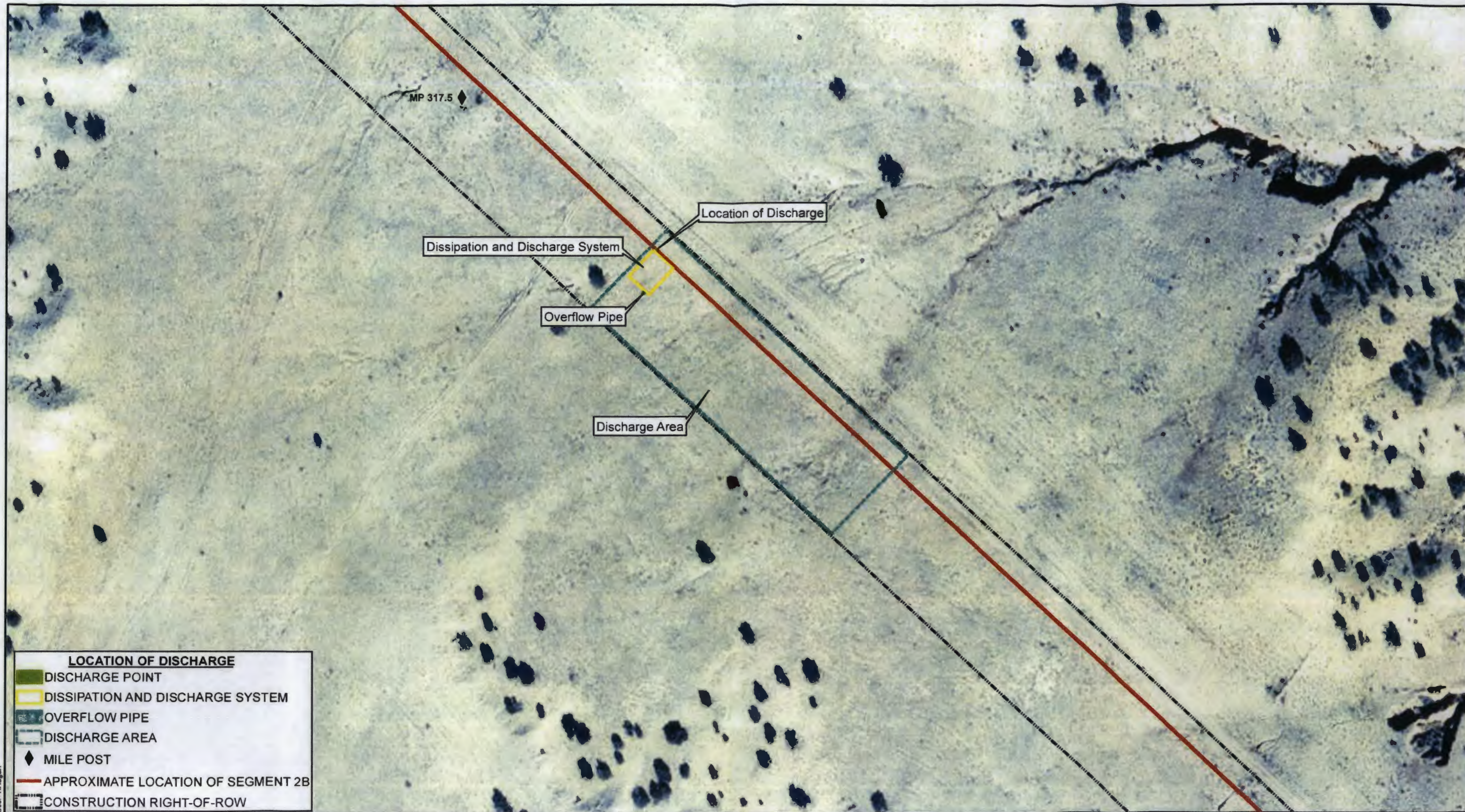
- ★ DISCHARGE LOCATION
- ◆ MILE POST
- APPROXIMATE SEGMENT OF PIPELINE TO BE HYDROSTATICALLY TESTED

Source: USGS 7.5 Quadrangle Topographic Maps
 Arroyo Empedrado, San Luis, Holy Ghost Spring, Guadalupe, Cabezon Peak, Ojito Spring, NM
 Centerline: SPREAD3 IFC 8470SE02B 060313 CL.shp provided by JFC Engineers & Surveyors on June 18, 2013



PROJECT NO.: 134288	NEW ENTERPRISE PIPELINE		FIGURE 1
DRAWN: JUN 2013	WEP III SEGMENT 2B		
DRAWN BY: KFH	ENTERPRISE PRODUCTS OPERATING LLC		
CHECKED BY: ES	SANDOVAL COUNTY, NEW MEXICO		
FILE NAME: Seg2B_Figure1.mxd	ORIGINATOR: K. HAGAN	DRAWING CATEGORY:	
	APPROVED BY: DS 3-19-13	1	

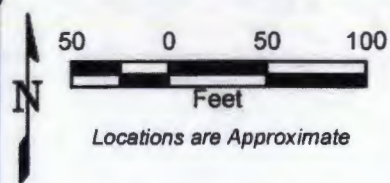
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



LOCATION OF DISCHARGE	
	DISCHARGE POINT
	DISSIPATION AND DISCHARGE SYSTEM
	OVERFLOW PIPE
	DISCHARGE AREA
	MILE POST
	APPROXIMATE LOCATION OF SEGMENT 2B
	CONSTRUCTION RIGHT-OF-WAY

Source: ESRI World Imagery; ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community
Date of image: 05/22/2010
SPREAD3_IFC_8470SEG2B_060313_CL.shp, SPREAD3_IFC_8470SEG2B_060313_CROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO.:	134288
DRAWN:	JUL 2013
DRAWN BY:	KFH
CHECKED BY:	ES
FILE NAME:	Seg2B_Figure2.mxd

NEW ENTERPRISE PIPELINE WEP III SEGMENT 2B DISCHARGE LOCATION	
ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO	
ORIGINATOR: K. HAGAN	DRAWING CATEGORY:
APPROVED BY: ELS 8-2-13	1

FIGURE

2

Straw bale catch basin: Bales will be installed 2-3 bales high and 2 bales wide.

Top View

Mirafi Fabric: Mirafi fabric will be installed on the inner walls of the interior straw bale catch basins to ensure the capture of suspended solids and debris that may occur from the testing procedure.

Plywood Supports: Plywood supports will be built to support the discharge point and the overflow pipe so that they do not rest on the straw bales.

Discharge point

Diffuser: A diffuser will be installed at the discharge point to dissipate the energy of the water.

Overflow Pipe

Side View

This system is designed to capture sediment and debris while allowing water to flow through. The size of the catch basin will be approximately 30x40 feet in size. This system is designed so that water will flow through the bales and filter out into the surrounding vegetation at a slow velocity. If too much water enters the catch basin, there is an overflow pipe to prevent the structure from collapse. Geotech fabric will be installed below the overflow to prevent erosion.



PROJECT NO.:	134288
DRAWN:	JUN 2013
DRAWN BY:	KFH
CHECKED BY:	ES
FILE NAME:	Seg2B_Figure3.doc

DISSIPATION AND DISPOSAL SYSTEM

ENTERPRISE PRODUCTS OPERATING LLC
SANDOVAL COUNTY, NEW MEXICO

ORIGINATOR:	K.HAGAN	DRAWING CATEGORY	1
APPROVED BY:	AS 7-4-13		

FIGURE

3

APPENDIX A

Certification of Siting Criteria

Certification of Siting Criteria

Hydrostatic Discharge Line

I, Theresa Ansell, 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 secondary containment area. The discharge area will be located at 35.633833° latitude, -107.025963° longitude, in the Ojo Del Espritu Santo Grant in Sandoval 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.

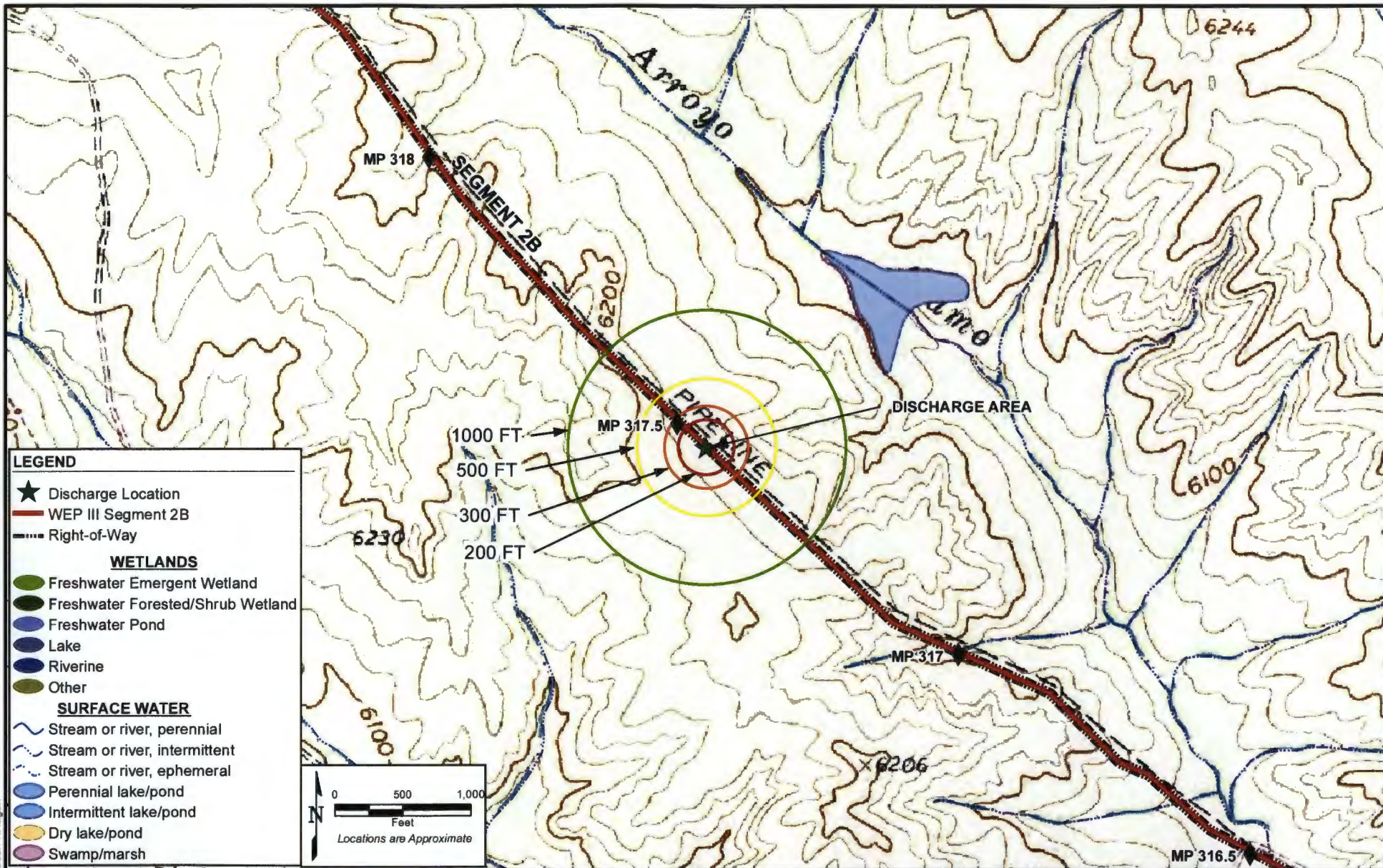
Theresa Ansell
Signature

June 6, 2013
Date of Site Visit

Project Manager
Title:

APPENDIX B

Water Feature, Water Well Information and Floodplain Information

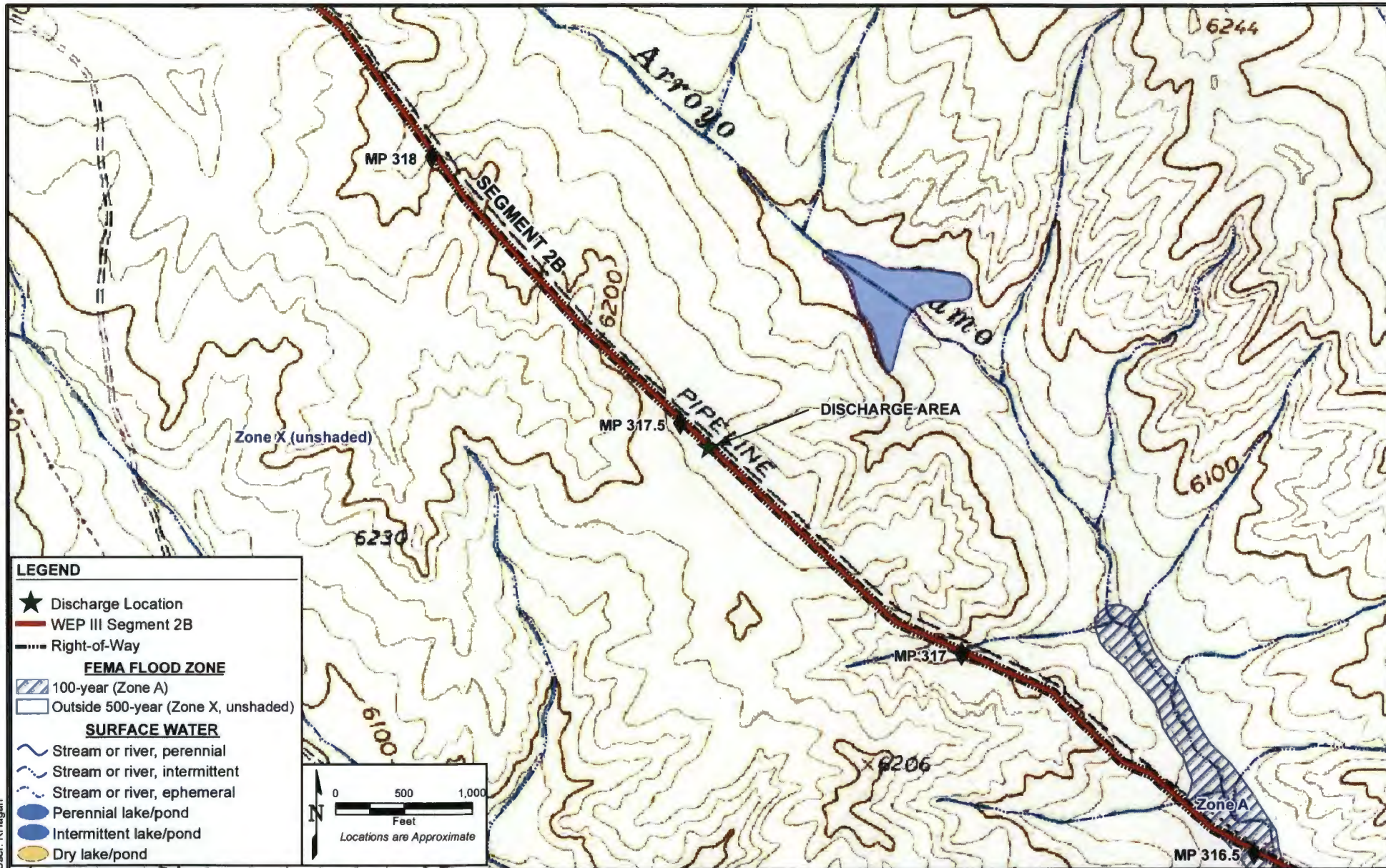


Sources:
SPREAD3_IFC_8470SEG2B_060313_CL.shp and
SPREAD3_IFC_8470SEG2B_060313_PROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013
National Wetlands Inventory, USF&WS
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, San Luis, NM

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

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

PROJECT NO.	134288	SURFACE WATER AND WETLANDS NEAR DISCHARGE AREA, WEP III SEGMENT 2B		FIGURE B-1
DRAWN:	JUN 2013			
DRAWN BY:	KFH	ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO		
CHECKED BY:	ES			
FILE NAME:	ORIGINATOR: K. HAGAN	DRAWING CATEGORY:		
Seg2B_FigureB1.mxd	APPROVED BY:	1		



Sources:
SPREAD3_IFC_8470SEG2B_060313_CL.shp and
SPREAD3_IFC_8470SEG2B_060313_PROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013
FEMA DFIRM Panel 35043C1075D dated 3/18/2008
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, San Luis, NM

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 134288
DRAWN: JUN 2013
DRAWN BY: KFH
CHECKED BY: ES
FILE NAME: Seg2B_FigureB3.mxd

**FEMA FLOOD MAP FOR THE VICINITY OF THE
DISCHARGE AREA, WEP III SEGMENT 2B**

ENTERPRISE PRODUCTS OPERATING LLC
SANDOVAL COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN
APPROVED BY:

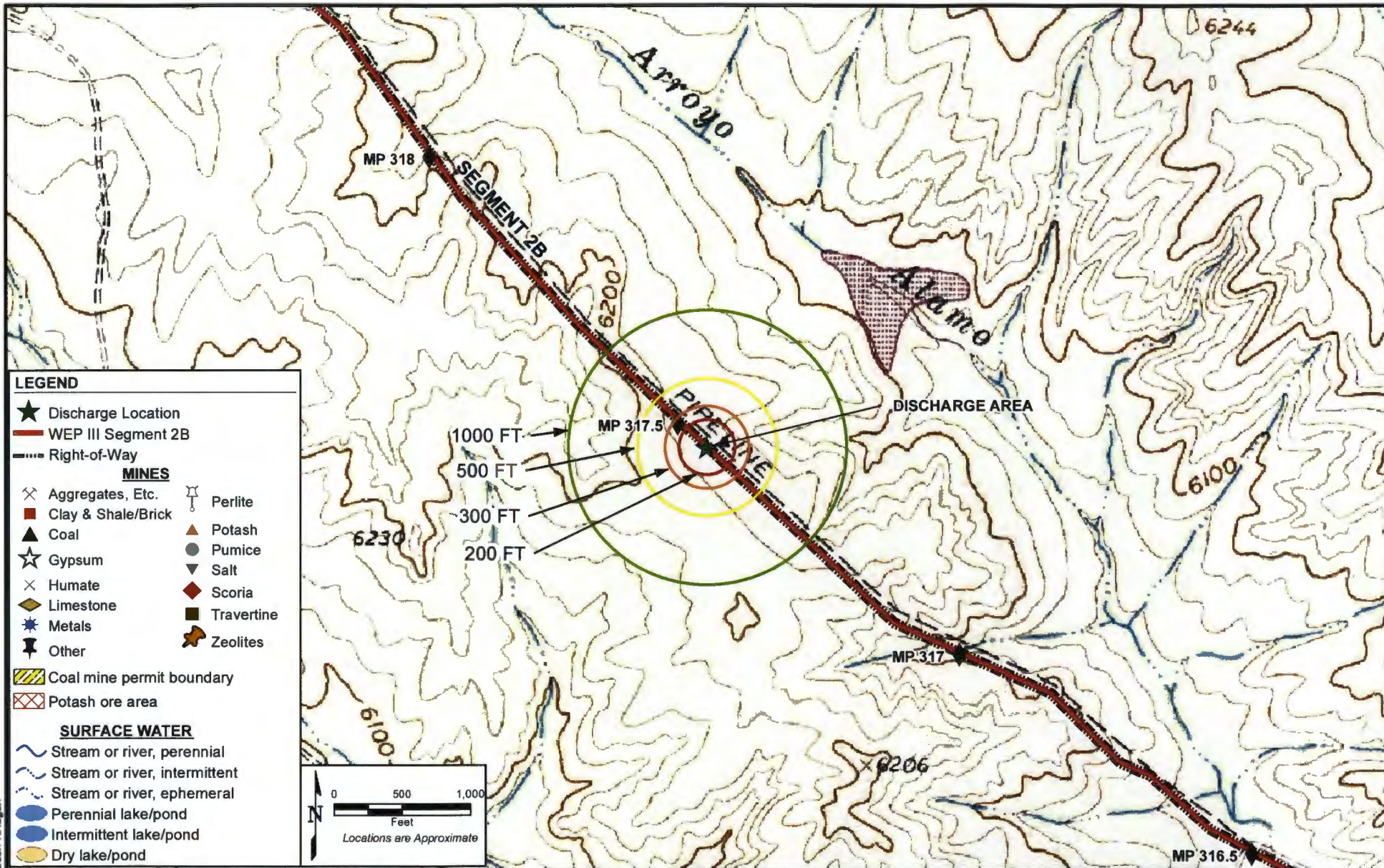
DRAWING CATEGORY:
1

FIGURE

B-3

APPENDIX C

Area Mine Information



Sources:
 SPREAD3_IFC_8470SEG2B_060313_CL.shp and
 SPREAD3_IFC_8470SEG2B_060313_PROW.shp
 provided by JFC Engineers & Surveyors on June 18, 2013
 New Mexico Mining and Minerals Division, February 2012
 National Hydrography Dataset, USGS
 USGS 7.5' Topographic Quadrangle, San Luis, NM

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfielder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

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

PROJECT NO.	134288	MINING ACTIVITY NEAR THE DISCHARGE AREA, WEP III SEGMENT 2B		FIGURE C-1
DRAWN:	JUN 2013			
DRAWN BY:	KFH	ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO		
CHECKED BY:	ES			
FILE NAME:	Seg2B_FigureC1.mxd	ORIGINATOR: K. HAGAN	DRAWING CATEGORY:	
		APPROVED BY:	1	

User: K-Hagan
 Date: 6/18/2013

Eileen Shannon

From: Tompson, Mike, EMNRD <Mike.Tompson@state.nm.us>
Sent: Tuesday, June 11, 2013 9:34 AM
To: Eileen Shannon
Cc: Kretzmann, John, EMNRD
Subject: RE: Mines in vicinity of proposed hydrostatic testing

Eileen,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines within a ½-mile radius of the stated location.

Please let me know if you have any other questions.

Mike

From: Eileen Shannon [<mailto:EShannon@kleinfelder.com>]
Sent: Monday, June 10, 2013 5:24 PM
To: Tompson, Mike, EMNRD
Subject: Mines in vicinity of proposed hydrostatic testing

Hi Mike,

I am working on a hydrostatic discharge plan for Enterprise and we are required to research whether there are mines in the vicinity of the proposed discharge area. Water will be discharged onto the ground surface pipeline right of way (upon receipt of acceptable ground water quality analytical results)

The discharge area is located at:

- the site has no TRS data (that I could find)
- Latitude 35.634015°; Longitude: -107.026218°

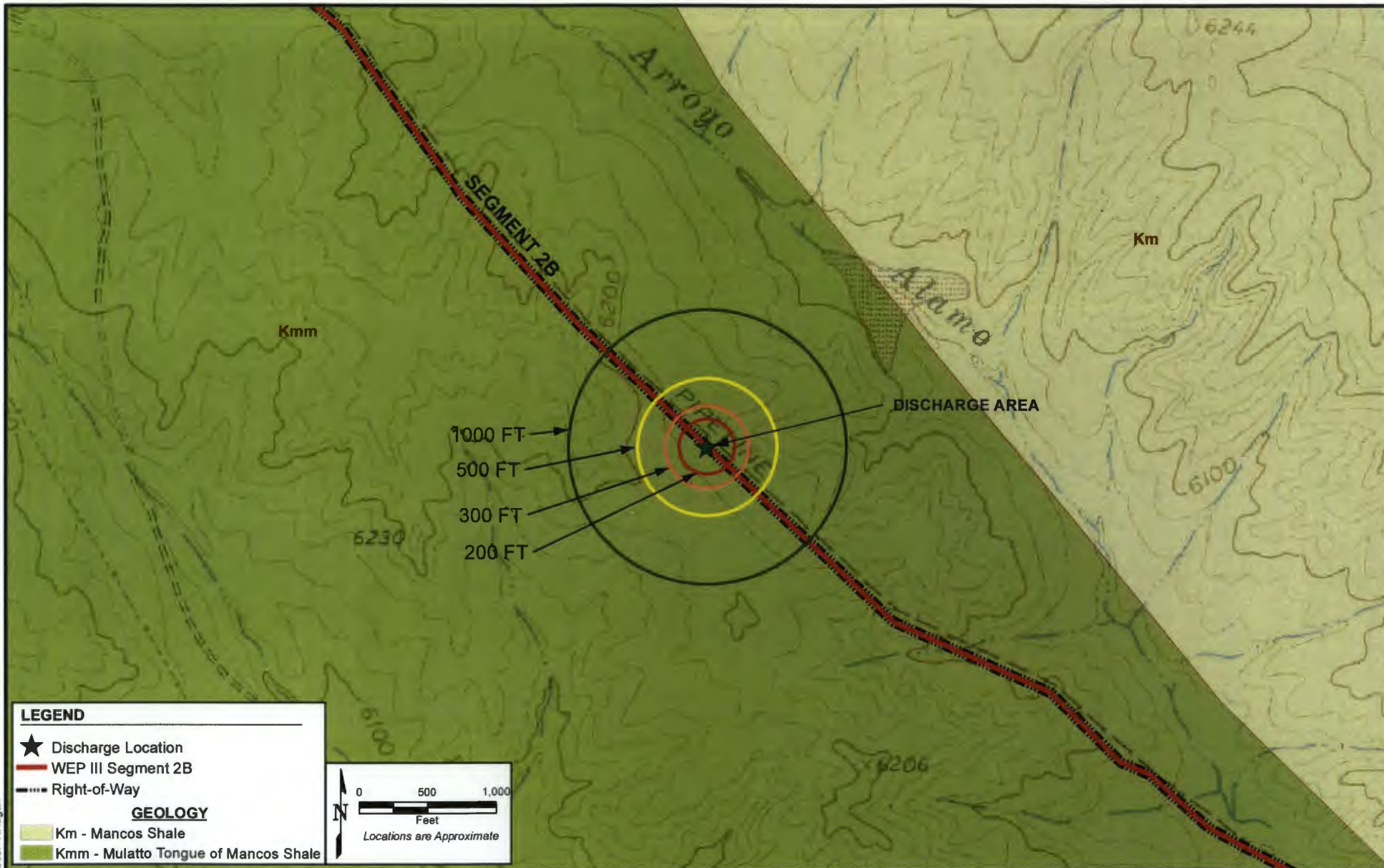
Thanks, Eileen

Eileen Shannon P.G.
Project Manager
9019 Washington NE, Building A
Albuquerque, NM 87113
o| 505.344.7373 Ext. 254
c| 505.307.0722
f| 505.344.1711



APPENDIX D

Geology



Sources:
SPREAD3_IFC_8470SEG2B_060313_CL.shp and
SPREAD3_IFC_8470SEG2B_060313_PROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013
USGS OFR 2005-21351
USGS 7.5' Topographic Quadrangle, San Luis, NM

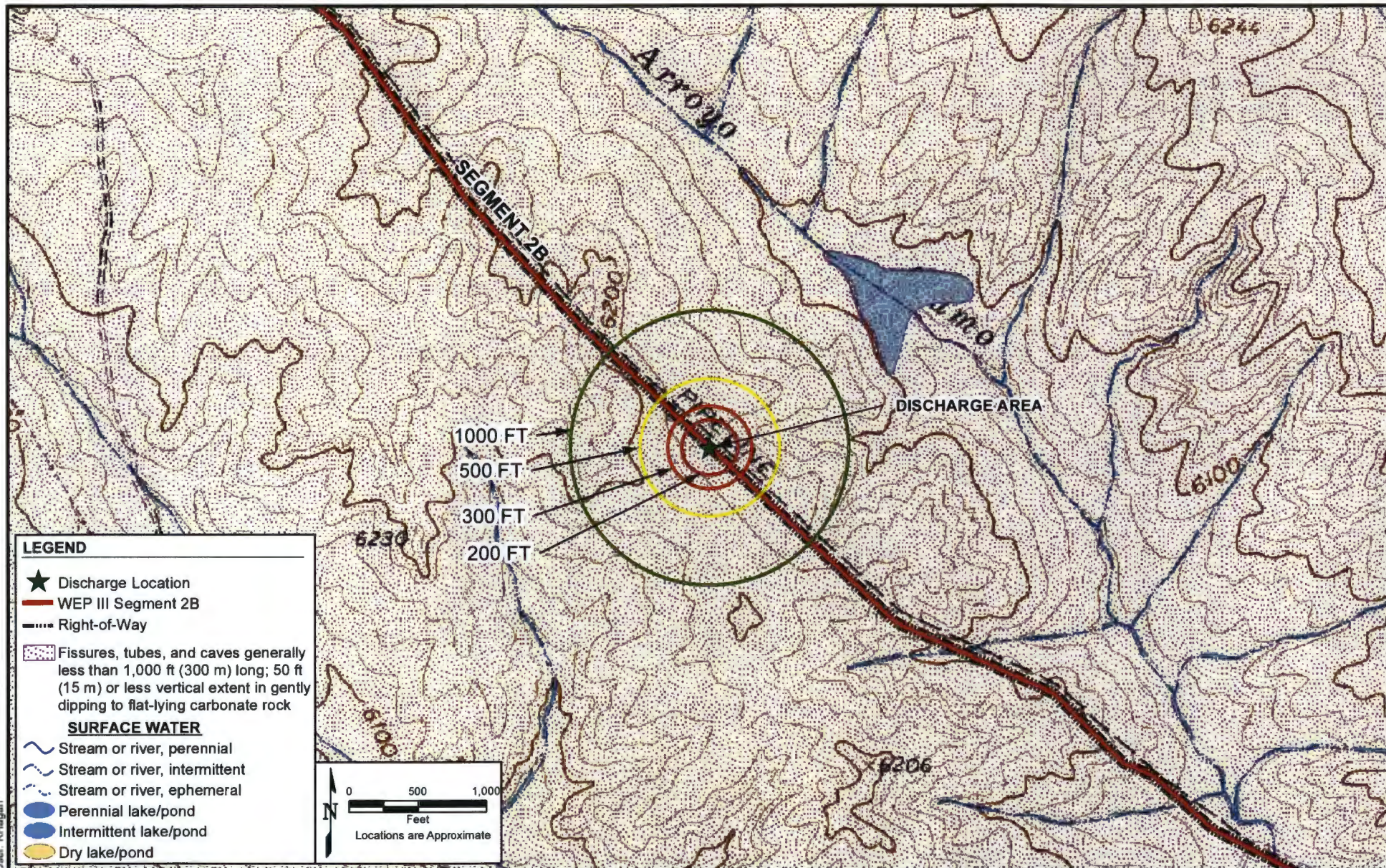
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

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

PROJECT NO.	134288	GEOLOGY IN THE VICINITY OF THE DISCHARGE AREA, WEP III SEGMENT 2B		FIGURE D-1
DRAWN:	JUN 2013			
DRAWN BY:	KFH	ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO		
CHECKED BY:	ES			
FILE NAME:	ORIGINATOR: K. HAGAN	DRAWING CATEGORY:		
Sea2B_FigureD1.mxd	APPROVED BY:	1		

User: K.Hagan

Date: 6/18/2013



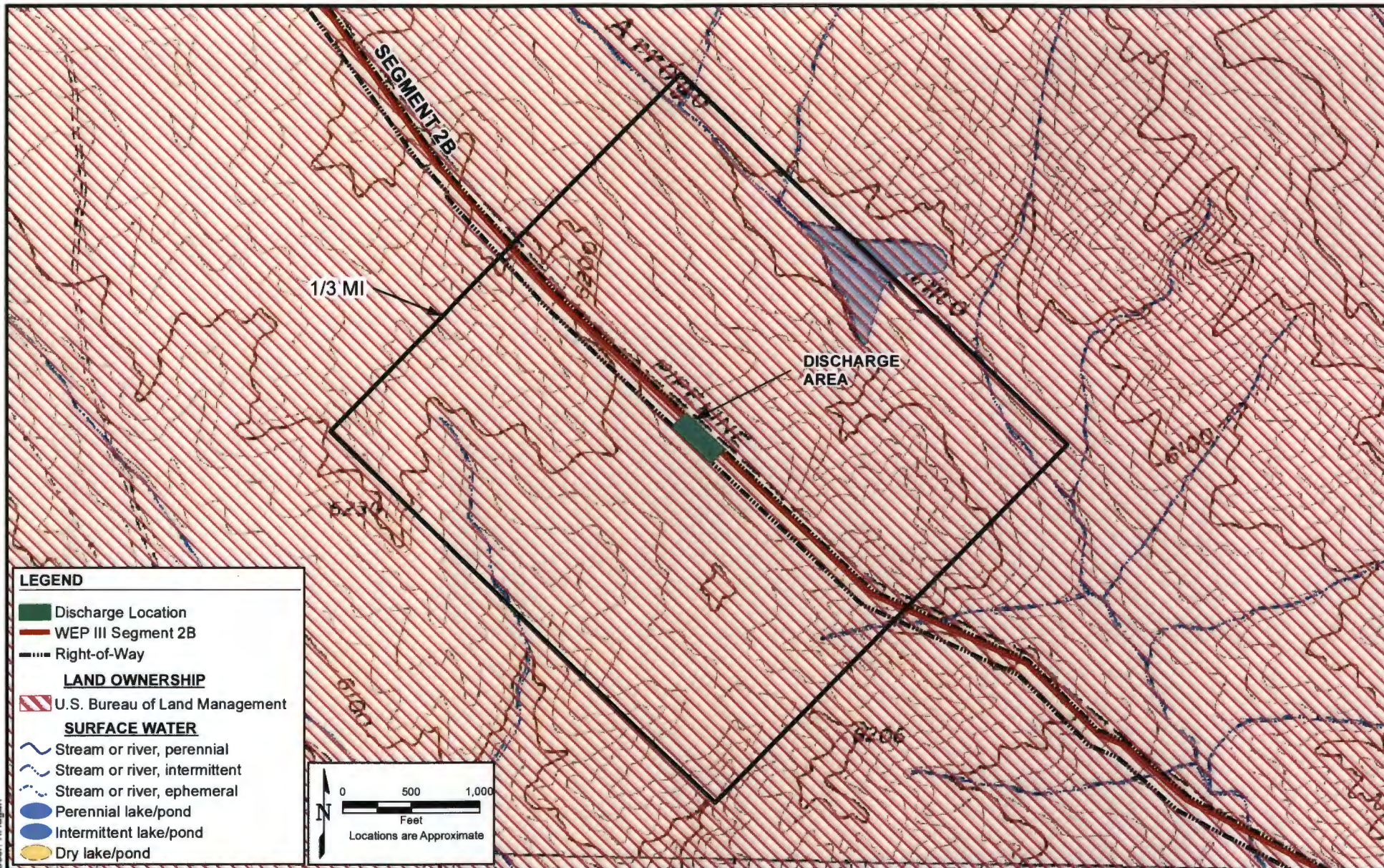
Sources:
SPREAD3_IFC_8470SEG2B_060313_CL.shp and
SPREAD3_IFC_8470SEG2B_060313_PROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013
USGS OFR 2004-1352
New Mexico BLM GIS Basemap
USGS 7.5' Topographic Quadrangle, San Luis, NM
National Hydrography Dataset, USGS

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO.	134288	KARST IN THE VICINITY OF THE DISCHARGE AREA, WEP III SEGMENT 2B		FIGURE D-2
DRAWN:	JUN 2013			
DRAWN BY:	KFH	ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO		
CHECKED BY:	ES			
FILE NAME:	Seg2B_FigureD2.mxd	ORIGINATOR: K. HAGAN	DRAWING CATEGORY: 1	
		APPROVED BY:		

APPENDIX E
Area Landownership



Sources:
SPREAD3_IFC_8470SEG2B_060313_CL.shp and
SPREAD3_IFC_8470SEG2B_060313_CROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013
New Mexico BLM GIS dataset
National Hydrography Dataset, USGS
USGS 7.5' Topographic Quadrangle, San Luis, NM

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 134288

DRAWN: JUL 2013

DRAWN BY: KFH

CHECKED BY: ES

FILE NAME:
Seg2B_FigureE1.mxd

**LAND OWNERSHIP IN THE VICINITY OF THE
DISCHARGE AREA, WEP III SEGMENT 2B**

ENTERPRISE PRODUCTS OPERATING LLC
SANDOVAL COUNTY, NEW MEXICO

ORIGINATOR: K. HAGAN

APPROVED BY:

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 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, 614 Reilly Ave., Farmington, NM 87401.

The purpose of hydrostatic (testing with water) pipeline testing is to determine the extent to which potential defects might threaten the pipeline's ability to sustain maximum allowable operation pressure. The pipeline will be filled with water, and then pressurized to a pressure higher than the standard operating pressure for a specified duration of time.

Enterprise has submitted an application for hydrostatic test water discharge that will occur on the pipeline right-of-way at latitude 35.633833°, longitude -107.025963 in the Ojo del Espiritu Santo Land Grant in Sandoval County, New Mexico. The location of the discharge is approximately 30 miles northwest of San Ysidro, New Mexico. To reach the discharge location from San Ysidro, from the intersection of NM-4 and US-550, head north on US-550 toward NM-279 for 18 miles; turn left on NM-279W and go 4.1 miles; turn left for 0.1 miles, then turn right for 3.3 miles (all unnamed roads); make a slight right onto an unnamed road and continue for 1.1 miles; and turn left on another unnamed road for approximately 2.2 miles. The discharge will take place in the 125-foot pipeline easement right-of-way (ROW). The hydrostatic test is scheduled for August 25, 2013 with discharge of the test water scheduled for approximately September 10, 2013.

The new piping, called the Western Expansion Pipeline (WEP) III, Segment 2B, will be hydrostatically tested. Up to 260,000 gallons of unused potable water obtained from the Homestake Well and will be hauled to the site and pumped via hose into the pipeline. 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. Once the results have been received, 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 a pipeline and the test water will be discharged to the dissipation and discharge system and allowed to flow onto ground surface within the ROW.

In the event that the hydrostatic test water is found to be unsuitable for disposal onto the ground surface, the used test water will be transported from the project site in DOT-approved tanker trucks to either Basin Disposal, Inc. (API 30-045-26862, Disposal Well No. 1: IPI-149-0) in Aztec, New Mexico or Agua Moss, LLC (UICI-005). The water will be transported by one or more of the following NMOCD-approved haulers: Dawn Trucking Co. (C133-31), M&R Trucking, Inc. (C133-399), Three Rivers Trucking, Inc. (C133-335) or Triple S Trucking Co., Inc. (C133-372).

The closest shallow groundwater likely to be affected by a leak or accidental discharge is found in the Dakota Sandstone, approximately 2,000 feet below the ground surface. The aquifer system in this area has a total dissolved solids concentration between 1,340 and 6,700 parts per million.

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, 20.6.2.3108). La dirección de correo local de la compañía Enterprise es: Enterprise Products Operating LLC, 614 Reilly Ave., Farmington, NM 87401.

El propósito de la prueba hidro-estática (prueba con agua) en la tubería es para evaluar el potencial de defectos que puedan afectar 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 periodo de tiempo especificado.

Enterprise ha sometido una aplicación para descargar agua de pruebas hidro-estática que ocurrirá en el área de la tubería a una latitud de 35.633833°, y una longitud de -107.025963° en la tierra del Ojo del Espíritu Santo en el Condado Sandoval, Nuevo México. El lugar de la descarga está aproximadamente 30 millas al noroeste de San Ysidro, Nuevo México. Para llegar al lugar de la descarga desde San Ysidro: desde la intersección de NM-4 y US-550, viajar hacia el norte sobre US-550 hacia NM-279 por 18 millas; dar vuelta a la izquierda sobre NM-279W y viajar 4.1 millas; dar vuelta a la izquierda por 0.1 millas, y luego dar vuelta por 3.3 millas (las calles no tienen nombre); dar poca vuelta hacia la derecha sobre una calle sin nombre y continuar por 1.1 millas; y dar vuelta a la izquierda sobre otra calle sin nombre por aproximadamente 2.2 millas. La descarga se llevara acabo en el área de la tubería (125-foot easement right-of-way, ROW). La prueba hidro-estática está programada para Agosto 25, 2013 con la descarga del agua de prueba programada para Septiembre 10, 2013.

La nueva tubería, llamada Western Expansion Pipeline (WEP) III, Segmento 2B, será probada hidro-estáticamente. Hasta 260,000 galones de agua potable (sin previo uso) obtenida del pozo Homestake (Homestake Well) y será transportada al sitio y será bombeada con manguera a la tubería. 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 sometidos a NMOCD. Una vez que NMOCD confirme los resultados indiquen el agua de descarga tiene los estándares de calidad de agua de NMAC 20.6.2.3103, Enterprise descargará el agua de acuerdo al permiso (aprobado) de descarga. Si descarga en la superficie del suelo es aprobado, el agua será desalojada de una tubería y el agua de prueba será descargada al sistema de descarga y permitida fluir sobre la superficie del suelo en el área de la tubería.

En el caso de que los resultados del agua de la prueba hidro-estática indiquen que descargar el agua en la superficie sea inapropiado, el agua de prueba será trasladada del sitio del proyecto en camiones-pipa aprobados por el departamento de transporte a Basin Disposal, Inc. (API 30-045-26862, Disposal Well No. 1: IPI-149-0) en Aztec, New Mexico o Agua Moss, LLC (UICI-005). El agua será transportada por uno más de las siguientes compañías de transporte aprobadas por NMOCD: Dawn Trucking Co. (C133-31), M&R Trucking, Inc. (C133-399), Three Rivers Trucking, Inc. (C133-335) or Triple S Trucking Co., Inc. (C133-372).

El nivel freático más cercano que posiblemente pueda ser afectado por una fuga o descarga accidental es encontrado en la Arenisca Dakota (Dakota Sandstone), aproximadamente 2,000

pies debajo de la superficie. El sistema acuífero en esta área tiene una concentración total de sólidos disueltos entre 1,340 y 6,700 partes por millón.

El aviso del plan de intención 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 de particular a este proyecto, 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.



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

ENTERPRISE PRODUCTS OPERATING LLC

July 22, 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
Western Expansion Pipeline III, Segment 2B
Sandoval County, New Mexico**

Enterprise Products Operating LLC (Enterprise) will be constructing Segment 2B of the Western Expansion Pipeline III 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 the requested revisions to the unofficial draft that you reviewed and submitted comments on July 12, 2013.

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

Sincerely,

James G. White
(Br)

James G. White
Sr. Environmental Scientist

cc: Runell Seale, Enterprise
Shiver Nolan, Enterprise



July 22, 2013
Project No.: 134288

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 Hydrostatic Test
WEP III – Segment 2B
Sandoval 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 a hydrostatic test to be conducted on Segment 2B of Enterprise's Western Expansion Pipeline III (WEP III).

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 Detail;
- Figure 3 – Dissipation and Discharge Area;
- 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; and
- Appendix F – Public Notice (English and Spanish).

A check totaling \$700 made out to the New Mexico Water Quality Management Fund is included with this NOI for the \$100 filing fee and the \$600 permit fee.

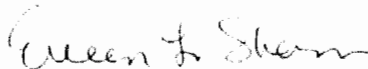
Kleinfelder prepared this NOI in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. The information provided in this document is based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

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

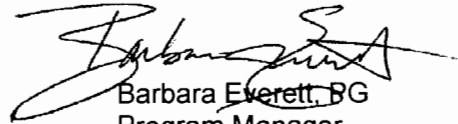
Respectfully submitted,

KLEINFELDER WEST, INC.

Reviewed by:



Eileen L. Shannon, PG
Project Manager



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 Enterprise Western Expansion Pipeline (WEP) III line is a new, welded, steel 16-inch diameter line. The section to be hydrostatic testing, Segment 2B of the WEP III pipeline is 11.4 miles or 60,192 feet long (Figure 1);
- The pipeline is part of a gathering system that transports natural gas from the Piceance and San Juan Basins to processing facilities located in Hobbs, New Mexico and Houston, Texas;
- The source water for the hydrostatic testing is the San Luis Cabazon Mutual Domestic Water Consumers Association (MDWCA) (NM3501823);
- Placement of water into the northern portion of Segment 2B (MP 320.6 to MP 324.2) is scheduled to start on August 25, 2013 (Figure 1). Water will be added to the pipeline near State Highway NM-279 (approximately MP 320.6). After the testing of the northern portion of the pipeline is complete, the water will be held in that portion of the pipeline until the construction of the next portion of Segment 2B (MP 320.6 to MP 317.5) is completed. The test water will then be moved to the central portion of Segment 2B and the central section of the line will be hydrostatically tested. Upon completion of hydrostatic tests from the central location, the test water will then be moved to the southern section (MP 317.5 to 312.8) and hydrostatically tested (additional municipal water may need to be added). Upon completion of test, the water will be analyzed for water quality (discussed in *item j*). Provided that the test water meets the requirements NMAC 20.6.3012, it will be discharged to the ground surface within the Enterprise right-of-way at MP 317.5. Approximately 260,000 gallons are expected to be discharged to the ground surface on or around September 5, 2013.
- Per NMAC 20.6.2.3108, a sample of the public notice is included in Appendix F; and
- 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 San Ysidro, New Mexico post office;
 3. Written notice of the discharge by mail to owners of record of all properties within a 1/3 mile distance from the boundary of the property where the discharge site is located;
 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 *Albuquerque Journal* newspaper. Public notice is published every day, and the paper requires the information five days prior to publication.

Notice of Intent Plan

On behalf of Enterprise, Kleinfelder is submitting this NOI plan as outlined in NMOCD Guidance document, "Guidelines for Hydrostatic Test Dewatering," (revised January 11, 2007). The NOI plan includes the following items:

Item a. Name and address of the proposed discharger:

Legally Responsible Party

Mr. Leonard W. Mallett, Sr. VP
POC: Ms. Shiver Nolan, Sr. Compliance Administrator
P.O. Box 4324
Houston, Texas 77210
713-381-6595

Local Representative

Ms. Runell Seale
Enterprise Products Operating LLC
614 Reilly Ave.
Farmington, NM 87401
505-599-2124

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 sections of the pipeline to be tested are located Sandoval County. Water from the hydrostatic testing will be discharged to the ground in the 125-foot right-of-way at the central portion of WEP III Segment 2B at MP 317.5. The location of the pipeline to be hydrostatically tested and the proposed discharge location are shown on Figure 1.

The location of the hydrostatic discharge area is located approximately 30 miles northwest of San Ysidro, New Mexico. Directions to the discharge site from San Ysidro, New Mexico are:

- From the intersection of NM-4 and US-550 in San Ysidro, New Mexico, head north on US-550 toward NM-279 for 18 miles;
- Turn left on NM-279W and go 4.1 miles;
- Turn left for 0.1 miles, then turn right for 3.3 miles (all unnamed roads);
- Make a slight right onto an unnamed road and continue for 1.1 miles; and
- Turn left on another unnamed road for approximately 2.2 miles.

The approximate coordinates for the discharge area location are: Latitude 35.633833°; Longitude -107.025963.

Item c. Legal description of the discharge location:

The discharge location is located:

- In the Ojo Del Espiritu Santo Land Grant, approximately 2.25 miles southwest of the southwest corner of Township 16 North, Range 1 West. The discharge location has no township, range or section description (Figure 1).
- The latitude and longitude coordinates are provided in *item b*.

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

- Figure 1 – Regional map showing topography, the pipeline section undergoing testing, and the hydrostatic test water discharge location.
- Figure 2 – Site-specific map showing the hydrostatic test water discharge area.

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

Shapefiles were downloaded from various electronic source were included in a Geographic Information System (GIS) database for preparation of this NOI. The maps generated from this database were reviewed between June 7 and June 14, 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 (rivers, creeks, arroyos, canyons, draws, washes, or other channels having definite banks and a bed with visible evidence of the occasional flow of water); lakebeds (perennial, intermittent, and dry lakes); sinkholes; or playa lakes were observed within 200 feet of the discharge area during the site visit (Appendix A).

No watercourses, lakebeds, sinkholes, or playa lakes were identified within 200 feet of the discharge area. (Figure B-1, Appendix B)

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

No springs were identified on the topographic map within 1,000 feet of the discharge area (Figure B-1, Appendix B) and no springs were observed during the site inspection (Appendix A). No water supply wells are located within 1,000 feet of the discharge area (Figure B-2, Appendix B).

The New Mexico Office of the State Engineer (OSE) website was checked for water supply wells located in the vicinity of the site. Based on data obtained from the OSE and Go-Tech websites, accessed on June 7, 2013, domestic and livestock wells are located approximately 2.8 to 3.7 miles to the northwest and west of the proposed discharge area (Figure B-2, Appendix B).

According to the Federal Emergency Management Administration (FEMA) DFIRM Panel 35043C1075D map, the discharge area is not located within a 100-year floodplain. The discharge and surrounding areas are located in Zone X (areas determined to be outside the 0.2% annual chance floodplain) (FEMA, fema.gov). An area located approximately 3,000 feet to the southeast of the proposed discharge area is mapped as Zone A (areas with 1% change of annual flooding and a 26% of flooding over a 30 year time period). Figure B-3 illustrates the above findings and is included in Appendix B.

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

Wetlands were not observed in or within 500 feet of the perimeter of the discharge area (Figure B-1, Appendix B) and none were observed during the site inspection (Appendix A).

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

No active or inactive mines were located at or in the vicinity of proposed discharge area (Figure C-1 in Appendix C). Mr. Mike Thompson, with the New Mexico Abandoned Mine Lands Program, was contacted on June 10, 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 a half mile radius of the proposed discharge site (see email, Appendix C).

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

No permanent residences, school, hospital, institution or church were noted on aerial photographs of the area (Figure 2), nor were they noted during the site visit (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 will be introduced into the pipeline and then the pipeline will be pressurized to a pressure higher than the standard 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 discharged from the pipeline into the dissipation and discharge system.

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, the water will be tested for water quality as described in *item j*. Once approval to discharge has been received, the test water will be allowed to flow from the pipeline into the 125-foot right-of-way (ROW).

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

Non-woven geotextile fabric will be installed beneath the dissipation structure to prevent scouring. Hay bales will be used to control erosion as the water is discharged from the pipeline at a rate of 1,500 gallons per minute (gpm) into the hydrostatic waste water dissipation and discharge system. A connector pipe is attached to the end of the pipeline and to a buffer "T" located within the dissipation structure. Pipeline water will gradually be released from the dissipation structure at a low flow rate onto the 125-foot ROW. The dissipation and discharge structure will be built to maintain the proper flow rate to avoid scaring the landscape. A 200-foot long berm will be built along the east side of the 125-foot ROW. The actual construction details

of the berm will be modified during construction to meet the conditions at the site and to prevent discharge water flow towards the east of the discharge area. A diagram of the hydrostatic waste water dissipation and discharge system is shown in Figure 3.

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 tests have been completed, 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 using the following methods.

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 SM 4500-H+B	1 x 125 ml plastic / H ₂ SO ₄
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
Radium 226/228	E903.0 / E904.0	2 x liter plastic / HNO ₃

has 11 lab
w/ 125 ml
for test results

Enterprise requests an exemption from radium testing, since the source water will be from the San Luis Cabazon MDWCA.

Once the 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.

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);

If test water exceeds discharge requirements, the water will be transported from the project site in DOT-approved tanker trucks to either Basin Disposal, Inc. (API 30-045-26862, disposal well No. 1: IPI-149-0) in Aztec, New Mexico or Agua Moss, LLC (Permit No. UICI-005) on Crouch Mesa, New Mexico. The water will be transported by one or more of the following NMOCD-approved haulers: Dawn Trucking Co. (C133-31), M&R Trucking, Inc. (C133-399), Three Rivers Trucking, Inc. (C133-335) or Triple S Trucking Co., Inc. (C133-372).

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

The volume of the hydrostatic test water is expected to be discharged is approximately 260,000 gallons. The source of water used for the hydrostatic test will be potable water from the San

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

Soils in the area are dominated by Sandoval-Querencia-Zia surface soils comprised of moderately well-drained, fine sandy loam and clay loam. The loam is formed by eolian deposits over stream and fan alluvium derived from sandstone and shale [United States Department of Agriculture (USDA), 2008]. The soil overlies the Cretaceous Mulatto Tongue of Mancos Shale formation (Kmm) (Figure D-1, Appendix D). Mancos Shale is located approximately 1,700 feet to the northeast of the discharge area.

Karst features were identified at and in the area surrounding the discharge area. The karst is described as fissures, tubes and caves generally less than 1,000 feet (300 meters) long with a vertical extent 50 feet (15 meters) or less with gently dipping to flat-lying beds of carbonate rock (Figure D-2, Appendix D).

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

The site is bordered by the Mancos Shale formation, an aquitard. The first water bearing zone is the Dakota Sandstone. The following properties are given for water encountered in the Dakota Sandstone formation (Stone et al, 1980):

- The depth to water is approximately 2,000 feet below ground surface;
- Total dissolved solids (TDS) concentrations in the ground water from the Dakota sandstone generally range from 1,340 parts per million (ppm) near recharge areas to over 6,700 ppm in deeper parts of the basin (Stone et al, 1983).

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 point or temporary frac tank storage area within the Enterprise pipeline easement:

According to GIS database the landowner of properties located at and surrounding the proposed discharge area, is the Bureau of Land Management (Figure E-1, Appendix E). The landowner's address is:

Bureau of Land Management
Rio Puerco Field Office
435 Montano Road NE
Albuquerque, NM 87107

References

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

Go-Tech, New Mexico Water database (NM WAIDS, accessed June 10, 2013, <http://octane.nmt.edu/waterquality/data/gwatersearch.aspx>

Office of the State Engineer (OSE) database search accessed in June 10, 2013, <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., Padgett, E.T., 1983, Hydrology and Water Resources of the San Juan Basin, New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6

United States Department of Agriculture, Natural Resources Conservation Service and New Mexico Agricultural Experiment Station, 2008 "Soil Survey of Sandoval County Area, New Mexico, Parts of Los Alamos, Sandoval, and Rio Arriba Counties", 2008

United States Geological Survey, Mineral Resources On-Line Spatial Data, accessed June 10, 2013, <http://mrdata.usgs.gov/geology/state/state.php?state=NM>

GIS References

Topographic 7.5' quadrangle maps (Segment 2B)

- Arroyo Empedrado, NM
- San Luis, NM
- Holy Ghost Spring, NM
- Guadalupe, NM
- Cabezón Peak, NM
- Ojito Spring, NM

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, Segment 2B

- ESRI World Imagery; ESRI DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community. Date of image: 05/22/2010

State and County boundaries

- ESRI Street Map North America dated August 17, 2010

Cities and Towns; Urban areas

- *TIGER urban areas 2010 (tl_2010_35_place10.shp) 2010 Census data
- 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
- Unable to find the USGS wells listed on the PRRC references sheet

Floodplains, Segment 2B

- *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 35043C1075D dated 3/18/2008

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

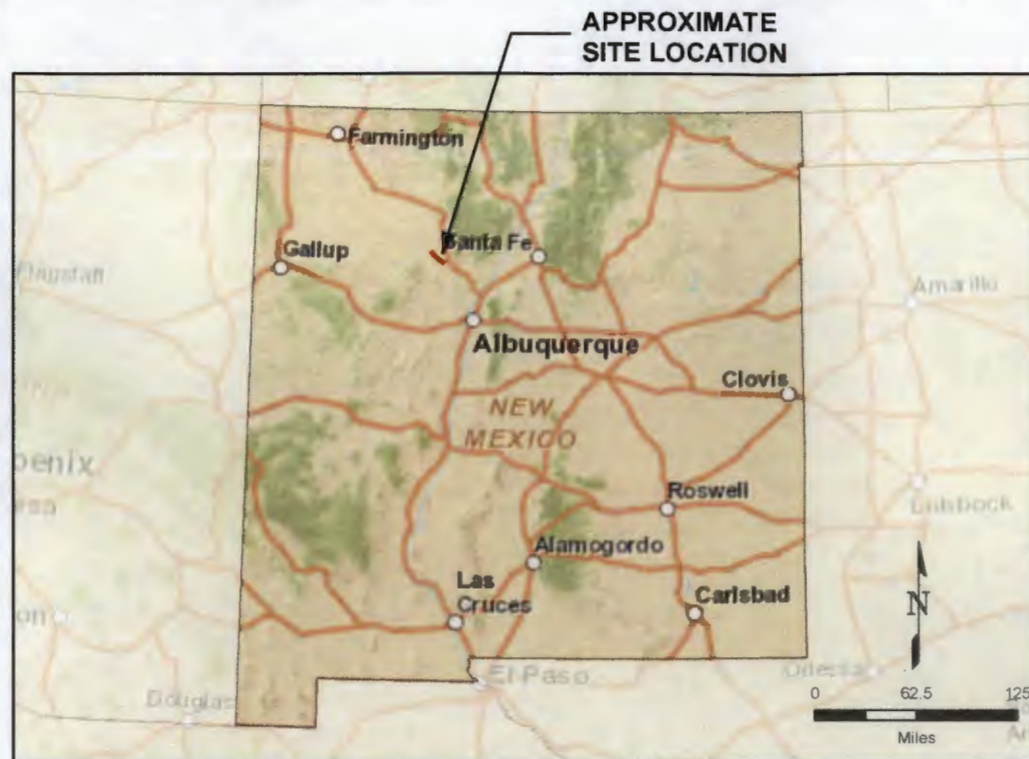
- *USGS OF 2004-1352. Tobin, Bret D., and David J. Weary, 2004. Digital Engineering Aspects of Karst Map: A GIS version of Davies, W.E., Simpson, J.H., Ohlmacher, G.C., Kirk, W.S., and Newton, E.G., 1984, Engineering aspects of karst: U.S. Geological Survey, National Atlas of the United States of America,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

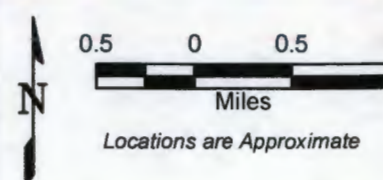
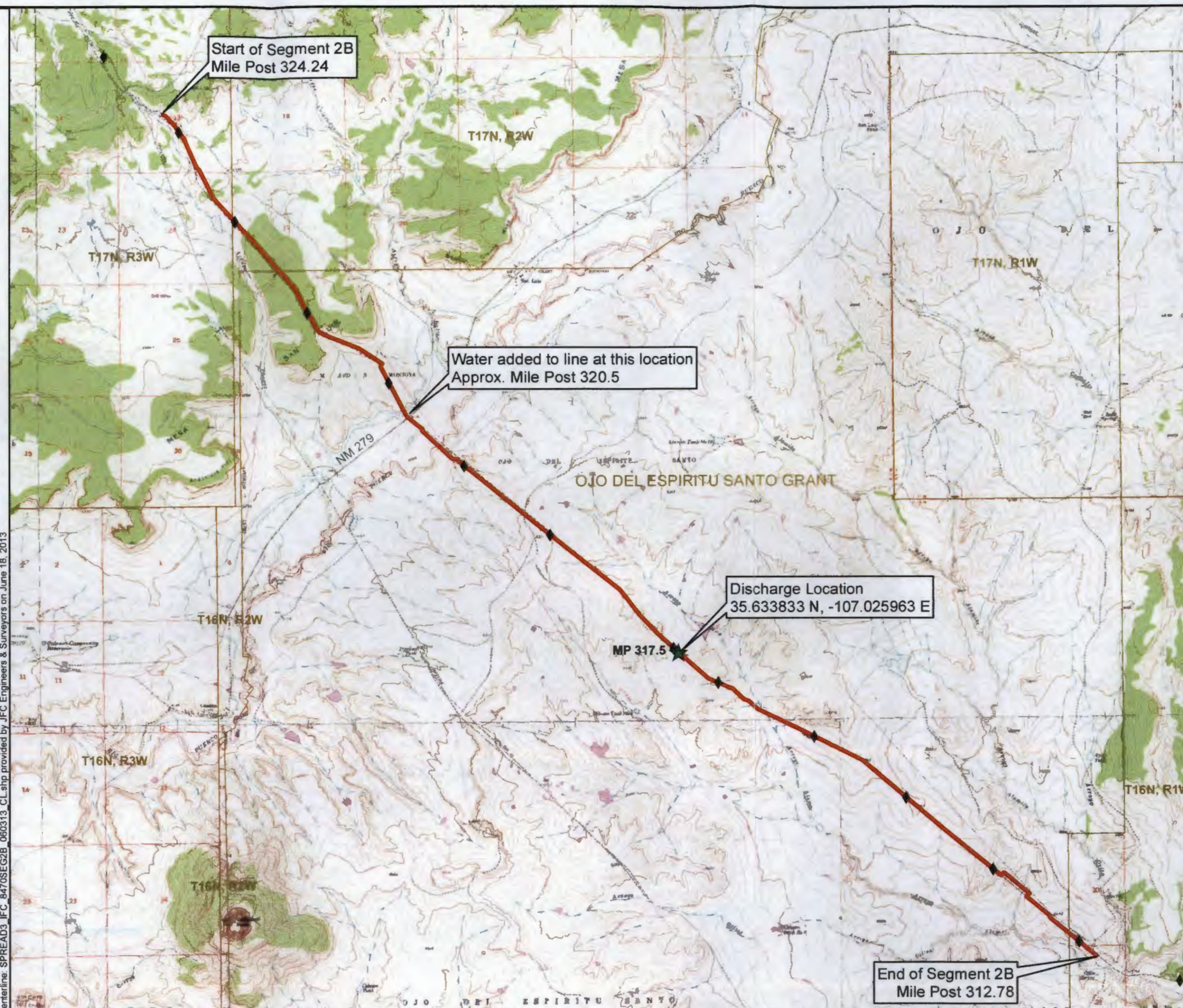


Source: ESRI World Street Map

LEGEND

- ★ DISCHARGE LOCATION
- ◆ MILE POST
- APPROXIMATE SEGMENT OF PIPELINE TO BE HYDROSTATICALLY TESTED

Source: USGS 7.5' Quadrangle Topographic Maps
Arroyo Empedrado, San Luis, Holy Ghost Spring, Guadalupe, Cabezon Peak, Ojito Spring, NM
Centerline: SPREAD3 IFC 8470SEG2B_060313.CL.shp provided by JFC Engineers & Surveyors on June 18, 2013



PROJECT NO.: 134288
DRAWN: JUN 2013
DRAWN BY: KFH
CHECKED BY: ES
FILE NAME: Seg2B_Figure1.mxd

NEW ENTERPRISE PIPELINE WEP III SEGMENT 2B	
ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO	
ORIGINATOR: K. HAGAN	DRAWING CATEGORY: 1
APPROVED BY: <i>ES 3-11-13</i>	

FIGURE
1

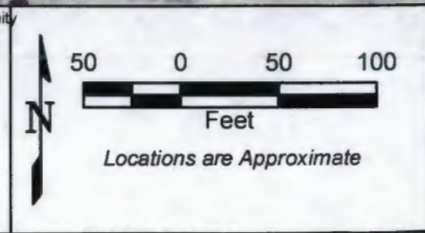
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



- LOCATION OF DISCHARGE**
- DISCHARGE POINT
 - DISSIPATION AND DISCHARGE SYSTEM
 - OVERFLOW PIPE
 - DISCHARGE AREA
 - MILE POST
 - APPROXIMATE LOCATION OF SEGMENT 2B
 - CONSTRUCTION RIGHT-OF-ROW

Source: ESRI World Imagery; ESRI, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community
Date of image: 05/22/2010
SPREAD3_IFC_8470SEG2B_060313_CL.shp, SPREAD3_IFC_8470SEG2B_060313_CROW.shp
provided by JFC Engineers & Surveyors on June 18, 2013

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



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

PROJECT NO.:	134288
DRAWN:	JUL 2013
DRAWN BY:	KFH
CHECKED BY:	ES
FILE NAME:	Seg2B_Figure2.mxd

NEW ENTERPRISE PIPELINE WEP III SEGMENT 2B DISCHARGE LOCATION	
ENTERPRISE PRODUCTS OPERATING LLC SANDOVAL COUNTY, NEW MEXICO	
ORIGINATOR: K. HAGAN	DRAWING CATEGORY: 1
APPROVED BY: <i>[Signature]</i>	

Straw bale catch basin: Bales will be installed 2-3 bales high and 2 bales wide.

Top View

Mirafi Fabric: Mirafi fabric will be installed on the inner walls of the interior straw bale catch basins to ensure the capture of suspended solids and debris that may occur from the testing procedure.

Plywood Supports: Plywood supports will be built to support the discharge point and the overflow pipe so that they do not rest on the straw bales.

Discharge point

Diffuser: A diffuser will be installed at the discharge point to dissipate the energy of the water.

Overflow Pipe

Side View

This system is designed to capture sediment and debris while allowing water to flow through. The size of the catch basin will be approximately 30x40 feet in size. This system is designed so that water will flow through the bales and filter out into the surrounding vegetation at a slow velocity. If too much water enters the catch basin, there is an overflow pipe to prevent the structure from collapse. Geotech fabric will be installed below the overflow to prevent erosion.



PROJECT NO.:	134288
DRAWN:	JUN 2013
DRAWN BY:	KFH
CHECKED BY:	ES
FILE NAME:	Seg2B_Figure3.doc

DISSIPATION AND DISPOSAL SYSTEM

ENTERPRISE PRODUCTS OPERATING LLC
SANDOVAL COUNTY, NEW MEXICO

ORIGINATOR:	K.HAGAN	DRAWING CATEGORY	1
APPROVED BY:	QS 7-1913		

FIGURE

3