HITP - _37_

GENERAL CORRESPONDENCE

YEAR(S): _2013-2014_

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DOCUMENT TRANSMITTAL FORM

TO:	Mr. Brad Jones New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division Santa Fe, NM 87505	**PAGE**	1	**OF**	1	
		TRANSMITTAL DATE:	3/8/2013			
		TRANSMITTAL DCN:	126026.4-ALB13TS001 Rev. 1			
		DATA MEDIA DCN:	N/A			
RETURN RESPONSES/COMMENTS TO:	Eileen Shannon					
RETURN RESPONSES/COMMENTS BY:	3/25/2013					

PROJECT NO.:	126026	**PROJECT NAME:**	Enterprise Hydrostatic 2012
ACTIVITY/DESCRIPTION:	Report		

DOCUMENTS BEING TRANSMITTED

ITEM	REV.	PAGES	DATE	DESIGNATOR
Enterprise Cover Letter	--	1	3/6/2013	--
Submittal of a Notice of Intent to Perform Heydrostatic Tests	0	27	3/6/2013	126026.4-ALB13RP001

INSTRUCTIONS/REMARKS

Copy to:
Mr. Jimmy White
Ms. Runell Seale

- ☐ Mark previous issues "obsolete", "superceded", or "uncontrolled"
- ☐ Destroy previous affected material
- ☐ Return old material with this record
- ☒ New issue (no previous copies issued to recipient)
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ADMINISTRATIVE SUPERVISOR
9019 WASHINGTON ST. NE BLDG A
ALBUQUERQUE, NM 87113
FAX: 505.344.1711 OR KKNIGHTS@KLEINFELDER.COM

CLIENT RECEIPT	PRINT NAME	SIGNATURE	DATE
Complete & Return this page via Fax/Mail/Email			

KLEINFELDER RECEIPT	PRINT NAME	SIGNATURE	DATE
Complete this section upon receipt from client			

Enterprise Products

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

ENTERPRISE PRODUCTS OPERATING LLC

March 6, 2013

Via Kleinfelder

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 Haul and Dispose Hydrostatic Test Water in SWD
San Juan Gathering System, Line 2C-112/2C-161
Rio Arriba and Sandoval Counties, New Mexico

Enterprise Products Operating LLC (Enterprise) is submitting the enclosed Notice of Intent (NOI) for a hydrostatic test of Line 2C-112/2C-161, a part of the San Juan natural gas gathering system. Enterprise intends to dispose of the used hydrostatic test waste water in an OCD-approved facility; with no surface discharge of hydrostatic test water proposed.

Enterprise plans to conduct hydrostatic testing of two used 6-inch pipelines located between the SW/4 of the SE/4 of Section 8, T24N R6W in Rio Arriba County, New Mexico and the SE/4 of the NW/4 of Section 12, T22N R7W in Sandoval County, New Mexico. Actual placement of water into the pipeline is scheduled to begin on Monday, April 8, 2013. Testing will begin on approximately Thursday, April 11, 2013, with transfer of wastewater and hauling to occur immediately after test completion. Approximately 13.3 miles (70,091 feet) of used piping will be tested.

Enterprise has contracted Kleinfelder to prepare the NOI and associated figures (maps and a sketch) according to "Guidelines for Hydrostatic Test Dewatering" dated January 11, 2007.

Enterprise understands that public notice will not be required for this permit. Two checks totaling $250.00, made out to the New Mexico Water Quality Management Fund, are enclosed for the $100.00 filing fee and the $150.00 for the temporary permit fee.

Should you have questions please contact Ms. Runell Seale at 505.599.2124 or Ms. Eileen Shannon at 505.344.7373 or 505.307.0722 (cell).

Respectfully submitted,

James G. "Jimmy" White
Sr Environmental Scientist

cc: Runell Seale

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

1100 LOUISIANA STREET
HOUSTON, TEXAS 77002-5227
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March 6, 2013
File No.: 126026.4-ALB13RP001

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 Tests
13.3 miles of Pipeline near Lybrook, New Mexico
Portions of Laterals 2C-112 and 2C-161
Rio Arriba and Sandoval Counties, New Mexico

Dear Mr. Jones:

On behalf of the Enterprise Products Operating Company, Inc. (Enterprise), Kleinfelder West, Inc. (Kleinfelder) is pleased to submit this Notice of Intent (NOI) for two hydrostatic tests conducted on segments of two Enterprise pipelines. The pipelines are located northeast of Lybrook, New Mexico. The tests will be run concurrently and used water from the tests will be stored in frac tanks located in the pipeline easement, at the same location for both tests. Enterprise intends to dispose of the used hydrostatic test water at Basin Disposal, Inc. (NM-1-005) and no surface discharge of hydrostatic test water is planned.

The following tests will be conducted:

- Section 1: On lateral 2C-112, a 6-inch ID line, hydrostatic testing will be conducted from ES 0+00 to ES 165+0. At ES 165+0, the hydrostatic test will continue in Lateral 2C-161 to ES 167+03.3. Approximately 6.4 miles of pipeline will be tested; and
- Section 2: On lateral 2C-161, a 6-inch line, hydrostatic testing will be conducted from ES 167+03.3 to ES 530+46. Approximately 6.9 miles of piping will be tested.

Actual placement of water into the pipelines is scheduled to start on April 8, 2013.

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;
- Figure 1, Pipeline Undergoing Hydrostatic Test;
- Figure 2, Temporary Frac tank Staging Location for Hydrostatic Test Water;
- Appendix A, Surface Water, Water Well Information and Floodplain Information;
- Appendix B, Wetlands Information; and
- Appendix C, Mine Information.

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It is Enterprise's understanding that public notice will not be required for this permit. Two checks totaling $250 made out to the New Mexico Water Quality Management Fund, are enclosed, submitted on behalf of Enterprise for the filing fee ($100) and temporary permit fee ($150).

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, Runell Seale (Enterprise) at 505.599.2124, 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: Runell Seale, Enterprise, 614 Reilly Ave., Farmington, NM 87401
Jimmy White, Enterprise, PO Box 4324, Houston, TX 77210

Attachments:

Figures
Appendix A - Surface Water, Water Well Information and Flood Plain Information
Appendix B – Wetlands Information
Appendix C - Mine Information

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KLEINFELDER, INC
PHOENIX PETTY CASH
1335 W. AUTO DRIVE
TEMPE, AZ 85284

2275
90-2267/1211 3811

Date 2/26/13

Pay to the Order of Water Quality Management Fund $ 150.00

One hundred fifty + 00/100 Dollars

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Temporary Permit Fee
For Enterprise 2C-112 and 2C-161

Michael Kuo

MP

⑈000000 2275⑈

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PHOENIX PETTY CASH
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TEMPE, AZ 85284

2274
90-2267/1211 3811

Date 2/26/13

Pay to the Order of Water Quality Management Fund $ 100.00

One hundred + 00/100 Dollars

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Filing Fee
For Enterprise 2C-112 and 2C-161

Michael Kuo

MP

⑈000000 2274⑈

Background Information

- The Enterprise pipelines are existing 6-inch natural gas pipeline and the sections to be tested are a part of a gathering line which carries natural gas from well sites to the Chaco Gas Plant for processing. The lines are physically located upstream of the Chaco Gas Plant.
- Two hydrostatic tests will be conducted, and will be referred to as:
    - Section 1, portions of laterals 2C-112/2C-161; and
    - Section 2, portion of lateral 2C-161.
- 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 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 purpose of these tests is to re-rate the pipeline operating pressure for pipeline maintenance.
- The hydrostatic tests are currently scheduled to begin on April 11, 2013.

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. Michael Mayfield Enterprise Field Services LLC 614 Reilly Ave. Farmington, NM 87401
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 pipelines to be tested are located in Sandoval and Rio Arriba Counties. Water from the hydrostatic testing will not be discharged. Water will be transferred from the pipeline into eight 16,643-gallon frac tanks for temporary storage. The water will be tested as required by the disposal facility, and then hauled to Basin Disposal, Inc. (NM-1-005) in Aztec, New Mexico. The locations of the pipelines to be hydrostatically tested are shown on Figure 1.

The source of water used for the hydrostatic test will be from municipal water sources from either Bloomfield, Aztec or Farmington.

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Eight frac tanks, placed within secondary containment, will be located on the pipeline right-of-way located northeast of the Lybrook, New Mexico. Pipeline dewatering from both hydrostatic tests will be stored in frac tanks at this location. Directions to the site from Farmington, New Mexico are:

- Take US-64E for approximately 11 miles to 550 S.
- Turn right onto 550 S and follow for approximately 49 miles to County Road 378.
- Head north on Country Road 378 for 1.8 miles to intersection with an unnamed easement road branching off the left.
- Turn left on to the unnamed easement road and go approximately 275 feet to the location of the frac tanks.

The frac tanks will be oriented in a manner that provides at least a 10-foot buffer between the tanks and edge of the pipeline right-of-way. The approximate coordinates for the proposed frac tank location are: Latitude 36°15'10.03"N; Longitude 107°32'19.37"W. Approximately 111,943 gallons of water will be used for the hydrostatic tests (54,016 gallons from Section 1 plus 57,927 gallons from Section 2).

Item c. Legal description of the discharge location;

Storage of hydrostatic test water from both tests will occur in the frac tank staging at the following location:

- NE ¼ of the SE ¼ of Section 2, Township 23 North, Range 7 West, Rio Arriba County, New Mexico (See Figure 1).

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

Figure 1 is a regional map showing topography, the pipeline sections undergoing testing, and the hydrostatic test water staging area. Figure 2 is a site-specific map showing details of the hydrostatic test water staging 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 surface water bodies in the vicinity of the temporary frac tank location was completed using the Petroleum Recovery Research Center (PRRC) database on February 26, 2013. No watercourses, lakebeds, sinkholes, playa lakes, or springs were found within 200 feet of the proposed frac tank location. Intermittent streams are located 300 to 500 feet south and 900 to 1,000 feet north of the dewatering area. Maps generated from the PRRC database are included in Appendix A, Figures A-1a and A-1b.

ii. ***Within 1,000 feet of an existing wellhead protection area or 100-year floodplain;***

A search for surrounding water wells was completed to satisfy a portion of this requirement. A search of the PRRC database was conducted on February 26, 2013. According to the PRRC database, no water wells are located within 1,000 feet of the proposed frac tank area. Figures A-2a and A-2b, included in Appendix A, were generated from the database and show no water wells in the vicinity of the site. In addition, the New Mexico Office of the State Engineer (OSE) website was checked

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for water wells located in the vicinity of the site and none were found. Springs are addressed in item e. i above.

Federal Emergency Management Administration (FEMA) flood insurance rate maps were searched on the FEMA website for 100-year floodplains in the proposed frac tank area. According to the FEMA website, the proposed temporary frac tank location is not located within a 100-year floodplain. Figure A-3, included in Appendix A, is a copy of the floodplain map.

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

No wetlands were noted within 500 feet or in the surrounding area on the US Fish & Wildlife website. A map is uncluded as Figure B-1 in Appendix B.

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

v. According to the PRRC database, no active or inactive mines were located in the vicinity of proposed frac tank location. Figures C-1a and C-1b (Appendix C), generated from the PRRC database, accessed on February 26, 2013, show no mines within 1,000 feet of the site. Mr. Mike Tompson with the New Mexico Abandoned Mine Lands Program was contacted on February 25, 2013 to assess the presence of mines in the vicinity of the proposed frac tank location. According to Mr. Tompson, they have no record of abandoned subsurface mines within Section 2, Township 23 North, Range 7 West. Ms Linda Delay, EMNRD was contacted on March 6, 2013, regarding active mines in the vicinity of the frac tanks. According to Ms. Delay, no active mines are present in Section 2 of Township 23N, Range 7 West. Copies of email correspondences are included in Appendix C.

vi. ***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 (see Figure 2).

Hydrostatic test water will not be discharged to the surface. It will be temporarily stored in frac tanks, and transported to Basin Disposal, Inc. (NM-1-005) in Aztec, New Mexico.

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

Pressure testing with water, known as hydrostatic testing, is one of the tools pipeline operators use to verify pipeline integrity. The test involves clearing the pipeline of debris, purging the natural gas from the pipeline with nitrogen, filling the pipeline with water, then pressurizing the pipeline to a pressure higher than the standard operating pressure for approximately eight hours. The purpose of hydrostatic testing in a pipeline is to determine the extent to which potential defects might threaten the pipeline's ability to sustain maximum allowable operation pressure. If leaks or breaks occur, the pipeline is repaired or the affected areas is replaced, and then re-tested. 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.

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

The pipeline will be filled from water trucks until the pipeline is full. Section 1 will be loaded from Unit Letter I, Section 2, Township 23 North, Range 7 West and will be filled to Unit Letter N, Section 8, Township 24 North, Range 6 West. Section 2 will be loaded from Unit Letter F, Section 12, Township 22 North, Range 7 West and will be filled to Unit Letter I, Section 2, Township 23 North, Range 7 West. The pipelines will need to stabilize for a minimum of 24 hours, and then will be tested for a minimum of eight hours.

Once the hydrostatic test has been conducted, the water will be transferred into eight frac tanks that are plumbed together. Water from Section 1 will be pumped or moved with a pig to be dewatered into the frac tanks at Unit letter F, Section 2, Township 23 North, Range 7 West. Section 2 will also be dewatered at Unit letter F, Section 2, Township 23 North, Range 7 West.

Drip pans will be used under pumps and at hose connections. Frac tanks will be interconnected but will have safety valves at each tank connection and will be located within secondary containment. Secondary containment, consisting of plastic liners, will be used under frac tanks sufficient to hold 1 1/3 the total volume of all tanks for interconnected tanks, or the volume of the largest tank, whichever is greater. All tanks will be contained within a single containment area. Plastic liners will be draped over dirt berms or hay bales surrounding frac tank staging area. Personnel will be present during transfer operations to close valves in case of leaks. Long-term storage is not proposed which will help prevent tank vandalism.

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

Enterprise intends to dewater the hydrostatic test water into eight frac tanks for temporary storage. The frac tanks will be located within secondary containment as described above in Item g. No laboratory analysis is required by the disposal facility. The water will be transported from the project site in DOT-approved tanker trucks to Basin Disposal, Inc. (NM-1-005) in Aztec, New Mexico. The water will be transported by one or more of the following OCD-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 i. A request for approval of an alternative treatment, use, and/or discharge location (other than the original discharge site), if necessary;

In the event that the hydrostatic test water is not accepted for disposal at Basin Disposal, Inc. (NM-1-005), Enterprise will attempt to dispose of the test water at Agua Moss Disposal, LLC (NM-1-009).

Item j. A proposed hydrostatic test wastewater sampling plan;

Enterprise will not collect nor analyze a pre-test sample of the water obtained from the municipality. Post-hydrostatic test water samples are not required for disposal of exempt-RCRA waste water at Basin Disposal, Inc. (NM-1-005).

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);

Because no discharge to the surface will occur, this information is not required.

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

Because the pipelines carry unrefined product, the expected water quality will be the same as produced water. The volume of the hydrostatic test water is expected to be approximately 111,943 gallons.

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

The site is located in the San Juan Basin which is a large bowl-like depression to the southeast of the Colorado Plateau. It is at the center of the syncline and the outcropping rock is tertiary sandstone from the San Jose and Nacimiento Formation. Based on groundwater well records provided by the New Mexico Office of the State Engineer, soil cover tends to be approximately 50 to 200 feet deep in the area. This is followed by the San Jose sandstone with interbeds of coarse conglomerate and mudstone.

No groundwater wells were identified in the immediate vicinity of the site so records were reviewed from wells in a 10-mile radius. Groundwater depth ranges from 216 feet to 690 feet below ground surface. One well record, from a well located five miles east of the site, indicates that groundwater was encountered at 40 feet in an isolated 20-foot layer of mudstone.

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

The primary aquifer of the central basin in the southeastern San Juan Basin occurs in the San Jose Formation. Strata are typically flat and the sandstones can be up to 200 feet thick. Total dissolved solids measured in the area range from 300 to 4,000 ppm (Stone, 1992). Depth to water ranges from 216 to 690 feet as recorded in wells located within a 10 mile address of the site.

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

The pipeline easement is owned by Enterprise Field Services, LLC and the property adjacent to the proposed frac tank location is owned by The State of New Mexico.

References

Federal Emergency Management Agency website, accessed February 2013, http://www.fema.gov/.

New Mexico Office of the State Engineer website, accessed February 2013, http://nmwrrs.ose.state.nm.us/nmwrrs/index.html.

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

Stone, W.J. 1992. Ground-water Resources of the Southeastern San Juan Basin. New Mexico Geological Society Guidebook, 43rd Field Conference, San Juan Basin IV. P 407-408.

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

US Fish & Wildlife Service website, accessed February 2013, http://www.fws.gov/wetlands/Wetlands-Mapper.html

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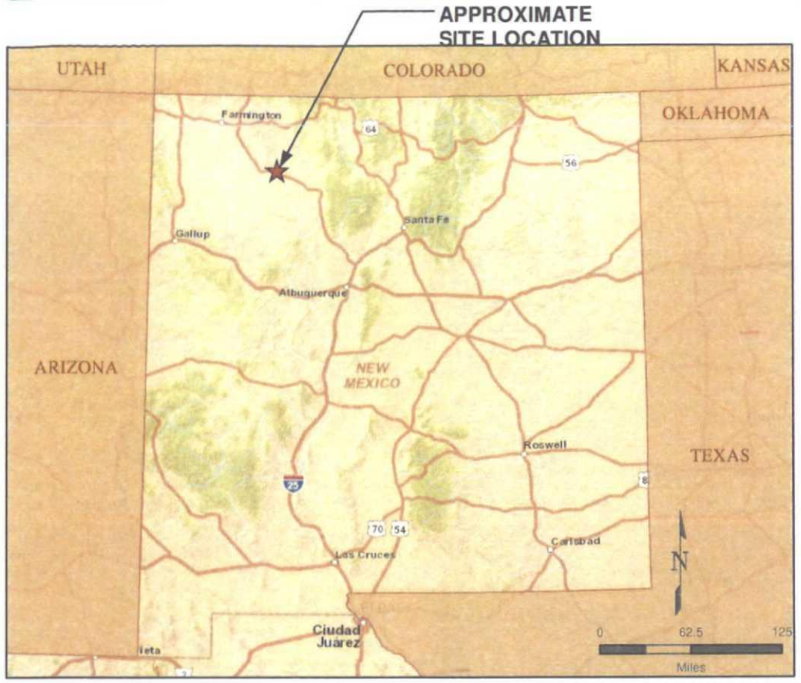
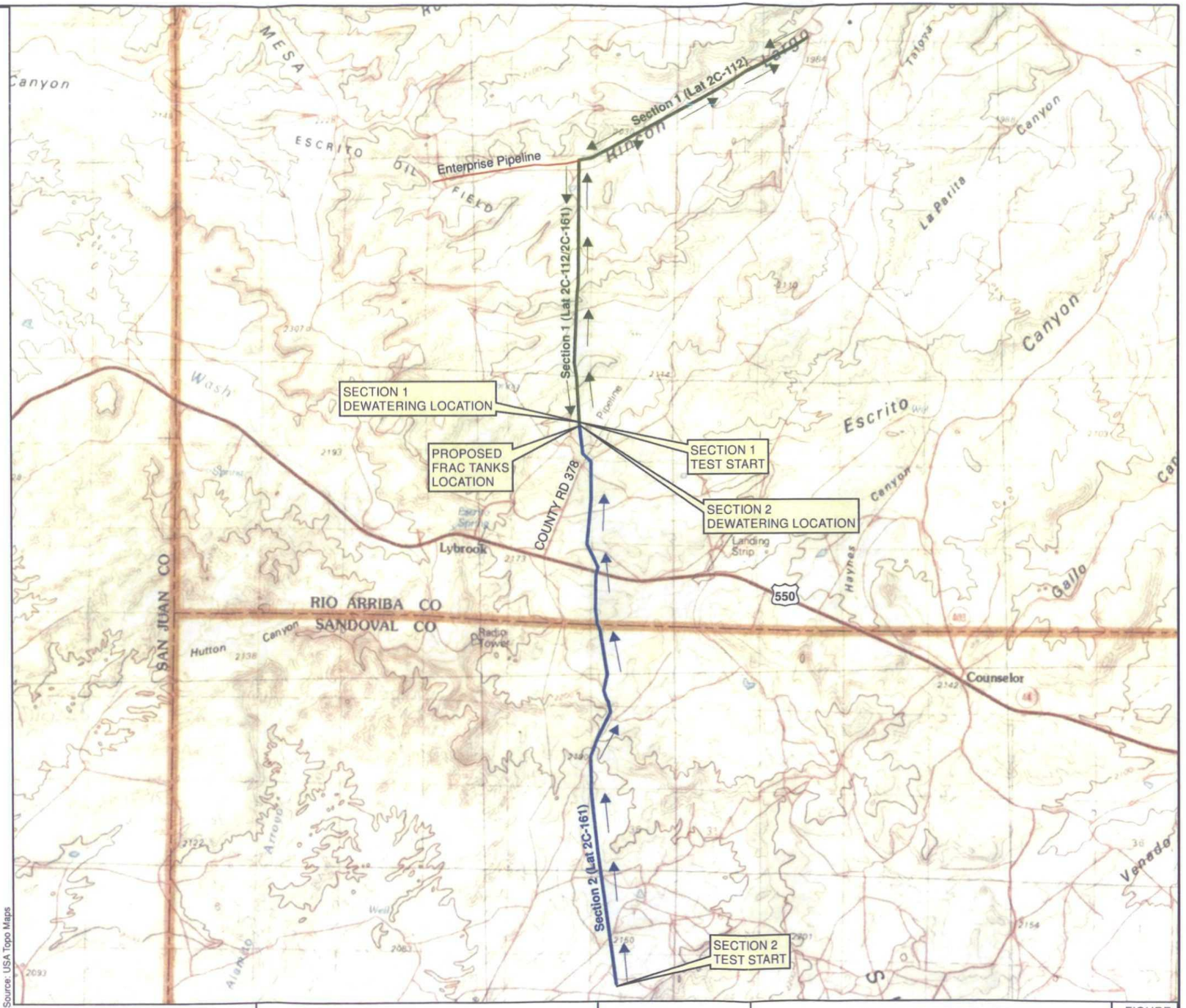
FIGURES



Source: ESRI World Street Map



Source: USA Topo Maps

LEGEND

- APPROXIMATE SITE LOCATION
- APPROXIMATE LOCATION OF ENTERPRISE PIPELINE
- APPROXIMATE LOCATION OF SECTION 1 HYDROSTATIC TEST LOCATION (LATERAL 2C-161)
- APPROXIMATE LOCATION OF SECTION 2 HYDROSTATIC TEST LOCATION (LATERAL 2C-112 AND 2C-161)

N

7,000 0 7,000

Feet

NAD 1983 StatePlane
New Mexico Central, US Feet

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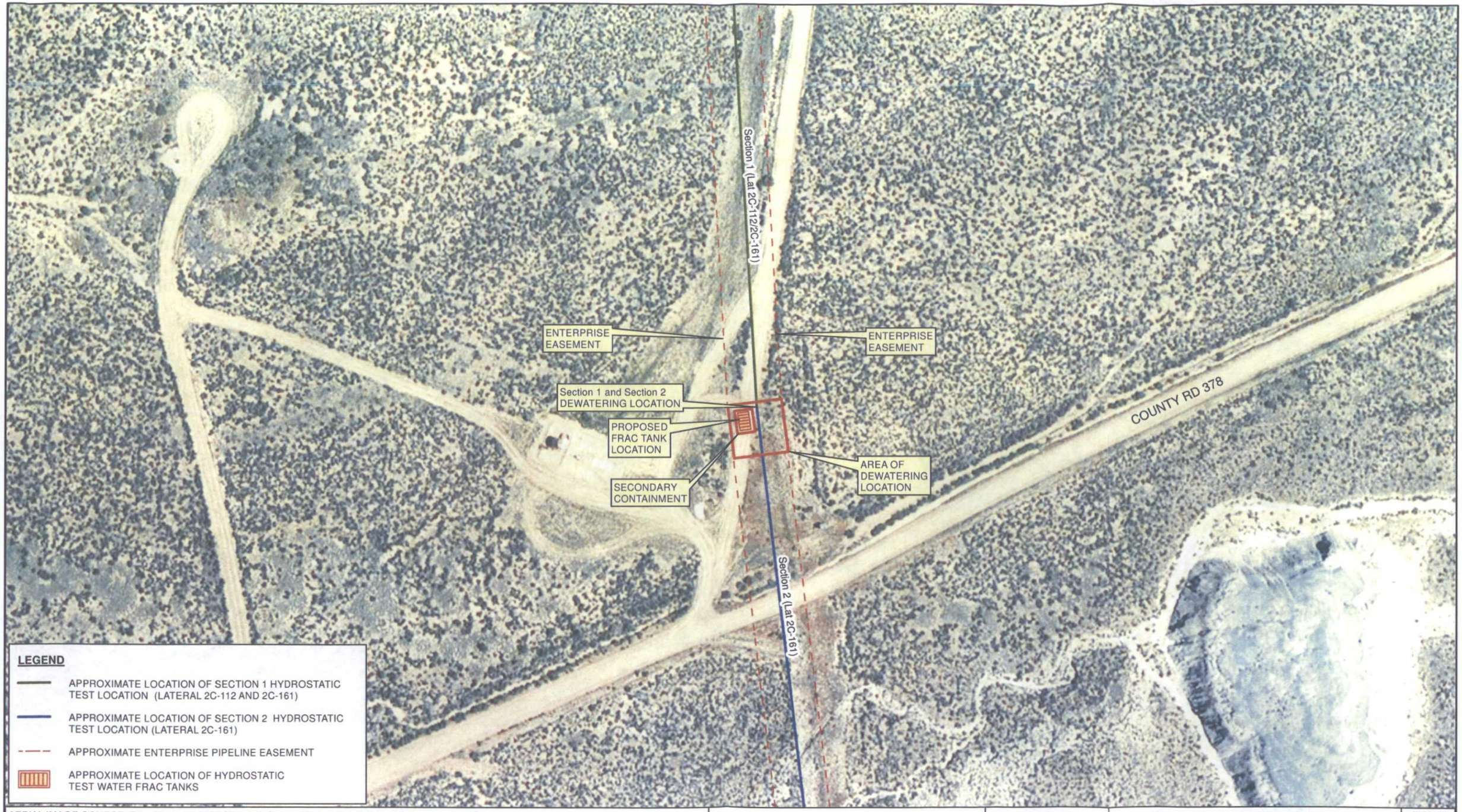
PROJECT NO.: 126026.4	
DRAWN: 02/27/13	
DRAWN BY: PD	
CHECKED BY: ES	
FILE NAME: 126026_4.mxd	
ORIGINATOR: E. SHANNON	DRAWING CATEGORY: 1
APPROVED BY:	

ENTERPRISE PIPELINES UNDERGOING HYDROSTATIC TESTS

SAN JUAN GATHERING
RIO ARRIBA AND
SANDOVAL COUNTIES, NEW MEXICO

FIGURE
1



AERIAL IMAGE SOURCE: Bing Maps, (c) 2010 Microsoft Corporation and its data suppliers

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Feet

NAD 1983 StatePlane
New Mexico Central, US Feet

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PROJECT NO.: 126026.4	**TEMPORARY FRAC TANK STAGING AREA FOR HYDROSTATIC TEST WATER**
DRAWN: 02/27/13	SAN JUAN GATHERING RIO ARRIBA AND SANDOVAL COUNTIES, NEW MEXICO
DRAWN BY: PD	
CHECKED BY: BE	
FILE NAME: 126026_4.mxd	ORIGINATOR: E. SHANNON
	APPROVED BY:
	DRAWING CATEGORY: 2

FIGURE **2**

APPENDIX A

Surface Water, Springs, Karst, Water Well Information and Flood Plain Information

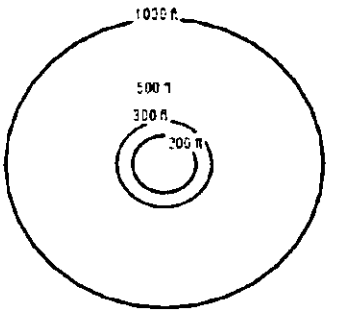
Legend

Petroleum Recovery Research Center
Pit Rule Web Mapping Portal
http://pitrule.source3.com

November 1, 2010

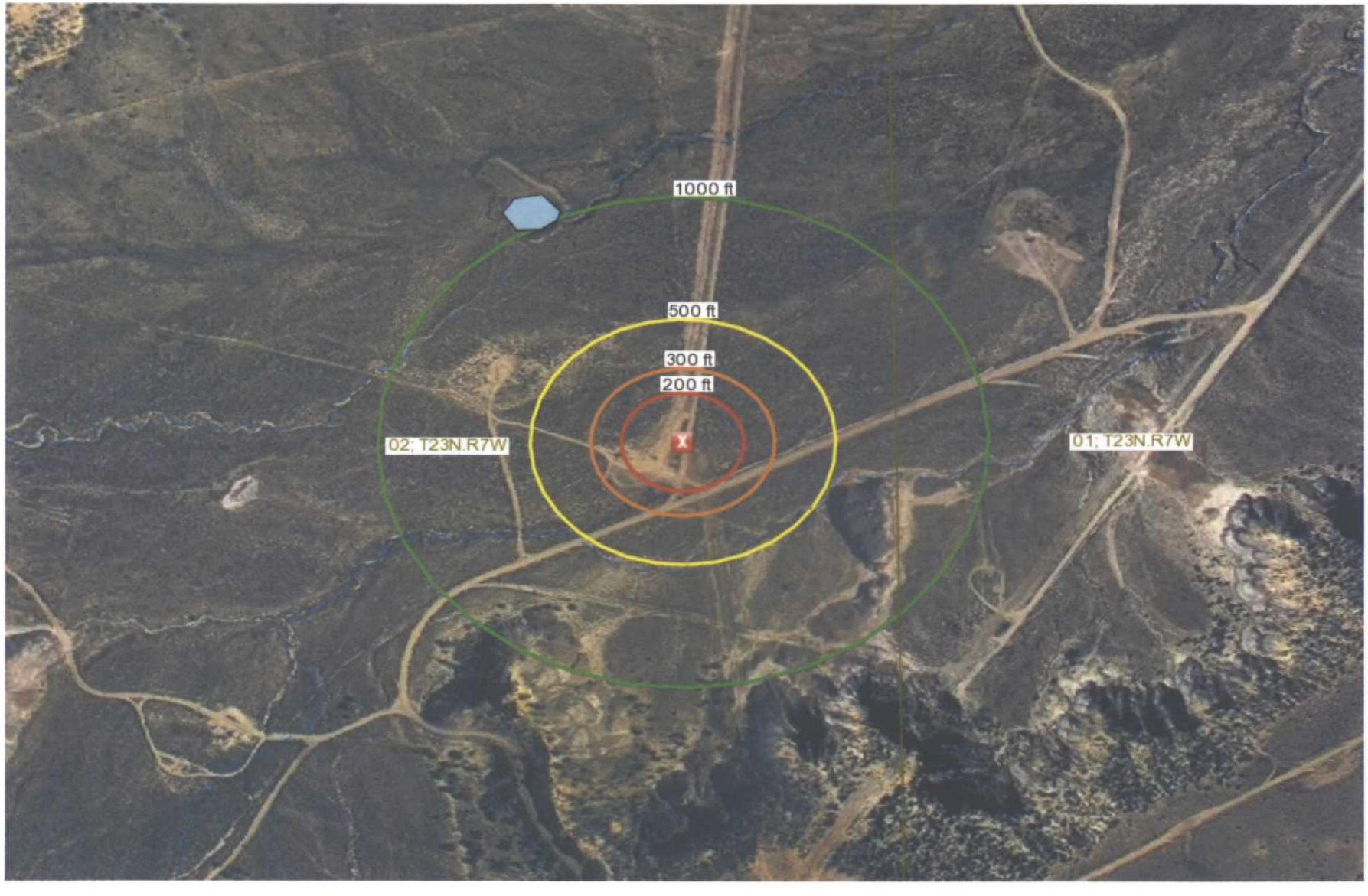
Frac Tank Storage Area

Distance Radii



Surface Water Site Marker

- Stream/River
- Perennial Stream
- Intermittent Stream
- Lake/Pond
- Reservoir
- Playa
- Swamp/Marsh
- Estuary
- Sink/Rise
- Spring/Seep



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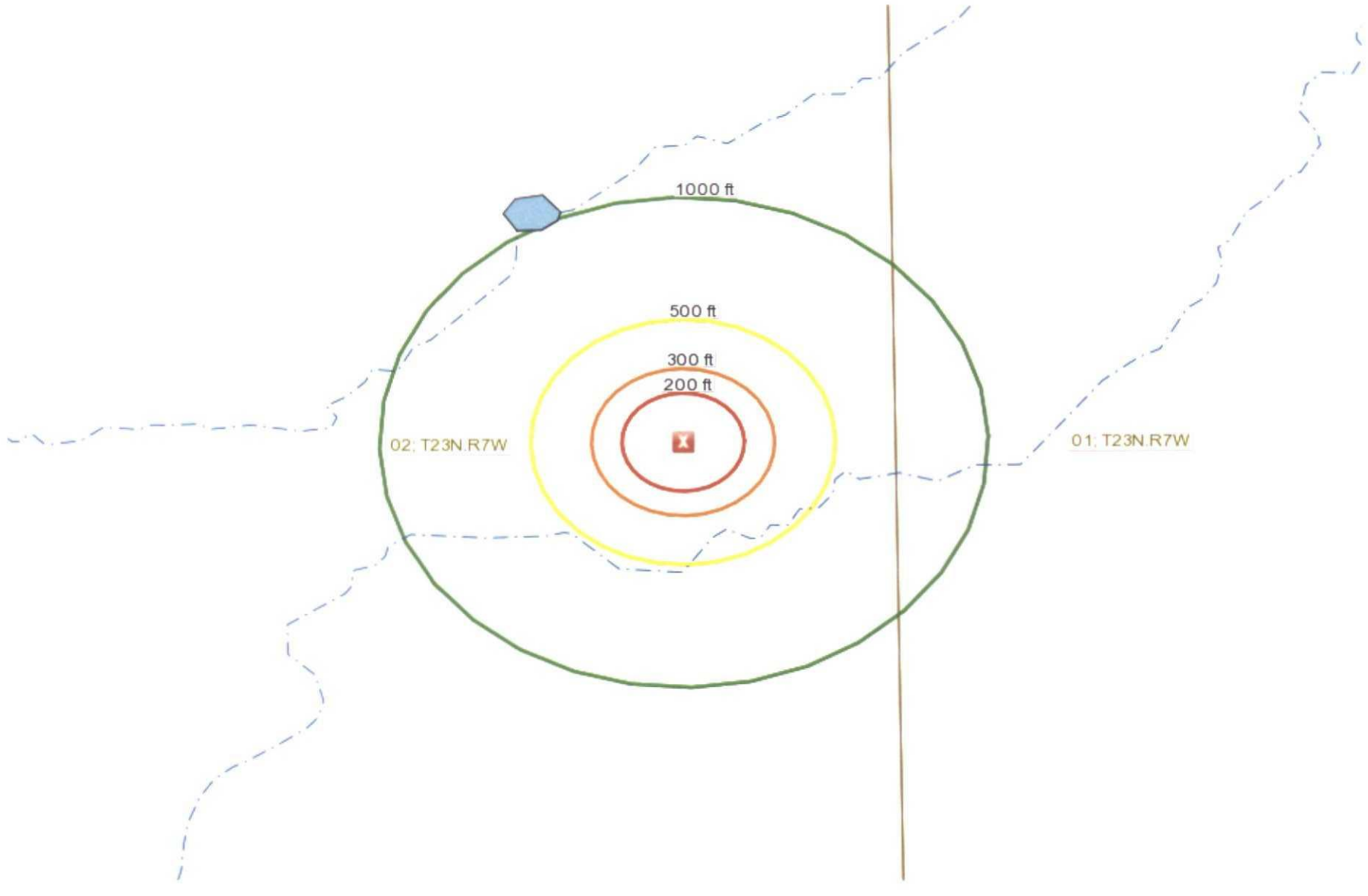
Petroleum Recovery Research Center	Surface Water, Springs, and Karst in Vicinity of Frac Tanks	Figure: A-1a
	Enterprise - Laterals 2C-161 and 2C-112	Feb 27, 2013



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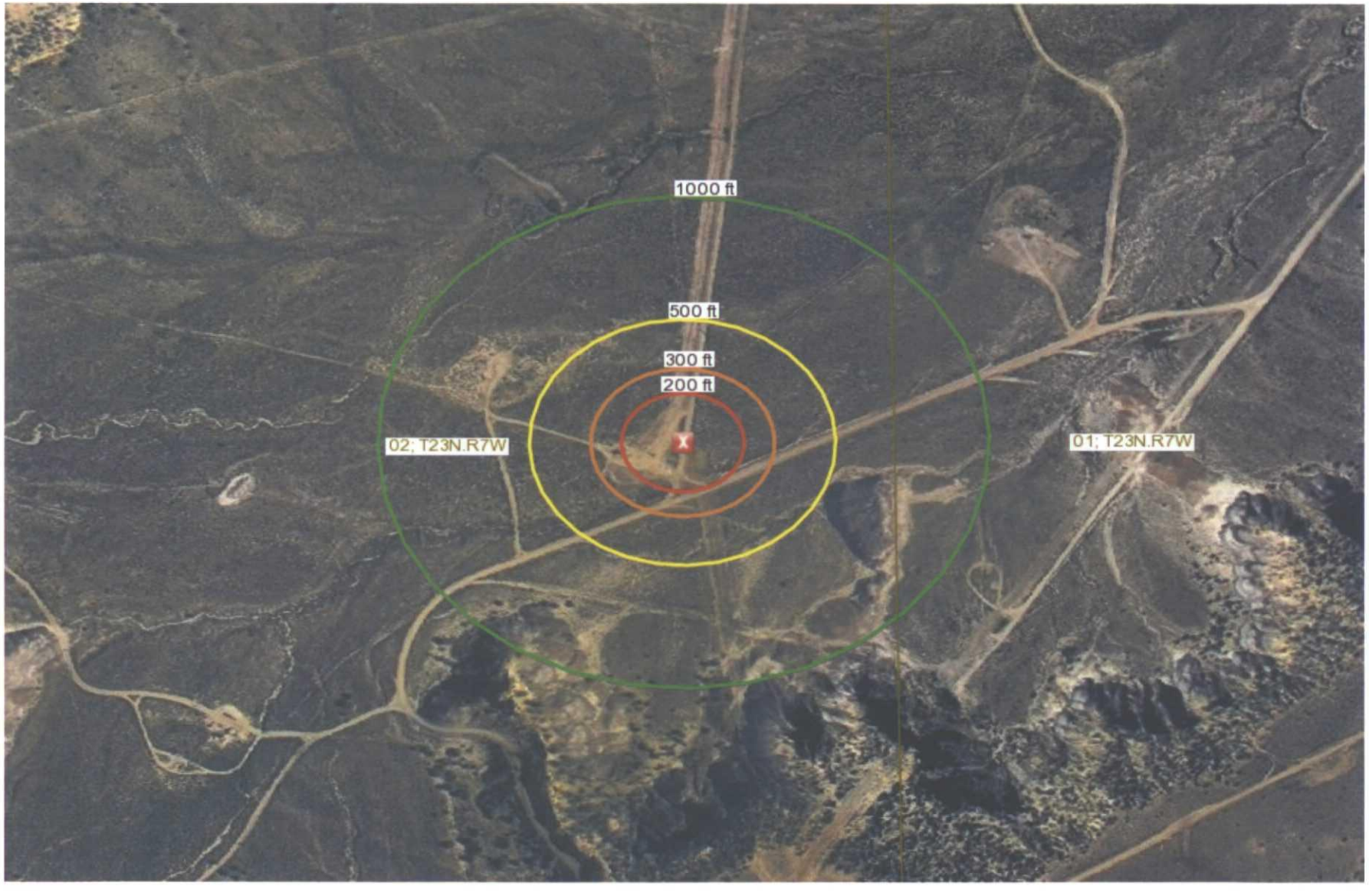
Petroleum Recovery Research Center	Surface Water, Springs, and Karst in Vicinity of Frac Tanks	Figure: A-1b
	Enterprise - Laterals 2C-161 and 2C-112	Feb 27, 2013



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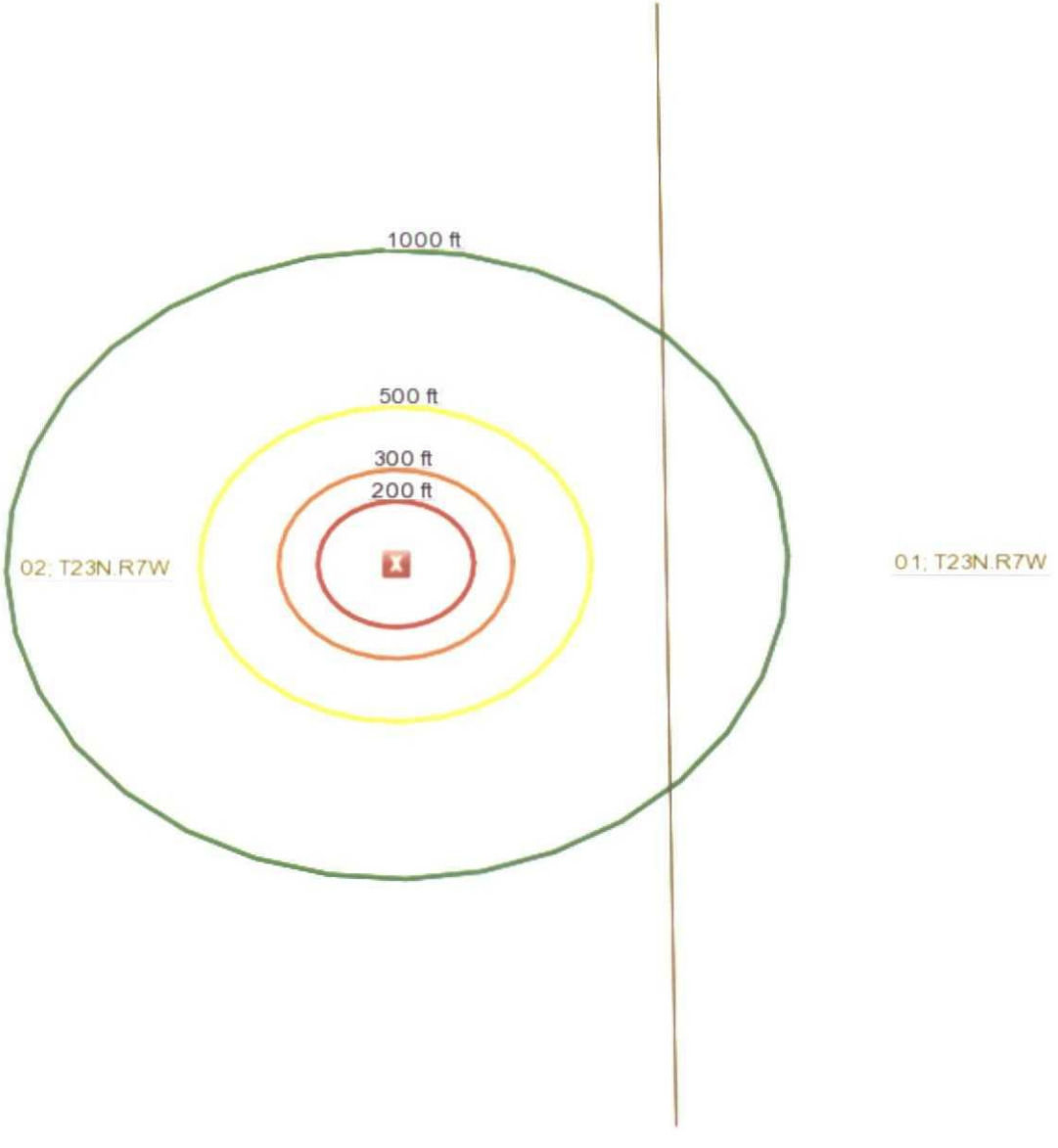
Petroleum Recovery Research Center	Water Wells in Vicinty of Frac Tanks	Figure: A-2a
	Enterprise-Laterals 2C-161 and 2C-112	Feb 26, 2013



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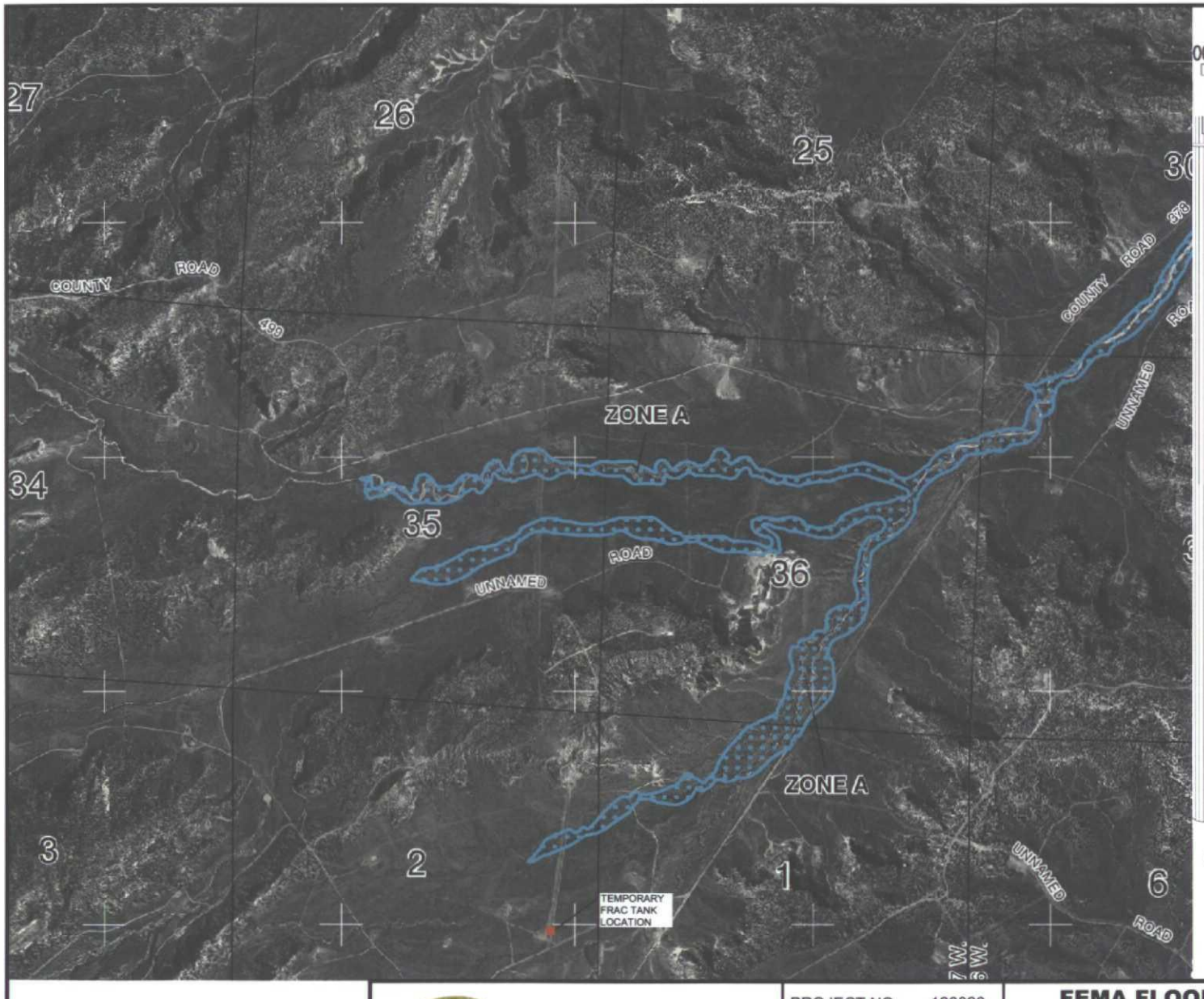
Petroleum Recovery Research Center	Water Wells in Vicinty of Frac Tanks	Figure: A-2b
	Enterprise-Laterals 2C-161 and 2C-112	Feb 26, 2013

ATTACHED XREFS:
ALBUQUERQUE, NM
CAD FILE: G:\ENVIRON\CURRENT WORK FOLDER PROJECTS\126026 - Enterprise Hydrostatic 2012\2.0 Technical Information\2.8 - Technical-CADD Figures LAYOUT: Layout1 Feb 2013, 3:58pm, pdan



MAP SCALE 1" = 2000'
000 0 2000 4000 FEET

NFIP

PANEL 1975D

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
RIO ARRIBA COUNTY, NEW MEXICO
AND INCORPORATED AREAS

PANEL 1975 OF 3175
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIO ARRIBA COUNTY	350049	1975	D
NAVAJO INDIAN RESERVATION	350091	1975	D

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
35039C1975D

EFFECTIVE DATE
MARCH 15, 2012

Federal Emergency Management Agency

ZONE A = HIGH RISK FLOOD HAZARD; AREAS WITH A 1% ANNUAL CHANCE OF FLOODING AND A 26% CHANCE OF FLOODING OVER THE LIFE OF A 30-YEAR MORTGAGE.

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PROJECT NO.	126026
DRAWN:	2/27/2013
DRAWN BY:	PD
CHECKED BY:	BE
FILE NAME:	PIPELINE.DWG

FEMA FLOOD MAP OF FRAC TANKS AND SURROUNDING AREA

SAN JUAN GATHERING
RIO ARRIBA AND
SANDOVAL COUNTIES, NEW MEXICO

ORIGINATOR: E. SHANNON
APPROVED BY:
DRAWING CATEGORY: 2

FIGURE
A-3

APPENDIX B

Wetlands Information

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands in Vicinity of Frac Tanks

Feb 28, 2013

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

● = Frac Tank Location

User Remarks:

Figure B-1

APPENDIX C
Mine Information

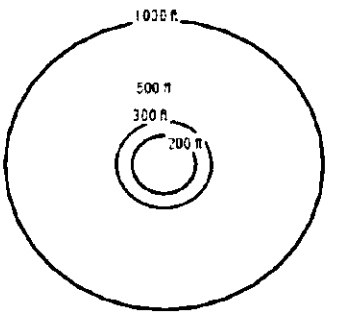
Legend

Petroleum Recovery Research Center
Pit Rule Web Mapping Portal
http://pitrule.source3.com

November 1, 2010

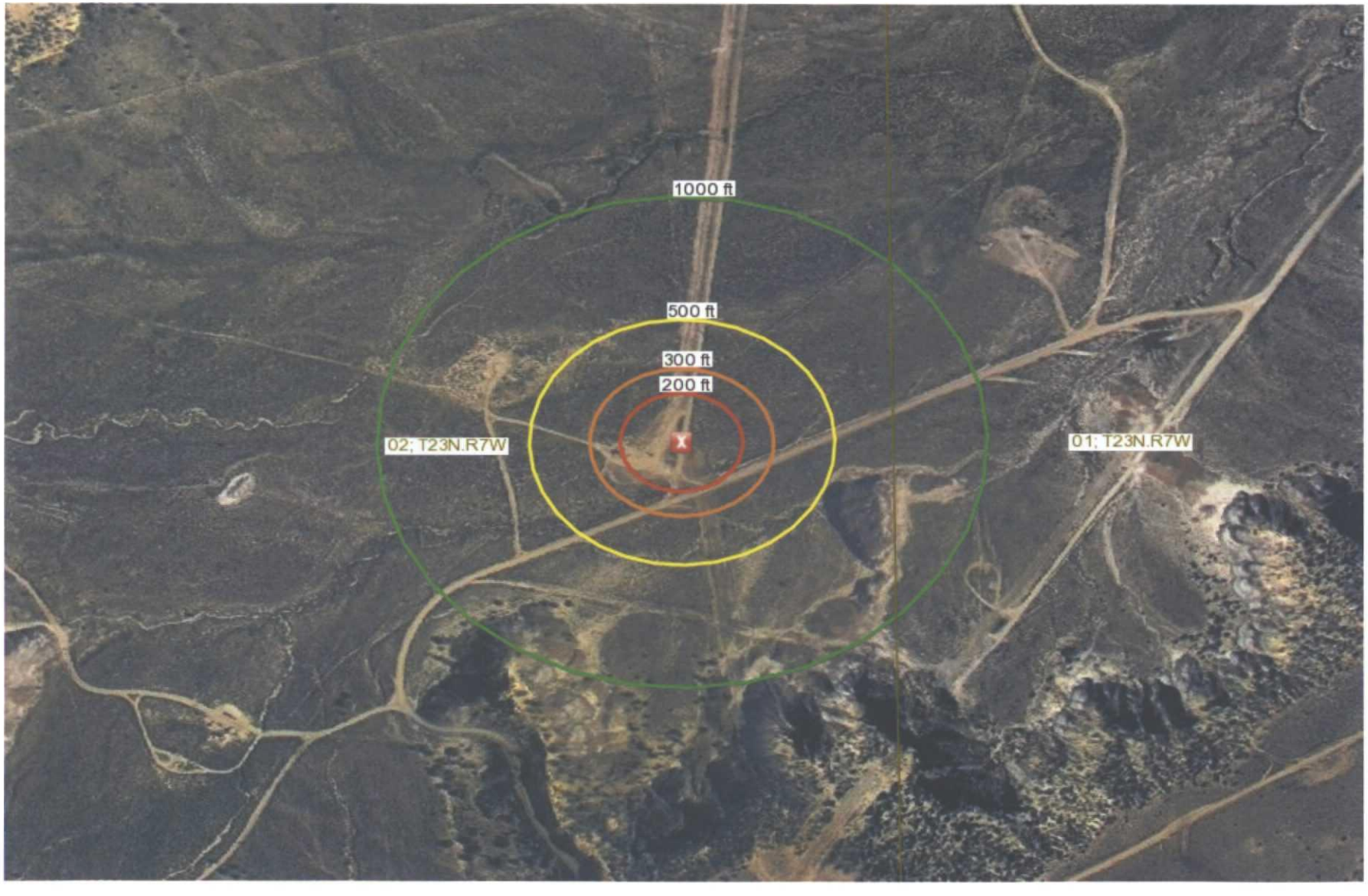
Frac Tank Storage Area

Distance Radii



Surface Water Site Marker

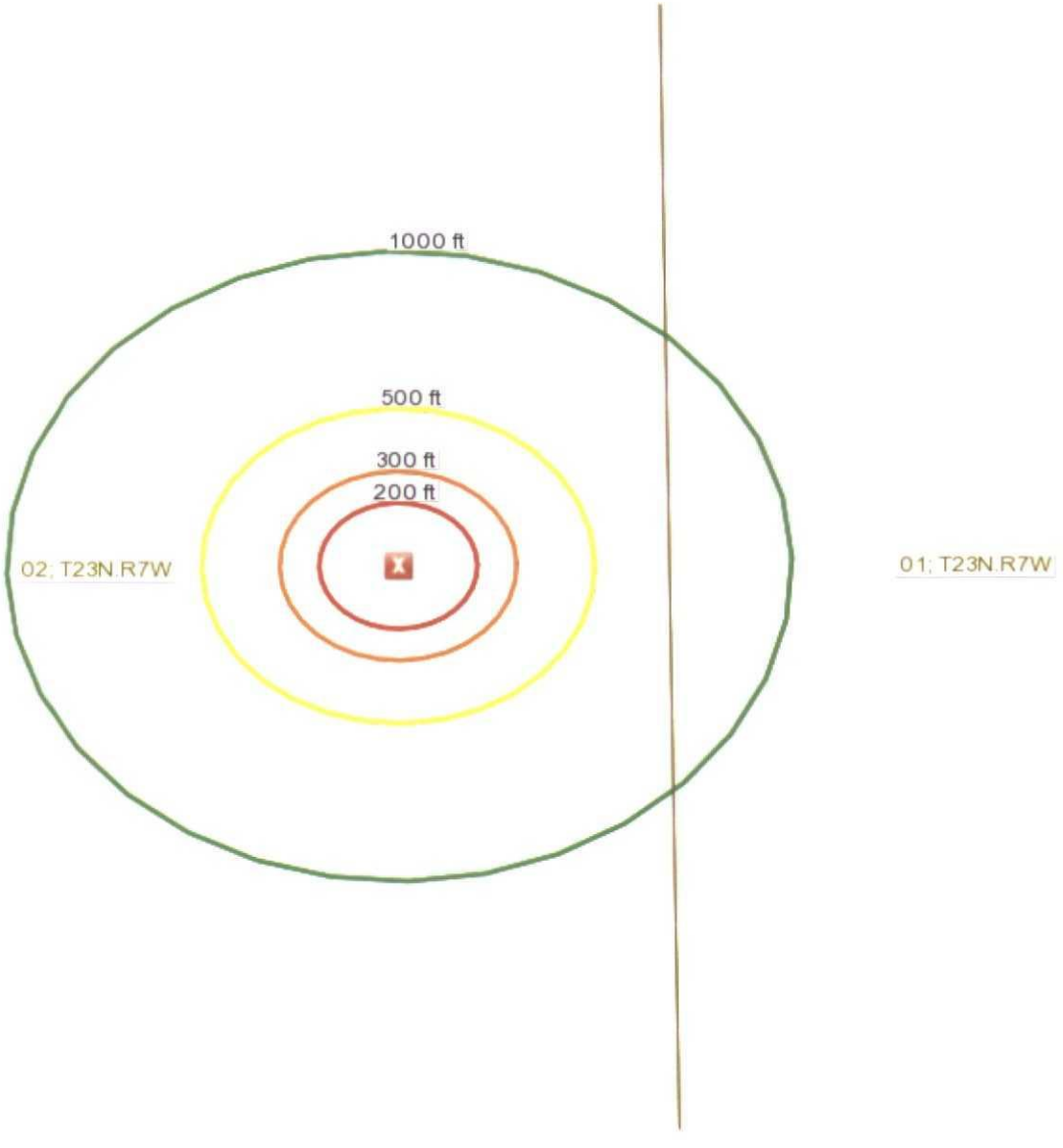
- Stream/River
- Perennial Stream
- Intermittent Stream
- Lake/Pond
- Reservoir
- Playa
- Swamp/Marsh
- Estuary
- Sink/Rise
- Spring/Seep



0 200 400ft

N W E S

Petroleum Recovery Research Center	Mines in Vicinty of Frac Tanks	Figure: C-1a
	Enterprise-Laterals 2C-161 and 2C-112	Feb 26, 2013



0 200 400ft

N W E S

Petroleum Recovery Research Center	Mines in Vicinty of Frac Tanks	Figure: C-1b
	Enterprise-Laterals 2C-161 and 2C-112	Feb 26, 2013

Eileen Shannon

From: Tompson, Mike, EMNRD <Mike.Tompson@state.nm.us>
Sent: Tuesday, February 26, 2013 8:20 AM
To: Eileen Shannon
Subject: RE: Mines in vicinity of proposed hydrostatic testing

Hi Eileen,

The New Mexico Abandoned Mine Land Program has no record of any abandoned mines within Section 2, Township 23 North, Range 7 West.

Please let me know if you have any questions.

Mike Tompson
New Mexico Abandoned Mine Land Program

From: Eileen Shannon [mailto:EShannon@kleinfelder.com]
Sent: Monday, February 25, 2013 4:40 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 staged in frac tanks located in the pipeline ROW and disposed of off site, once analytical results are obtained.

The frac tank staging area is located at:

- SE ¼ of the NE ¼ of Section 2, Township 23 North, Range 7 West, Rio Arriba County, New Mexico; or
- Latitude 36°19'15.63"N; Longitude: 107°29'27.77"W

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

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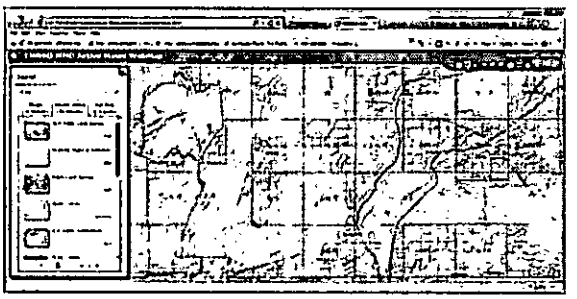
Eileen Shannon

From: Delay, Linda, EMNRD <Linda.Delay@state.nm.us>
Sent: Wednesday, March 06, 2013 1:34 PM
To: Eileen Shannon
Cc: Pfeil, John, EMNRD
Subject: RE: any mines in vicinity of proposed frac tanks

Dear Eileen:

I looked at the data in ArcMap and, as of August 2012 (the last report produced from Mining Registration Database), there are no active mines within section 2 of T23N R7W.

Actually the Active Mines Web Map is now available on web site. We are using Silverlight for ArcGIS Server. In this format you can "rope" the mines in question and can view the attributes. Unfortunately, it doesn't yet have the capability to query on TRS. One method is to add a TRS layer from ArcGIS online using the Search Tool. You would still have to pan and hunt for county and TRS. We have a request into ITO for more map tools.



Hope this helps,
Linda DeLay

From: Eileen Shannon [mailto:EShannon@kleinfelder.com]
Sent: Wednesday, March 06, 2013 11:49 AM
To: Delay, Linda, EMNRD
Subject: any mines in vicinity of proposed frac tanks

Hi Linda,

I was sorry to see that the web site showing active mines is down. Would you be able to check on the following?

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 staged in frac tanks located in the pipeline ROW and disposed of off site, once analytical results are obtained.

The frac tank staging area is located at:

- SE ¼ of the NE ¼ of Section 2, Township 23 North, Range 7 West, Rio Arriba County, New Mexico; or
- Latitude 36°19'15.63"N; Longitude: 107°29'27.77"W

If you have any questions, please call or email.

Thanks, Eileen

Eileen Shannon P.G.
Project Manager
9019 Washington NE, Building A
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