

**HITP - \_41\_**

**GENERAL  
CORRESPONDENCE**

**YEAR(S):  
\_2013-2014\_**

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of Check No. 687593 dated 6/3/13

or cash received on 8/14/13 in the amount of \$ 150.00

from KLEINFELDER WEST, INC.

for HITP-41

Submitted by: BRAD JONES Date: 8/14/13

Submitted to ASD by: Lupe Sherman Date: 8/14/13

Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee \_\_\_\_\_ New Facility: \_\_\_\_\_ Renewal: \_\_\_\_\_

Modification \_\_\_\_\_ Other  TEMPORARY PERMISSION FEE

Organization Code 521.07 Applicable FY 14

To be deposited in the Water Quality Management Fund.

Full Payment \_\_\_\_\_ or Annual Increment \_\_\_\_\_

**ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH**

I hereby acknowledge receipt of Check No. 687594 dated 6/3/13  
or cash received on 8/14/14 in the amount of \$ 100.00  
from KEINFELDER WEST, INC.  
for HITP-41

Submitted by: BRAD JONES Date: 8/14/13

Submitted to ASD by: Lupe Muman Date: 8/14/13

Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee  New Facility: \_\_\_\_\_ Renewal: \_\_\_\_\_

Modification \_\_\_\_\_ Other \_\_\_\_\_

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 Revenue Transmittal

Description	Fund	CES	DFA Org.	DFA ED Acct.	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 <input checked="" type="checkbox"/> Water Quality - Oil Conservation Division	341	29		2329 900000	2329029	250.00 10
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 VON GONTEN Phone #: 476-3488 Date: 8/14/13

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:
8/14/14		✓	KLEINFELDER, WEST	6/3/13	687593		150.00		
8/14/14		✓	KLEINFELDER WEST, INC.	6/3/13	687594		100.00		
<b>TOTAL</b>							250.00 <del>50.00</del>		

## 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					



August 8, 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 for Review  
                  Phantom Banks, Big Sinks, and Ross Draw Laterals  
                  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 three new, interconnected Enterprise pipelines for your review.

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

- Background Information;
- Notice of Intent Plan;
- Figure 1 – New Enterprise Pipeline Undergoing Hydrostatic Testing;
- Figure 2 – Temporary Frac Tank Staging Area for Hydrostatic Test Water;
- Figure 3 – Topographic Map;
- Appendix A - Certification of Siting Criteria;
- Appendix B –Water Feature, Water Well, and Floodplain Information;
- Appendix C – Area Mine Information; and
- Appendix D – Geology.

Checks totaling \$250 will be submitted to the New Mexico Water Quality Management Fund on behalf of Enterprise for the \$100 filing fee and a \$150 temporary permission 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.

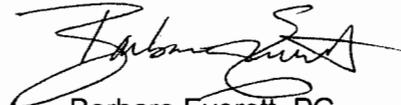
Should you have any questions, please feel free to contact Barbara Everett (Kleinfelder) at 505.344.7373 or Jimmy White (Enterprise) at 713.392.2458.

Respectfully submitted,

**KLEINFELDER WEST, INC.**

**Reviewed by:**

  
Jill Hernandez  
Staff Engineer

  
Barbara Everett, PG  
Program Manager

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

## Background Information

- The U.S. Department of Transportation 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 pipelines are 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 Phantom Banks, Big Sinks, and Ross Draw Laterals are located in the following sections of Eddy County, New Mexico:
  - Sections 7, 17, 18, 20, 29, and 32 of Township 25 South, Range 31 East;
  - Sections 3, 9, 10, 11, and 12 of Township 25 South, Range 30 East; and
  - Sections 5, 8 of Township 26 South, Range 31 East.
- The Phantom Banks and Big Sinks Laterals are new, welded steel, 12-inch inner-diameter pipelines, approximately 30,320 feet (5.8 miles) in total length.
- The Ross Draw Lateral is new, welded steel, 8.249-inch inner-diameter pipeline, approximately 20,230 feet (3.8 miles) in length.
- The pipelines are part of a gathering system that transports natural gas from well sites to processing facilities.
- The Phantom Banks and Big Sinks pipelines are currently scheduled to be filled with approximately 188,000 gallons of test water beginning August 28, 2013 (one test for both pipelines), with discharge to frac tanks located at the southeastern end of the Phantom Banks Lateral on August 29, 2013. Mesquite Services Inc. (Permit Number C133-211) will be used to transport approximately 116,000 gallons of the test water for disposal at Dorstate SWD (Order #247-A, API #30-015-23728) for injection and disposal. The remaining 72,000 gallons of post-hydrostatic test water will be stored in frac tanks pending hydrostatic testing of the Ross Draw pipeline.

Upon completion of the Ross Draw Lateral construction, the remaining post-hydrostatic test water will be transferred from the frac tanks into the Ross Draw Lateral and a hydrostatic test will be conducted. The Ross Draw Lateral hydrostatic testing is currently scheduled to be filled with test water beginning September 27, 2013. Upon completion of the Ross Draw hydrostatic testing, the test water will be discharged to frac tanks located in the collection/retention area at the southeastern end of the Phantom Banks Lateral on September 29, 2013. Mesquite Services Inc. (Permit Number C133-211) will be used to transport the post-hydrostatic test water for injection and disposal at Dorstate SWD (Order #247-A, API #30-015-23728).

**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

**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 in Eddy County. The location of the pipelines to be hydrostatically tested is shown on Figure 1. Water from the hydrostatic testing will be temporarily stored in frac tanks pending injection and disposal at Dorstate SWD (Order #247-A, API #30-015-23728). The location of the pipeline to be hydrostatically tested is depicted on Figure 1.

The frac tanks will be placed within 50x305-foot secondary containment located in the collection retention area. The size of collection retention area will be 50x305 feet with an additional portion located along the 30-foot Ross Draw Lateral easement, as depicted on Figure 2 to allow space for the trucks during dewatering operations. The collection/retention area will be located within the 50-foot Phantom Banks pipeline construction right-of-way and the 30-foot Ross Draw Lateral easement approximately 20 miles southeast of Loving, New Mexico. Directions to the collection/retention area from Loving, New Mexico are:

- From the intersection of W. Cedar Street and N. 4th Street, head north on N 4<sup>th</sup> Street toward W Elm Street for approximately 0.3 miles;
- Turn right onto Oak Road and continue for 1.7 miles;
- Turn left on to S Donaldson Farm Road and continue for 1.5 miles;
- Turn right onto NM-31/Potash Mines Road and continue for 4.5 miles;
- Turn right onto NM-128 E/Jal Highway and continue for 12.8 miles;
- Turn right onto Twin Wells Road and continue for 5.6 miles;
- Turn right to stay on Twin Wells Road and continue for 2.1 miles;
- Turn left to stay on Twin Wells Road and continue for 1.2 miles;
- Turn left to stay on Twin Wells Road and continue for 1.7 miles;
- Slight left to stay on Twin Wells Road and continue for 1.4 miles;
- Turn right onto Buck Jackson Road and continue for 2.4 miles;
- Turn left to stay on Buck Jackson Road at the fork in the road for 0.7 miles;
- Turn left onto unnamed road and continue 1.8 miles to the southern end of the Phantom Banks pipeline and the collection/retention area.

**Item c. Legal description of the discharge location;**

The collection/retention area will be located at:

SW/4 of the SW/4 of Section 17 and NW/4 of the NW/4 of Section 20, Township 25 South, Range 31 East, Eddy County, New Mexico (See Figure 1). The approximate coordinates for the proposed collection/retention area location are: Latitude 32° 7'23.30"N; Longitude 103°48'22.05"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 collection/retention area.
- Figure 2 – Site-specific aerial map depicting the collection/retention area.
- Figure 3 – Site-specific topographic map depicting topography in the collection/retention area.

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

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

A search of watercourses, lakebeds, sinkholes, and playa lakes in the vicinity of the collection/retention area was completed on May 9, 2013 by reviewing the topographic map and the Petroleum Recovery Research Center database (PRRC database). 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 identified within 200 feet of the collection/retention area. A copy of the topographic map is included in Appendix B, Figure B-1. A map generated from the PRRC database is included in Appendix B, Figure B-2. In addition, no watercourses, lakebeds, sinkholes, or playa lakes were observed within 200 feet of the collection/retention area during the site visit (Appendix A).

- 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 collection/retention area was conducted. The PRRC and New Mexico Office of the State Engineer (OSE) websites were searched on May 9, 2013. According to the PRRC database and OSE records, the collection/retention area is not located within a wellhead protection area (Figure B-2, Appendix B). In addition, no water wells were observed during the site visit within 1,000 feet of the proposed collection/retention area.

The topographic map provided in the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) database was reviewed for springs in the vicinity of the collection/retention area on May 9, 2013. No springs were identified on the topographic map within 1,000 feet of the collection/retention area (Figure B-1, Appendix B). The PRRC database was also reviewed on May 9, 2013 for evidence of springs in the collection/retention area. No springs were identified in the PRRC database (Figure B-2, Appendix B) or during the site inspection (Appendix A).

The Federal Emergency Management Administration (FEMA) flood insurance rate map (Panel 1900) was reviewed on the FEMA website for 100-year floodplains in the vicinity of the proposed collection/retention area. According to the FEMA website, the proposed collection/retention area is not located within a 100-year floodplain. The collection/retention area and the area surrounding the site are located within an area designated Zone X (areas determined to be above the 500-year floodplain) (FEMA, fema.gov). Figure B-3 is a copy of the floodplain map and is included in Appendix B.

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

The NWI was searched for wetlands in the vicinity of the collection/retention area on May 9, 2013 (Figure B-3, Appendix B). Wetlands were not observed within 500 feet of the perimeter of the collection/retention area. In addition, no wetlands were visible within 500 feet of the collection/retention area in the April 19, 2011 aerial photograph of the area (see Figure 2) or during the site inspection (Appendix A).

iv. Within the area overlying a subsurface mine; or

According to the PRRC database, no active or inactive subsurface mines were located in the vicinity of proposed collection/retention area. Figure C-1 (Appendix C), generated from the New Mexico Mining and Minerals Division GIS database, accessed on May 9, 2013 does not depict subsurface mines within 1,000 feet of the collection/retention area. Mr. Mike Tompson with the New Mexico Abandoned Mine Lands Program was contacted on May 20, 2013 to assess the presence of abandoned subsurface mines in the vicinity of the proposed collection/retention area. According to Mr. Tompson, there is no record of abandoned subsurface mines within Sections 17 and 20, Township 25 South, Range 31 East (see email, Appendix C).

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

No permanent residences, schools, hospitals, institutions, or churches were noted on the aerial photographs of the area, dated April 19, 2011 (see Figure 2). A visual site inspection conducted on May 31, 2013 confirmed the absence of permanent residences, schools, hospitals, institutions, and churches within 500 feet of the collection/retention area.

**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 hydrostatic testing is on new piping, previous contents of the pipe do not need to be cleared. The pipeline will be filled with water and 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 areas are replaced, and then re-tested.

The hydrostatic testing will begin with the Phantom Banks and Big Sinks Laterals (one test for both pipelines). Approximately 188,000 gallons of potable, municipal water from the City of Carlsbad will be transferred into the Phantom Banks and Big Sinks Laterals from water trucks. The hydrostatic test of the Phantom Banks and Big Sinks Laterals will be conducted. Upon completion of the Phantom Banks and Big Sinks hydrostatic testing, the post-hydrostatic test

water will be discharged to frac tanks for temporary storage at the southeast end of the Phantom Banks Lateral within the collection/retention area. Mesquite Services Inc. (Permit Number C133-211) will be used to transport approximately 116,000 gallons of the test water for disposal at Dorstate SWD (Order #247-A, API #30-015-23728) for injection and disposal. The remaining 72,000 gallons of post-hydrostatic test water will then be reused in the hydrostatic test of the Ross Draw Lateral. Water will be transferred from the frac tanks to the Ross Draw Lateral and a hydrostatic test will be conducted. Upon completion of the Ross Draw Lateral hydrostatic testing, the water will be transferred to frac tanks and temporarily stored in the collection/retention area located at the southeastern end of the Phantom Banks Lateral. The water from the Ross Draw Lateral testing will be transferred from the frac tanks to water trucks for injection and disposal at Dorstate SWD (Order #247-A, API #30-015-23728).

***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 Phantom Banks and Big Sinks Laterals, the water will be transferred to and temporarily stored in nine clean, ±21,000-gallon frac tanks in the collection/retention area (Figure 2).

Frac tanks will be interconnected but will have safety valves at each tank connection and will be located within lined and bermed secondary containment in the collection/retention area. Drip pans will be used under pumps and at hose connections. The secondary containment will be sufficient to hold 1 1/3 of the total volume of the interconnected frac tanks, or the volume of the largest tank, whichever is greater. The tanks will be contained within a single containment area. Plastic will be draped over dirt berms or hay bales surrounding the collection/retention area.

Water will then be reused to test an adjacent section of pipeline, the Ross Draw Lateral. Hoses will be used to transfer water from the frac tanks into the Ross Draw Lateral. Drip pans will be used under pumps and at hose connections. Upon completion of the Ross Draw Lateral hydrostatic testing, the water will be transferred to frac tanks and temporarily stored in the collection/retention area (Figure 2).

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

Enterprise intends to transfer the test water into frac tanks for temporary storage. Secondary containment consisting of plastic liners will be used under the frac tanks to prevent leakage to the ground surface. Personnel will be present during test water transfer operations to close valves in case of leaks. Personnel will be located in the surrounding area to conduct pipeline construction and maintenance activities and can help prevent vandalism to the frac tanks. Visual inspections will be conducted while the hydrostatic test water is stored in the frac tanks to ensure the absence of leaks and damage due to vandalism.

***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;**

Potable water from the City of Carlsbad will be used for the hydrostatic testing, and as such, Enterprise will not collect, nor analyze, a pre-test sample of the water obtained from the municipality or prior to the pipeline testing. Post-hydrostatic test water samples are not required for disposal of RCRA-exempt waste water at Dorstate SWD (Order #247-A, API #30-015-23728).

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

The fluids will be temporarily containerized as described under items g and h. Potable municipal water is being used to test the new piping; therefore, solids accumulation is not anticipated. Approximately 116,000 gallons of post-hydrostatic test water will be hauled off-site by Mesquite Services Inc. (Permit Number C133-211) for injection and disposal at Dorstate SWD (Order #247-A, API #30-015-23728) at completion of the Phantom Banks and Big Sinks test. The five frac tanks holding this water will be removed from the collection/retention area once the water has been hauled offsite. The remainder of the used test water (approximately 72,000 gallons) will be temporarily stored in four clean  $\pm$ 21,000-gallon frac tanks at the collection/retention area to be used in the hydrostatic testing of the connecting Ross Draw Lateral in September 2013. Post-hydrostatic test water will be hauled off-site by Mesquite Services Inc. (Permit Number C133-211) for injection disposal at Dorstate SWD (Order #247-A, API #30-015-23728) at completion of the Ross Draw test. No surface discharge is proposed.

**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 a total of approximately 188,000 gallons. The source of water used for the hydrostatic test will be potable municipal water from the City of Carlsbad. Because the piping is new, the hydrostatic testing is not expected to degrade the water.

**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 into west Texas. The Delaware Basin consists primarily of 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.

Soils in the area are dominated by Kermit – Berino fine sands. These sands are Quaternary eolian deposits and unconsolidated alluvial deposits that cover most of the underlying older Quaternary alluvium deposits of the upland plains and piedmont areas (Qe/Qp on Figure D-1, Appendix D). These Quaternary units are between 30 and 150 feet thick and unconformably overlie older Permian formations. The Permian Rustler Formation outcrops in the area and is composed of siltstone, gypsum, sandstone, and dolomite. No known karst features were identified in the area based on a Petroleum Recovery Research Center database search (accessed on May 9, 2013), 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; and**

East of the Pecos River, specific conductance measurements of the groundwater in the shallow alluvium, if present, have been reported greater than 6,000 micromhos per centimeter (Bjorklund, et.al., 1959). Based on a specific conductivity measurement of 6,000 micromhos per centimeter, total dissolved solids (TDS) concentrations would be approximately 4,020 parts per million.

The only source of water in the region is within the sandy/silty Dockum and Dewey Lake beds of the Permian Rustler Formation (Geolex, Inc., 2007). In the local area, water from wells can be found in the Triassic redbeds at depths of approximately 300 feet. Water is fair in quality but locally impotable (Henderson and Jones, 1952).

Based on data obtained from the OSE and Go-Tech websites, accessed on May 9, 2013, one livestock well is located in Section 21 of Township 25 South and Range 31 East, approximately 1.5 miles to the southeast of the proposed temporary frac tank storage area. The depth to water was reported at 390 feet below ground surface. Total dissolved solids (TDS) for this well was not included in various databases checked (OSE, GoTech); however, the chloride content range was reported to be from 73 to 119 parts per million. Regionally, the waters of the Dockum Group beds range from 1,000 to over 3,000 milligrams per liter TDS (Geolex, 2007).

**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:**

The hydrostatic test water will not be discharged to the surface; however, according to the PRRC database, the Bureau of Land Management (BLM) owns the property at the temporary frac tank storage area and the area located within 1/3-mile of the proposed temporary frac tank storage area. The address of the BLM is:

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

**References**

Bjorkland, L.J. and W.S. Motts, 1959. Geology and Water Resources of the Carlsbad Area, Eddy County, New Mexico: United States Department of the Interior Geological Survey and New Mexico State Engineer; Open-File Report; 517 pgs.

Federal Emergency Management Agency website, accessed May 9, 2013,  
<http://www.fema.gov/>.

Geolex, Inc., 2007, Application for New Mexico Oil Conservation Division Discharge Plan, Fortson Compressor Station (Section 25, Township 24 South, Range 30 East) on behalf of Southern Union Gas Services, Ltd.

Go-Tech, New Mexico Water database (NM WAIDS, accessed May 9, 2013,  
<http://octane.nmt.edu/waterquality/data/gwatersearch.aspx>.

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

New Mexico Mining and Minerals Division GIS Database, Mines in New Mexico, accessed May 9, 2013, <http://www.emnrd.state.nm.us/maps/MMQActiveMinesIndex.html>.

Office of the State Engineer (OSE) database search, accessed May 9, 2013, <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>.

Petroleum Recovery Research Center database (PRRC) database search, accessed May 9, 2013, [http://ford.nmt.edu/prrc\\_MF/index5.html](http://ford.nmt.edu/prrc_MF/index5.html).

U.S. Fish and Wildlife Service National Wetlands Inventory database, accessed May 9, 2013, <http://www.fws.gov/wetlands/wetlands-mapper.html>.

## FIGURES

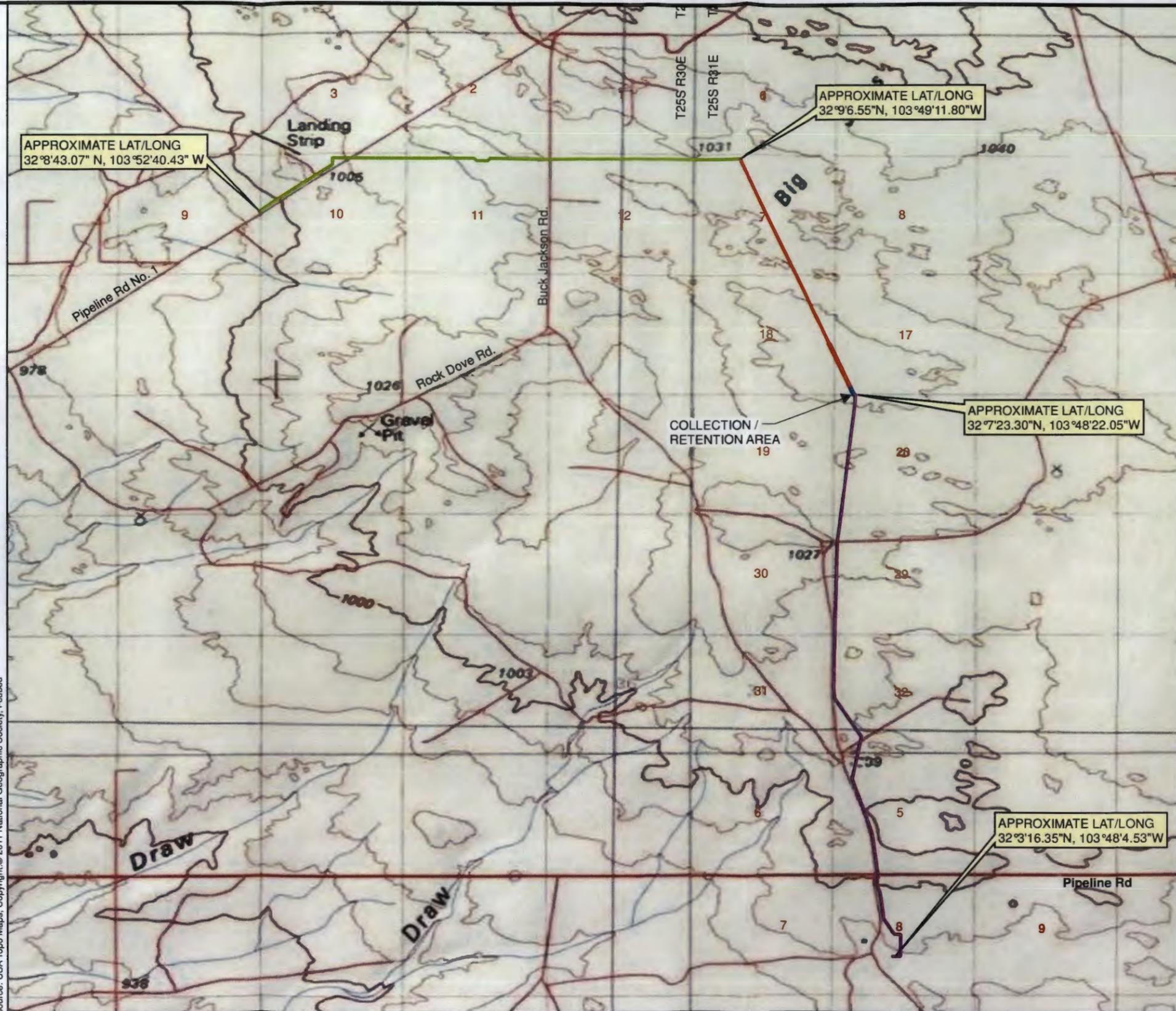


APPROXIMATE SITE LOCATION

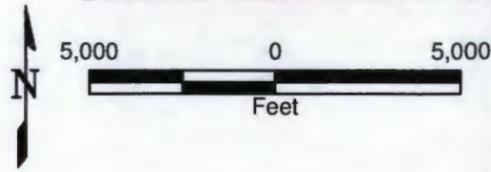
**LEGEND**

- ★ APPROXIMATE SITE LOCATION
- APPROXIMATE LOCATION OF PHANTOM BANKS LATERAL
- APPROXIMATE LOCATION OF BIG SINKS LATERAL
- APPROXIMATE LOCATION OF ROSS DRAW LATERAL
- COLLECTION/RETENTION AREA

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Source: USA Topo Maps. Copyright © 2011 National Geographic Society. T-cubed



PROJECT NO.: 131457	<b>NEW ENTERPRISE PIPELINE UNDERGOING HYDROSTATIC TESTING</b>		<b>FIGURE 1</b>
DRAWN: 05/22/2013	ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO		
DRAWN BY: PD/CTH	ORIGINATOR: J. HERNANDEZ		DRAWING CATEGORY: 1
CHECKED BY: BE	APPROVED BY: BE		
FILE NAME: 131457_SLM_PBBS-ROS.mxd			

G:\ENVIRONMENTAL\WORK FOLDER PROJECTS\131457 -Enterprise 2013 Hydrostatic Permits\2.0 Technical Information\2.8 - Technical-CADD Figures\Task 5 - PBBS-Ross\131457\_SP\_PBBS-ROSS.mxd

Revision Date: 06/19/2013

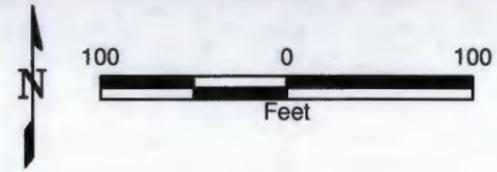


**LEGEND**

- APPROXIMATE LOCATION OF PHANTOM BANKS LATERAL
- APPROXIMATE LOCATION OF ROSS DRAW LATERAL
- - - APPROXIMATE ENTERPRISE EASEMENT
- APPROXIMATE LOCATION OF COLLECTION / RETENTION AREA
- APPROXIMATE LOCATION OF SECONDARY CONTAINMENT
- APPROXIMATE LOCATION OF HYDROSTATIC TEST WATER FRAC TANK

Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community, date of image 2011-04-19.

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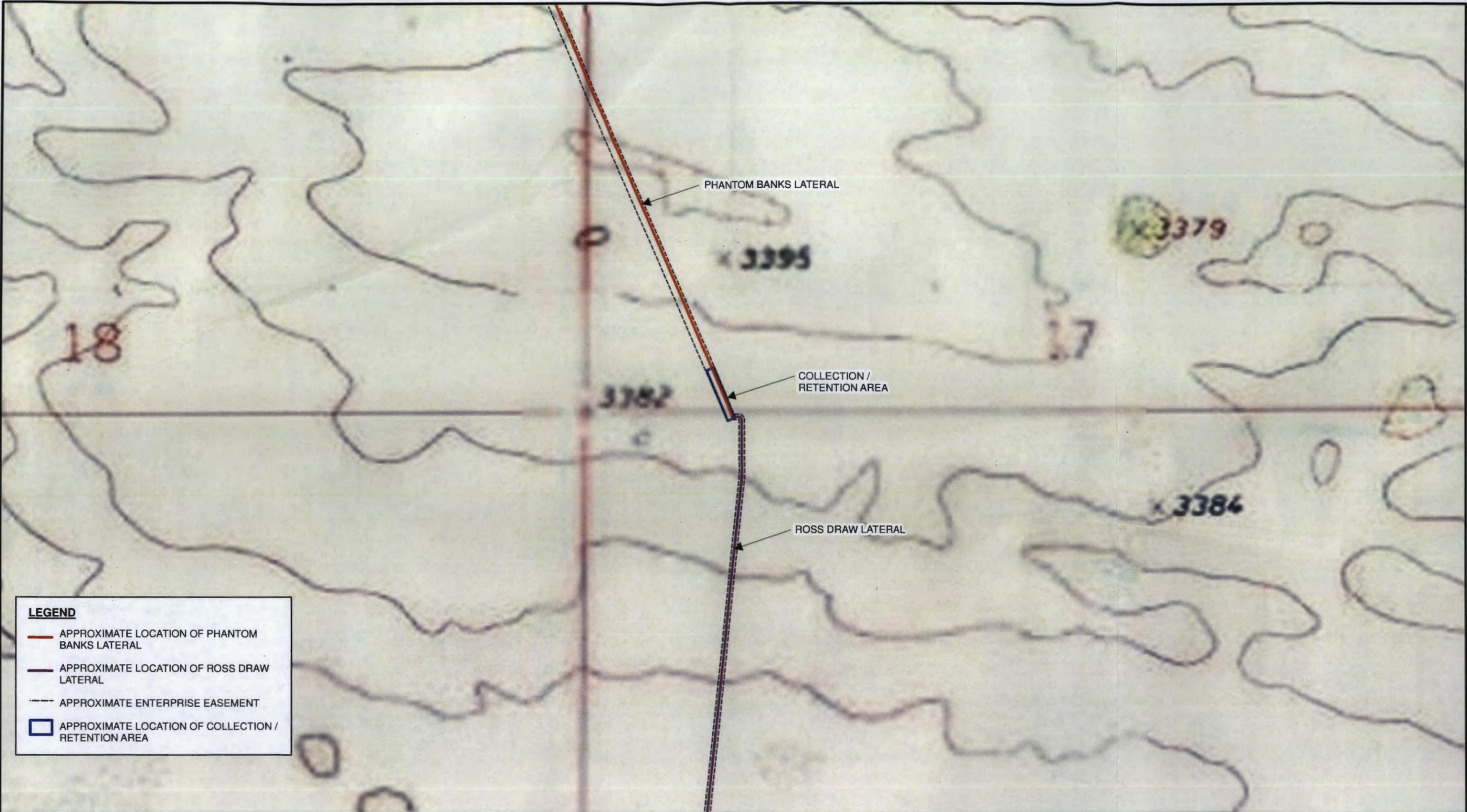


PROJECT NO.: 131457	<b>TEMPORARY FRAC TANK STAGING AREA FOR HYDROSTATIC TEST WATER</b>	
DRAWN: 06/12/2013	ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
DRAWN BY: PD/CTH	ORIGINATOR: J. HERNANDEZ	DRAWING CATEGORY: 2
CHECKED BY: BE	APPROVED BY: BE	
FILE NAME: 131457_SP_PBBS-ROSS.mxd		

FIGURE  
**2**

G:\ENVIRONMENTAL WORK FOLDER PROJECTS\131457 -Enterprise 2013 Hydrostatic Permits\2.8 - Technical-CADD Figures\Task 5 - PBBS-Rosa\131457\_3\_PBBS-ROSS.mxd

Revision Date: 06/19/2013

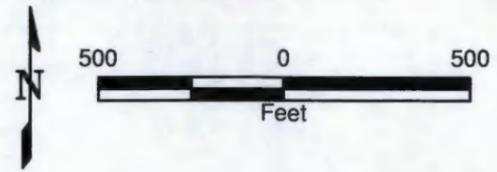


**LEGEND**

- APPROXIMATE LOCATION OF PHANTOM BANKS LATERAL
- APPROXIMATE LOCATION OF ROSS DRAW LATERAL
- - - - APPROXIMATE ENTERPRISE EASEMENT
- APPROXIMATE LOCATION OF COLLECTION / RETENTION AREA

Source: Esri online maps; Copyright © 2011 National Geographic Society, i-cubed

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PROJECT NO.: 131457	<b>TOPOGRAPHIC MAP</b>		<b>FIGURE</b>  <b>3</b>
DRAWN: 06/12/2013			
DRAWN BY: PD/CTH	ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO		<b>2</b>
CHECKED BY: BE	ORIGINATOR: J. HERNANDEZ	DRAWING CATEGORY:	
FILE NAME: 131457_3_PBBS-ROSS.mxd	APPROVED BY: BE		

**APPENDIX A**  
**Certification of Siting Criteria**

## Certification of Siting Criteria

*Hydrostatic Discharge Line*

I, Guillermo Westerman, 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 collection/retention area. The water storage tanks will be located in the SW 1/4 of the SW 1/4 of Section 17 and in the NW 1/4 of the NW 1/4 of Section 20, Township 25 South, Range 31 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.

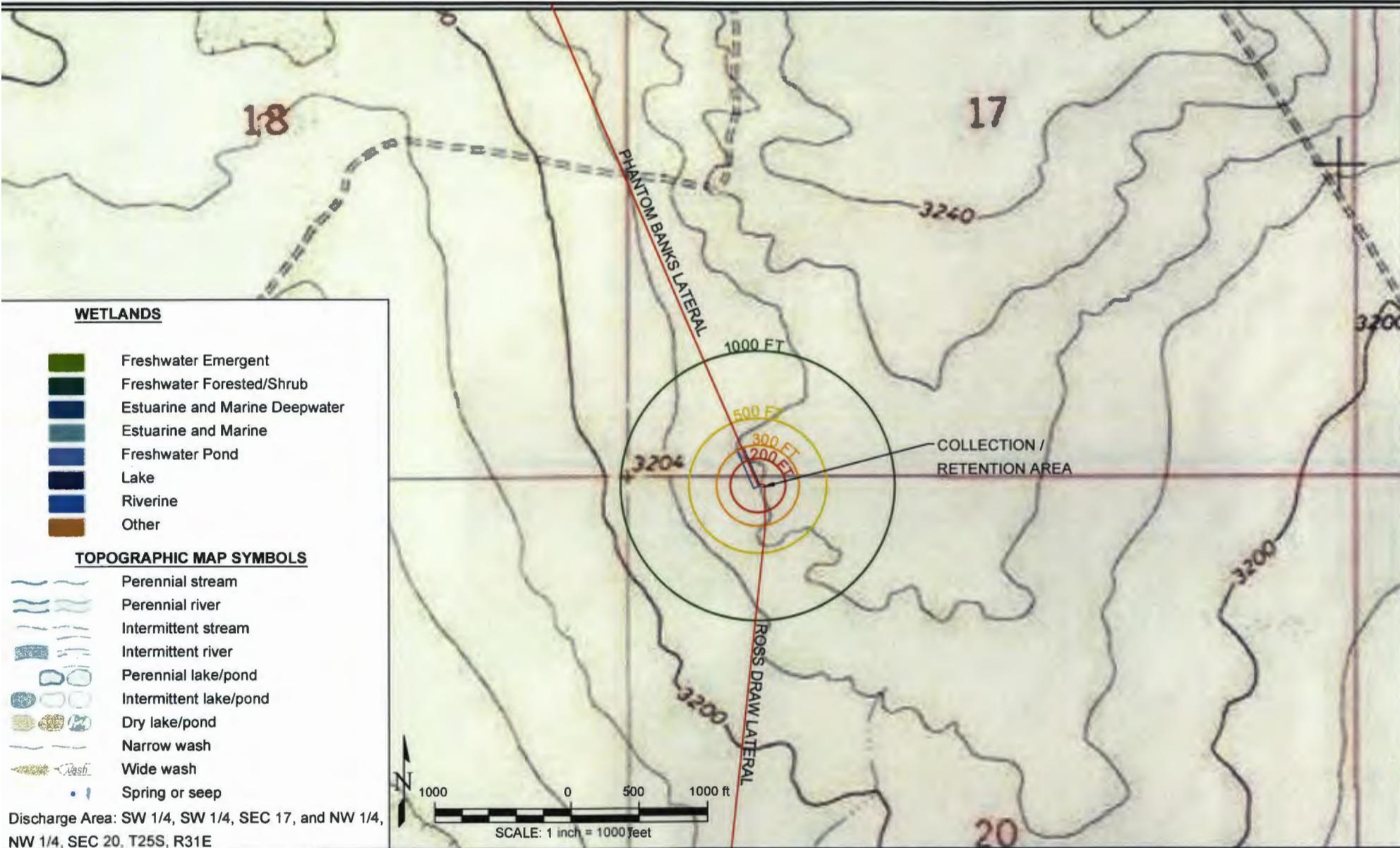
R. Westerman  
Signature

08/31/2005  
Date of Site Visit

Field Technician  
Title:

**APPENDIX B**

**Water Feature, Water Well, and Floodplain Information**



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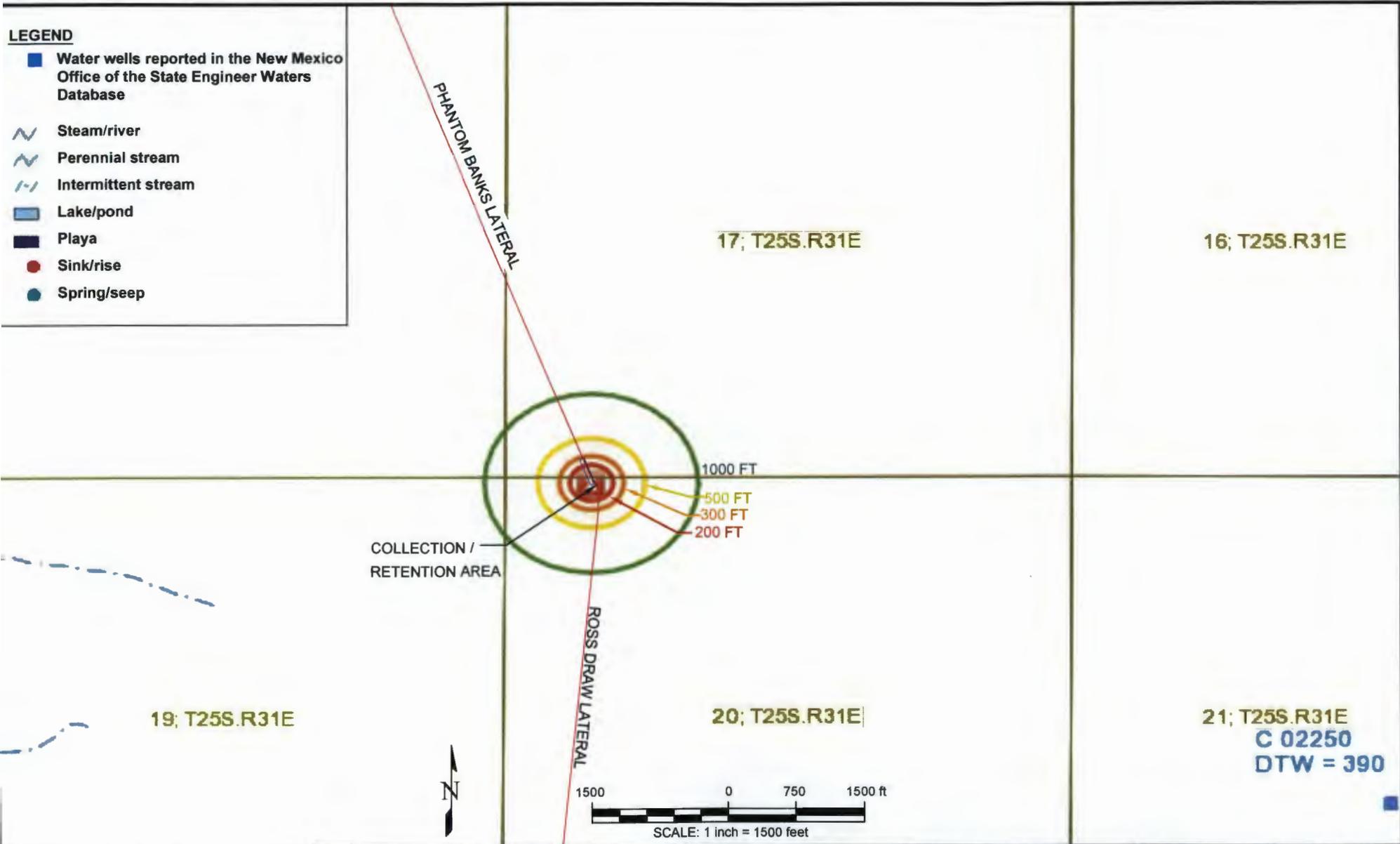
PROJECT NO.	131457
DRAWN:	6/12/2013
DRAWN BY:	PD/CTH
CHECKED BY:	BE
FILE NAME:	PBBS-ROSS.dwg

<b>SURFACE WATER AND WETLANDS NEAR THE DISCHARGE AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**B-1**

**LEGEND**

- Water wells reported in the New Mexico Office of the State Engineer Waters Database
- Steam/river
- Perennial stream
- Intermittent stream
- Lake/pond
- Playa
- Sink/rise
- Spring/seep



Source: PPRC Website, accessed 5/9/2013.

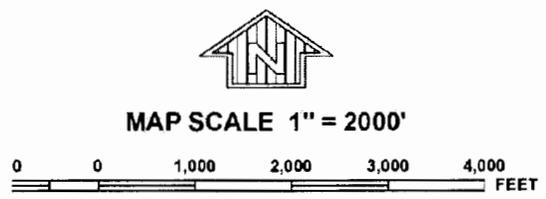
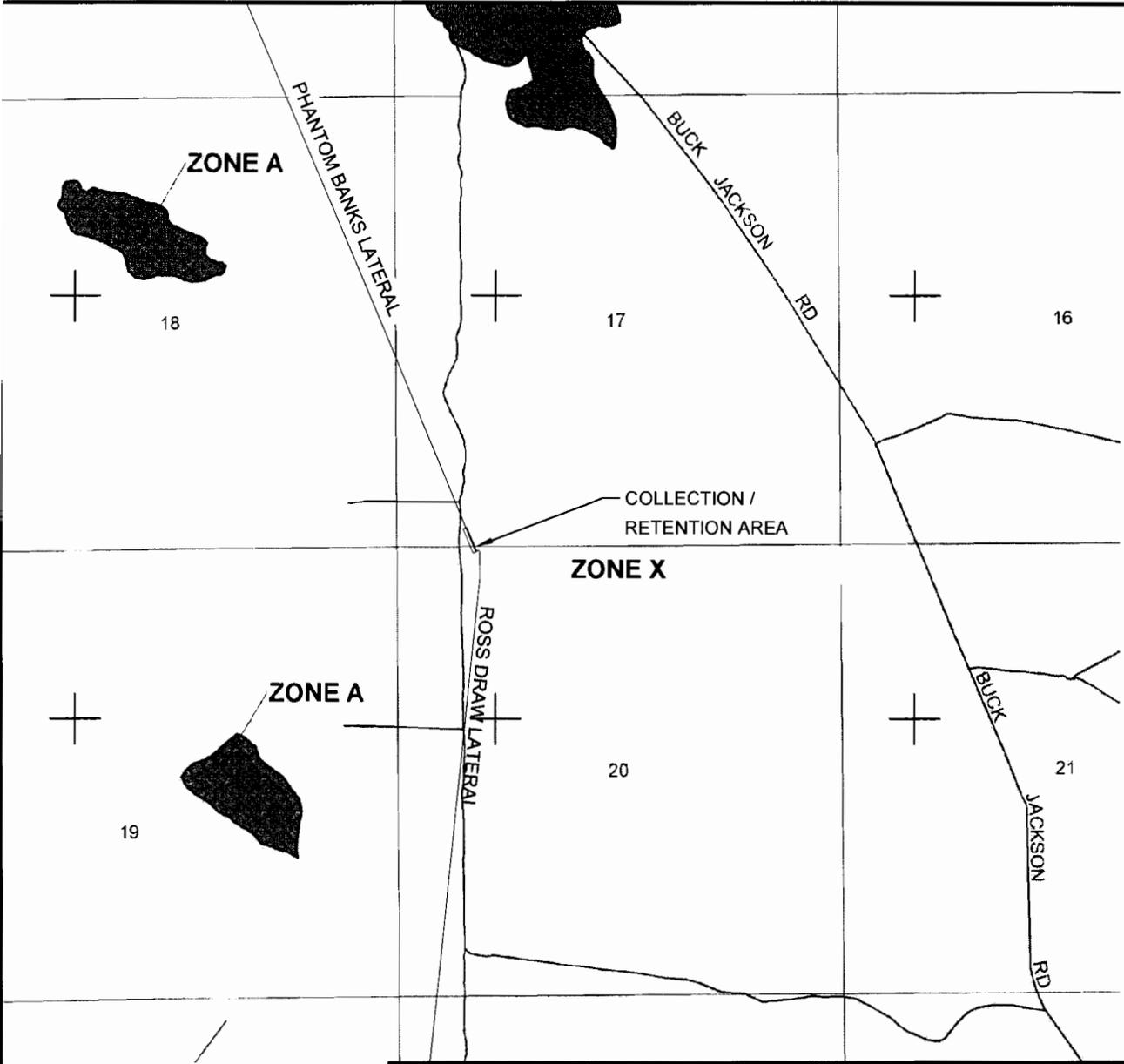
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PROJECT NO.	131457
DRAWN:	6/12/2013
DRAWN BY:	PD/CTH
CHECKED BY:	BE
FILE NAME:	PBBS-ROSS.dwg

<b>SURFACE WATER AND WATER WELLS IN THE VICINITY OF THE DISCHARGE AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**B-2**



**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 1900D**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**EDDY COUNTY,**  
**NEW MEXICO**  
**AND INCORPORATED AREAS**

**PANEL 1900 OF 2000**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EDDY COUNTY, UNINCORPORATED AREAS	350120	1900	D

ZONE A = HIGH RISK FLOOD HAZARD; 1% ANNUAL CHANCE OF FLOODING AND 26% CHANCE OF FLOODING OVER A 30-YEAR MORTGAGE  
 ZONE X = MINIMAL FLOOD HAZARD; ABOVE 500-YEAR FLOOD LEVEL

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
**35015C1900D**  
**EFFECTIVE DATE**  
**JUNE 4, 2010**

**Federal Emergency Management Agency**

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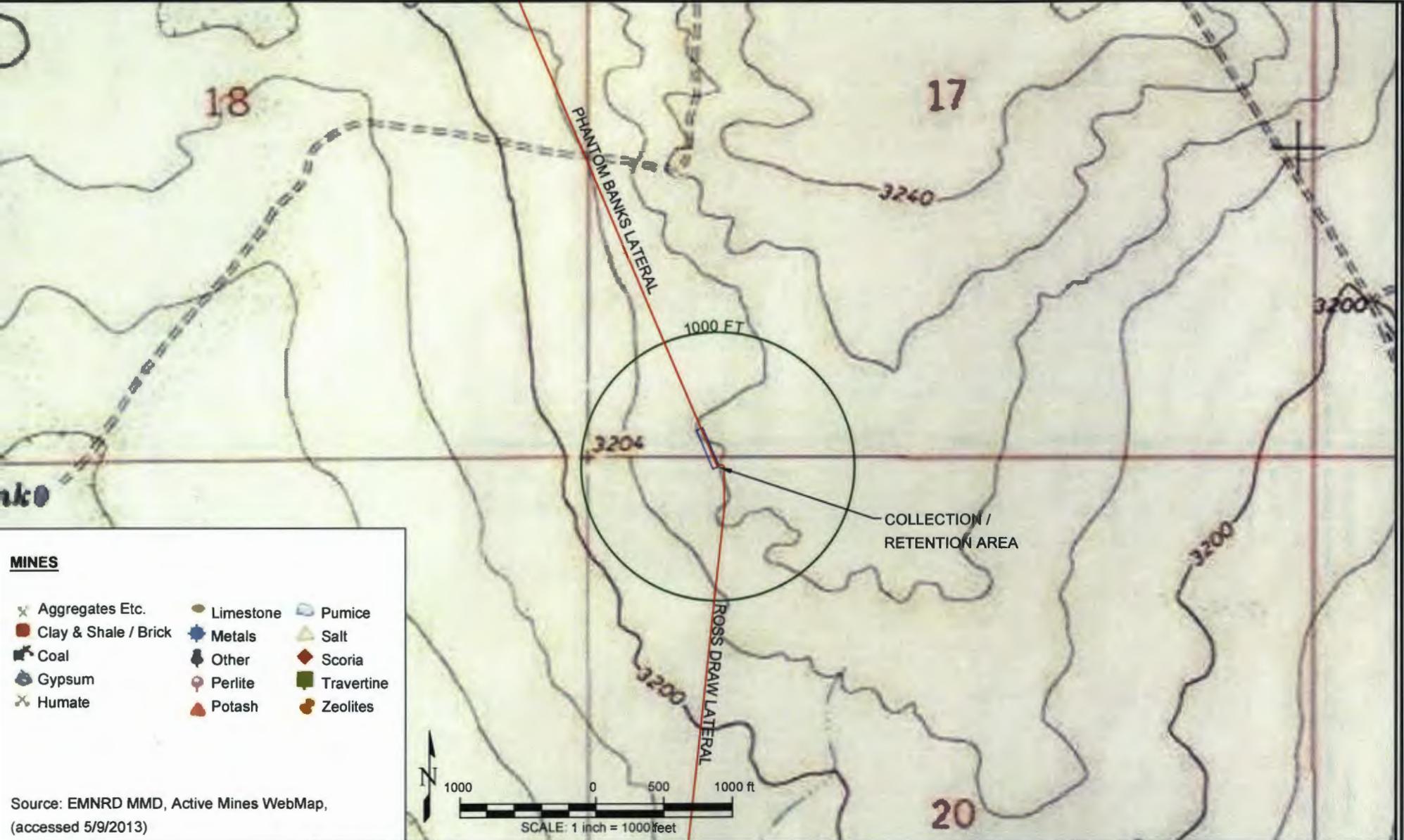
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PROJECT NO.	131457
DRAWN:	6/12/2013
DRAWN BY:	PD/CTH
CHECKED BY:	BE
FILE NAME:	PBBS-ROSS.dwg

<b>FEMA FLOOD MAP OF THE DISCHARGE AND SURROUNDING AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**B-3**

**APPENDIX C**  
**Area Mine Information**



**MINES**

- ✕ Aggregates Etc.
- Clay & Shale / Brick
- Coal
- Gypsum
- ✕ Humate
- Limestone
- Metals
- Other
- Perlite
- Potash
- Pumice
- Salt
- Scoria
- Travertine
- Zeolites

Source: EMNRD MMD, Active Mines WebMap,  
(accessed 5/9/2013)

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PROJECT NO.	131457
DRAWN:	6/12/2013
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CHECKED BY:	BE
FILE NAME:	PBBS-ROSS.dwg

<b>MINING ACTIVITY NEAR THE DISCHARGE AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**C-1**

## Jill Hernandez

---

**From:** Tompson, Mike, EMNRD <Mike.Tompson@state.nm.us>  
**Sent:** Wednesday, May 22, 2013 8:59 AM  
**To:** Jill Hernandez  
**Cc:** Kretzmann, John, EMNRD  
**Subject:** RE: Sections 17 and 20, Township 25 South, Range 31 East

Jill,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines in Section 17, Township 25 South, Range 31 East.

Please let me know if you have any questions about this analysis.

Mike Tompson  
New Mexico Abandoned Mine Land Program

**From:** Jill Hernandez [<mailto:JHernandez@kleinfelder.com>]  
**Sent:** Monday, May 20, 2013 9:57 AM  
**To:** Tompson, Mike, EMNRD  
**Subject:** Sections 17 and 20, Township 25 South, Range 31 East

Mike,  
Kleinfelder has been contracted by Enterprise to prepare a hydrostatic discharge plan for an area located in Eddy County, New Mexico. I am researching whether or not there are abandoned mines in the vicinity of the proposed temporary frac tank staging area. Municipal water from Carlsbad will be used to hydrostatically test the new 5.7-mile section of pipeline. After the testing, the test water will be hauled off-site to an approved injection well.

The temporary frac tank staging area will be located at:

- SW ¼ of the SW ¼ of Section 17, Township 25 South, Range 31 East in Eddy County, New Mexico; or
- Latitude 32° 7'23.30"N; Longitude 103°48'22.05"W.

I have already checked the NMTECH pit rule portal website and no mines are shown in the discharge area. I've attached a Google Earth file showing the new pipeline section location. The proposed frac tank storage area that will temporarily store the discharge water will be located at the far southeast end of the Phantom Banks Lateral shown on the attached file.

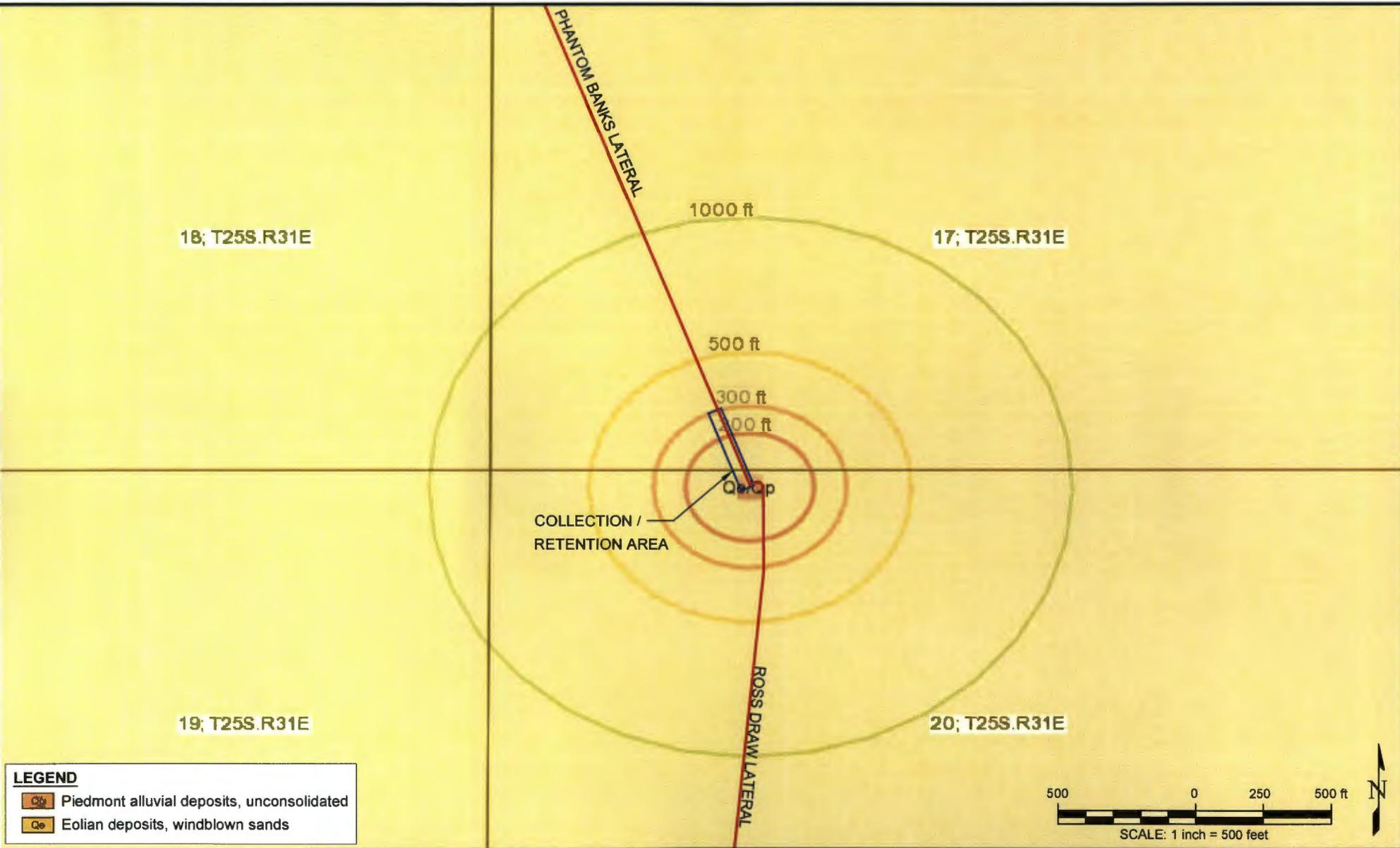
Discharge water from a second hydrostatic test on an adjacent pipeline to the south will be discharged at a later date to the ground surface on BLM property in the same location as the proposed temporary frac tank staging area previously mentioned. Please let me know if you need any other information.

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**



**LEGEND**  
 Cq Piedmont alluvial deposits, unconsolidated  
 Qe Eolian deposits, windblown sands

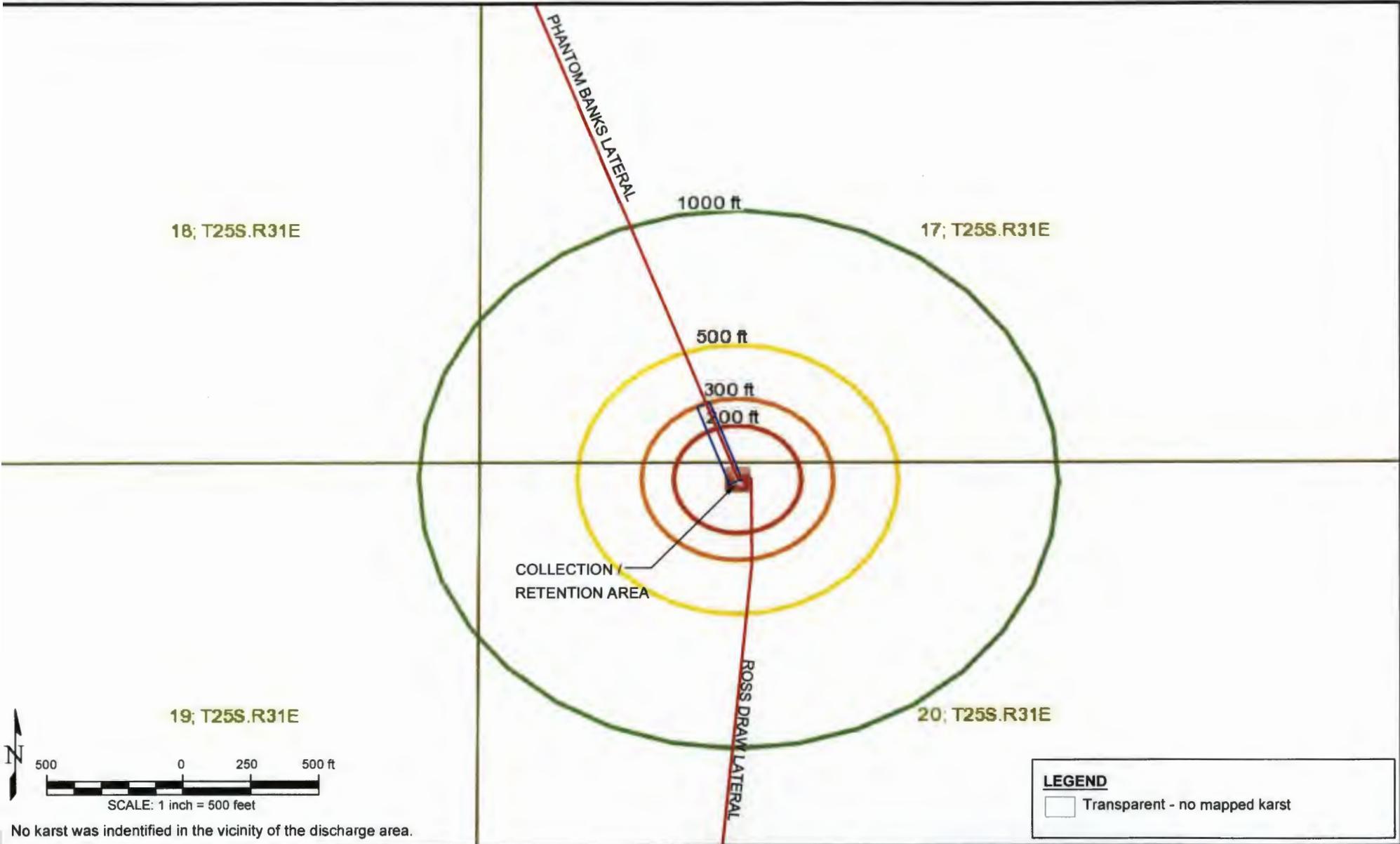
Source: PPRC Website, accessed 5/9/2013.

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PROJECT NO.	131457
DRAWN:	6/12/2013
DRAWN BY:	PD/CTH
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FILE NAME:	PBBS-ROSS.dwg

<b>GEOLOGY IN THE VICINITY OF THE DISCHARGE AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**D-1**



Source: PRRC Website, accessed 5/9/2013.

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PROJECT NO.	131457
DRAWN:	6/12/2013
DRAWN BY:	PD/CTH
CHECKED BY:	BE
FILE NAME:	PBBS-ROSS.dwg

<b>KARST IN THE VICINITY OF THE DISCHARGE AREA</b>	
ENTERPRISE PRODUCTS OPERATING, LLC PHANTOM BANKS/BIG SINKS/ROSS DRAW LATERALS EDDY COUNTY, NEW MEXICO	
ORIGINATOR:	J. HERNANDEZ
APPROVED BY:	BE
DRAWING CATEGORY:	2

FIGURE  
**D-2**