

APPROVED

By Olivia Yu at 1:18 pm, Dec 08, 2017

NMOCD approves of the proposed
delineation for 1RP-3979.

**1RP-3979
DELINEATION PLAN
Devon Lease
Illegal Dumping Spill
Lea County, New Mexico**

LAI Project No. 17-0201-01

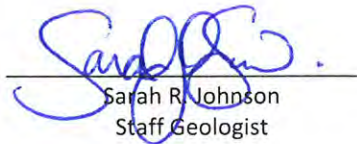
November 7, 2017

Prepared for:
Penroc Oil Corporation
1515 Calle Sur, Suite 174
Hobbs, New Mexico 88240

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 205
Midland, Texas 79701



Mark J. Larson, P.G.
Certified Professional Geologist #10490



Sarah R. Johnson
Staff Geologist

This Page Intentionally Left Blank

Table of Contents

1.0 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Physical Setting.....	2
1.3 Remediation Action Levels.....	3
2.0 DELINEATION PLAN.....	4
3.0 REMEDIATION PLAN.....	5

Figures

Figure 1	Topographic Map
Figure 2	Aerial Map Showing Proposed Sample Points

Appendices

Appendix A	Initial C-141 and Documents Produced By Devon Energy Production
Appendix B	Photographs

INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this delineation plan on behalf of Penroc Oil Corporation (Penroc) for submittal to the New Mexico Oil Conservation (OCD) District I for a spills related to illegal dumping at four (4) locations near leases operated by Penroc and previously operated Devon Energy Production (Devon), in Lea County, New Mexico. The leases include:

- Altbeir 10 State #1H, in Unit N (SE/4, SW/4), Section 10, Township 18 South, Range 36 East;
- Dopplebock 8 State Com #1H, in Unit B (NW/4, NE/4), Section 8, Township 18 South, Range 36 East;
- Dunkel 7 State #1H, in Unit E (SW/4, NW/4), Section 17, Township 18 South, Range 36 East; and
- Guadalcanal State Com #1H, in Unit D (NW/4, NW/4), Section 34, Township 17 South, Range 36 East.

Figure 1 presents a topographic map.

1.1 Background

On August 26, 2015, a land owner discovered unusual discoloration and tire tracks on his property and notified the nearest lease operator, Devon, about the illegal dumping of produced fluids in the vicinity of the four (4) Devon leases. The illegal dumping was reported to the OCD (verbal communication with Thomas Oberding) on September 1, 2015. The initial C-141 was submitted on September 2, 2015. The OCD assigned remediation permit number 1RP-3979.

LAI was requested by Penroc to prepare this delineation plan. LAI determined that GPS coordinates presented on the initial C-141 were incorrect. LAI relied on legal description provided on the initial C-141 as well as photographs and drawings provided by Devon to locate the spills. The C-141 describes each spill based on proximity to the nearest Devon lease. On November 1 and 6, 2017 LAI personnel conducted reconnaissance visits using the legal descriptions, drawings and photographs. LAI describes the physical setting based on the spill areas rather than lease locations as some spills were not close to the identified leases. Appendix A presents the initial C-141 and photographs and maps produced by Devon.

1.1.1 Altbeir 10 State #1H

LAI personnel collected photographs at the Altbeir 10 State #1H in similar orientation and direction as photographs by Devon. LAI personnel mapped the visible spill area with a Trimble sub-meter GPS receiver. A spill area was observed just off the lease road to the north of the now plugged and abandoned Altbeir 10 State #1 well. The vegetative cover has improved since the spill was initially reported but scarring is visible. LAI mapped the impact area as about 9,400 square feet or about 0.22 acre. Figure 2a presents an aerial map. Appendix B presents photographs.

Devon also presented photographs and a map for an area of discolored vegetation about 2,000 feet west of the well, however, LAI personnel were unable to locate this area with information provided by Devon.

1.1.2 Dopplebock 8 State Com #1H

LAI personnel collected photographs at the Dopplebock 8 State Com #1H in similar orientation and direction as photographs taken by Devon and mapped the visible spill area using a Trimble sub-meter GPS receiver. An area of discolored vegetation similar to what Devon photographed was visible along the east side of the lease road leading up to the tank battery. The area of discolored vegetation measures approximately 6,200 square feet or about 0.14 acre. There were no visible signs of impact within the tank battery pad. Figure 2b presents an aerial map. Appendix B presents photographs.

1.1.3 Dunkel 7 State #1H

LAI personnel collected photographs at the Dunkel 7 State #1H in similar orientation and direction as photographs taken by Devon and mapped the visible spill area using a Trimble sub-meter GPS receiver. An area of discolored vegetation was also observed about 1 mile south of the Dunkel 7 State #1H location and measured about 5,700 square feet or about 0.13 acre. The spill is situated predominately on the lease road with a runoff into the pasture on either side. Figure 2c presents an aerial map. Appendix B presents photographs.

1.1.4 Guadalcanal State Com #1H

LAI personnel conducted a site reconnaissance at the Guadalcanal State Com #1H on November 1, 2017. No impacted vegetation or discolored soil was observed in the vicinity of the well or tank battery. LAI observed an area of discolored soil near the lease entrance about 2 miles west of the location. Figure 2d presents an aerial map. Appendix B presents photographs.

1.2 Physical Setting

The physical setting for is as follows:

1.2.1 Altbeir 10 State #1H

- The surface elevation is approximately 3,822 feet above mean sea level (msl);
- The surface topography slopes gently towards the southeast;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as “Portales loam, 0 to 3 percent slopes”, consisting of 0 to 14 inches of loam underlain by 14 to 35 inches of clay loam;
- The surface geology is the Ogallala Formation (lower Pliocene to middle Miocene) consisting of alluvial and eolian deposits, and petrocalcic soils of the southern High Plains;
- Groundwater occurs in the Ogallala formation at approximately 55 feet below ground surface (bgs) (1991);
- The nearest fresh water well is located in Unit G (SW/4, NE/4) in Section 10, Township 18 South, Range 36 East about 0.40 miles northeast of the Site.

1.2.2 Dopplebock 8 State Com #1H

- The surface elevation is approximately 3,860 feet above msl;
- The surface topography slopes gently towards the northeast;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as “Kimbrough-Lea complex, dry, 0 to 3 percent slopes”, consisting of 0 to 3 inches of gravelly loam underlain by 3 to 10 inches of loam;
- The surface geology is the Ogallala Formation (lower Pliocene to middle Miocene) consisting of alluvial and eolian deposits, and petrocalcic soils of the southern High Plains;
- Groundwater occurs in the Ogallala formation at approximately 57 feet bgs (1986);
- The nearest freshwater well is located in Unit G (SW/4, NE/4), Section 8, Township 18 South, Range 36 East about 0.40 miles southwest of the Site.

1.2.3 Dunkel 7 State #1H

- The surface elevation is approximately 3,855 feet above msl;
- The surface topography slopes gently towards the southeast;

- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as “Kimbrough-Lea complex, dry, 0 to 3 percent slopes”, consisting of 0 to 3 inches of gravelly loam underlain by 3 to 10 inches of loam;
- The surface geology is the Ogallala Formation (lower Pliocene to middle Miocene) consisting of alluvial and eolian deposits, and petrocalcic soils of the southern High Plains;
- Groundwater occurs in the Ogallala formation at approximately 51 feet bgs (1986);
- The nearest freshwater well is located in Unit J (NW/4, SE/4), Section 17, Township 18 South, Range 36 East about 0.45 miles east of the Site.

1.2.4 Guadalcanal State Com #1H

- The surface elevation is approximately 3,850 feet above msl;
- The surface topography gently slopes towards the southeast;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as “Portales and Gomez fine sandy loams”, consisting of 0 to 8 inches of fine sandy loam underlain by 8 to 60 inches of clay loam;
- The surface geology is the Ogallala Formation (lower Pliocene to middle Miocene) consisting of alluvial and eolian deposits, and petrocalcic soils of the southern High Plains;
- Groundwater occurs in the Ogallala formation at approximately 56 feet bgs (1986);
- The nearest freshwater well is located in Unit M (SW/4, SW/4), Section 34, Township 17 South, Range 36 East about 0.75 miles southeast of the Site;

1.3 Recommended Remediation Action Levels

Recommended remediation action levels were calculated for benzene, BTEX and TPH based on the following criteria established by the OCD in “*Guidelines for Remediation of Leaks, Spills and Releases*, pp. 6-7, August 13, 1993”:

1.3.1 Altbeir 10 State #1H

Criteria	Result	Score
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1,000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

1.3.2 Dopplebock 8 State Com #1H

Criteria	Result	Score
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	No	0

Distance to Surface Water Body	>1,000 Horizontal Feet	0
--------------------------------	------------------------	---

The following RRAL apply to the release for ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

1.3.3 Dunkel 7 State #1H

Criteria	Result	Score
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1,000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

1.3.4 Guadalcanal State Com #1H

Criteria	Result	Score
Depth-to-Groundwater	50 - 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1,000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

Depth to groundwater between 50 and 99 feet bgs requires vertical delineation for chloride to 600 milligrams per kilogram and maintained a minimum 10 feet further in depth.

2.0 DELINEATION PLAN

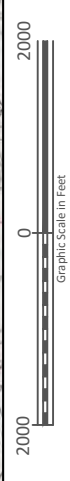
LAI proposes to delineate the observed impacts at four (4) sites. Soil samples will be collected within each spill area at 1 foot intervals to approximately 4 feet bgs and 2 foot intervals to approximately 12 feet bgs using direct push technology (DPT) depending on subsurface conditions. Additional samples will be collected in each cardinal direction (north, south, east and west) of the spill areas for horizontal delineation. The samples will be delivered under chain of custody and preservation to Permian Basin Environmental Lab (PBEL) located in Midland, Texas. The laboratory will analyze the upper sample (0 to 1 foot) for benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH), including gasoline range organics (GRO), diesel range organics (DRO) and oil range organics (ORO) by

EPA SW-846 Methods 8021B and 8015M, respectively. Additional samples will be analyzed to determine the vertical extent of these compounds should the laboratory report concentrations above the RRAL. All samples will be analyzed for chloride by EPA Method and 300 until the delineation requirements are achieved. Pending laboratory results, further delineation will be determined to reach cleanup level standards. Figures 2a, 2b, 2c and 2d present the proposed soil sample locations.

3.0 REMEDIAITON PLAN

Penroc will include a remediation plan in the delineation report to be submitted to the OCD upon receipt of the laboratory report.

Figures



Penroc Oil Corporation
Lea County, New Mexico



Legend ● - Site Location

Site 1	32° 45' 24.43"N	103° 20' 40.08"W	Site 2	32° 46' 03.22"N	103° 22' 28.72"W	Site 3	32° 44' 51.76"N	103° 23' 04.24"W	Site 4	32° 47' 51.96"N	103° 21' 03.11"W
--------	-----------------	------------------	--------	-----------------	------------------	--------	-----------------	------------------	--------	-----------------	------------------

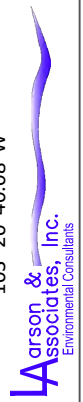
Figure 1 - Topographic Map



100 0 100
Graphic Scale in Feet

Penroc Oil Corporation

Altbeir 10 State #1H
Unit N (SE 1/4 of SW 1/4)
Sec. 10, T. 18 S., R. 36 E.
Lea County, New Mexico
32° 45' 24.43"N
103° 20' 40.08"W



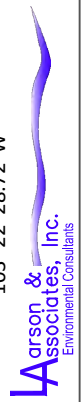
Legend

- - Proposed Sample Location
- - Spill Area

Figure 2a - Aerial Map



Penroc Oil Corporation
Dopplebock 8 State Com #1H
Unit B (NW 1/4 of NE 1/4)
Sec. 8, T. 18 S., R. 36 E.
Lea County, New Mexico
32° 46' 03.22"N
103° 22' 28.72"W



- Proposed Sample Location
- Spill Area

Figure 2b - Aerial Map



Legend

- - Proposed Sample Location
- - Spill Area

Penroc Oil Corporation

Dunkel 7 State #1H
Unit E (SW 1/4 of NW 1/4)
Sec. 17, T. 18 S., R. 36 E.
Lea County, New Mexico
32° 44' 51.76"N
103° 23' 04.24"W

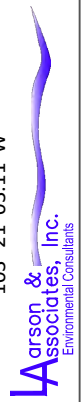
Larson & Associates, Inc.
Environmental Consultants

Figure 2c - Aerial Map



Penroc Oil Corporation

Guadalcanal
Unit D (NW 1/4 of NW 1/4)
Sec. 34, T. 17 S., R. 36 E.
Lea County, New Mexico
32° 47' 51.96"N
103° 21' 03.11"W



Legend

- - Proposed Sample Location
- - Spill Area

Figure 2d - Aerial Map

Appendix A

Initial C-141 and Documents Produced By Devon Energy Production

RECEIVED**By JKeyes at 2:07 pm, Nov 12, 2015**

1
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435
Facility Name Altbeir 10 State 1H	Facility Type Oil
Surface Owner State	Mineral Owner State
API No. 30-025-42290	

LOCATION OF RELEASE

Unit Letter N	Section 10	Township 18S	Range 36E	Feet from the 230	North/South Line South	Feet from the 1980	East/West Line West	County Lea
------------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	---------------

Latitude: N 32°76'85.22"

Longitude: W 103°34'45.64"

NATURE OF RELEASE

Type of Release Spill Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release Illegal dumping on lease roads	Date and Hour of Occurrence August 21 or 22, 2015	Date and Hour of Discovery August 26, 7:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD Thomas Oberding BLM	
By Whom? Ruben Garcia	Date and Hour September 1, 2015 @ 2:00 PM September 1, 2015 @ 1:50 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

On September 1, 2015 Land owner was out checking his land when he noticed there was discoloration and tire tracks on his land. He went to the nearest location and notified Devon lease operator and advised him of the illegal dumping. There was an unknown amount of produced water that had been dumped on the pasture.

Describe Area Affected and Cleanup Action Taken.*

Devon Security was called out to location and is investigating the situation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: *Corina Moya*

Printed Name: Corina Moya

Title: Field Admin Support

E-mail Address: corina.moya@dvn.com

Date: 9.2.2015

Phone: 575.746.5559

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: *[Signature]*

Approval Date: 11/12/2015

Expiration Date: 01/12/2016

Conditions of Approval:
Discrete site samples required. Delineate and
remediate per NMOCD guidelines.

Attached ☐
IRP 3979

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga	
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435	
Facility Name Doppiebock 8 State Com 1H	Facility Type Oil	
Surface Owner State	Mineral Owner State	API No. 30-025-41694

LOCATION OF RELEASE

Unit Letter B	Section 8	Township 18S	Range 36E	Feet from the 200	North/South Line North	Feet from the 1980	East/West Line East	County Lea
------------------	--------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	---------------

Latitude: N 32°76'87.75"

Longitude: W 103°37'45.81"

NATURE OF RELEASE

Type of Release Spill Produced Water	Volume of Release unknown	Volume Recovered none
Source of Release Illegal dumping on lease roads	Date and Hour of Occurrence August 21 or 22, 2015	Date and Hour of Discovery August 26, 7:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD Thomas Oberding BLM	
By Whom? Ruben Garcia	Date and Hour September 1, 2015 @ 2:00 PM September 1, 2015 @ 1:50 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* On September 1, 2015 Land owner was out checking his land when he noticed there was discoloration and tire tracks on his land. He went to the nearest location and notified Devon lease operator and advised him of the illegal dumping. There was an unknown amount of produced water that had been dumped on the pasture.		
Describe Area Affected and Cleanup Action Taken.* Devon Security was called out to location and is investigating the situation.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: <i>Corina Moya</i>	OIL CONSERVATION DIVISION	
Printed Name: Corina Moya	Approved by Environmental Specialist:	
Title: Field Admin Support	Approval Date:	Expiration Date:
E-mail Address: corina.moya@dmv.com	Conditions of Approval:	
Date: 9.2.2015 Phone: 575.746.5559	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435
Facility Name Dunkel 7 State 1H	Facility Type oil
Surface Owner State	Mineral Owner State
API No. 30-025-41693	

LOCATION OF RELEASE

Unit Letter 4	Section 7	Township 18S	Range 36E	Feet from the 200	North/South Line South	Feet from the 865	East/West Line West	County Lea
------------------	--------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	---------------

Latitude: N 32°76'84.12"

Longitude: W 103°40'01.27"

NATURE OF RELEASE

Type of Release Spill Produced Water	Volume of Release Unknown	Volume Recovered none
Source of Release Illegal Dumping on lease roads	Date and Hour of Occurrence August 21 or 22, 2015	Date and Hour of Discovery August 26, 2015
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD Thomas Oberding BLM	
By Whom? Ruben Garcia	Date and Hour September 1, 2015 @ 2:00 PM September 1, 2015 @ 1:50 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

On September 1, 2015 Land owner was out checking his land when he noticed there was discoloration and tire tracks on his land. He went to the nearest location and notified Devon lease operator and advised him of the illegal dumping. There was an unknown amount of produced water that had been dumped on the pasture.

Describe Area Affected and Cleanup Action Taken.*

Devon Security was called out to location and is investigating the situation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Corina Moya</i>	OIL CONSERVATION DIVISION	
Printed Name: Corina Moya	Approved by Environmental Specialist:	
Title: Field Admin Support	Approval Date:	Expiration Date:
E-mail Address: corina.moya@dvn.com	Conditions of Approval:	
Date: 9.2.2015 Phone: 575.746.5559	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435
Facility Name Guadalcanal State Com 1H	Facility Type Oil

Surface Owner State	Mineral Owner State	API No. 30-025-41373
---------------------	---------------------	----------------------

LOCATION OF RELEASE

Unit Letter M	Section 25	Township 17S	Range 36E	Feet from the 100	North/South Line South	Feet from the 360	East/West Line West	County Lea
------------------	---------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	---------------

Latitude: N 32°18'31.52"

Longitude: W 103°31'65.44"

NATURE OF RELEASE

Type of Release Spill Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release Illegal dumping on lease roads	Date and Hour of Occurrence August 21 or 22, 2015	Date and Hour of Discovery August 26, 7:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD Thomas Oberding BLM	
By Whom? Ruben Garcia	Date and Hour September 1, 2015 @ 2:00 PM September 1, 2015 @ 1:50 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

On September 1, 2015 Land owner was out checking his land when he noticed there was discoloration and tire tracks on his land. He went to the nearest location and notified Devon lease operator and advised him of the illegal dumping. There was an unknown amount of produced water that had been dumped on the pasture.

Describe Area Affected and Cleanup Action Taken.*

Devon Security was called out to location and is investigating the situation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Corina Moya</i>	OIL CONSERVATION DIVISION	
Printed Name: Corina Moya	Approved by Environmental Specialist:	
Title: Field Admin Support	Approval Date:	Expiration Date:
E-mail Address: corina.moya@dvn.com	Conditions of Approval:	
Date: 9.2.2015 Phone: 575.746.5559	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

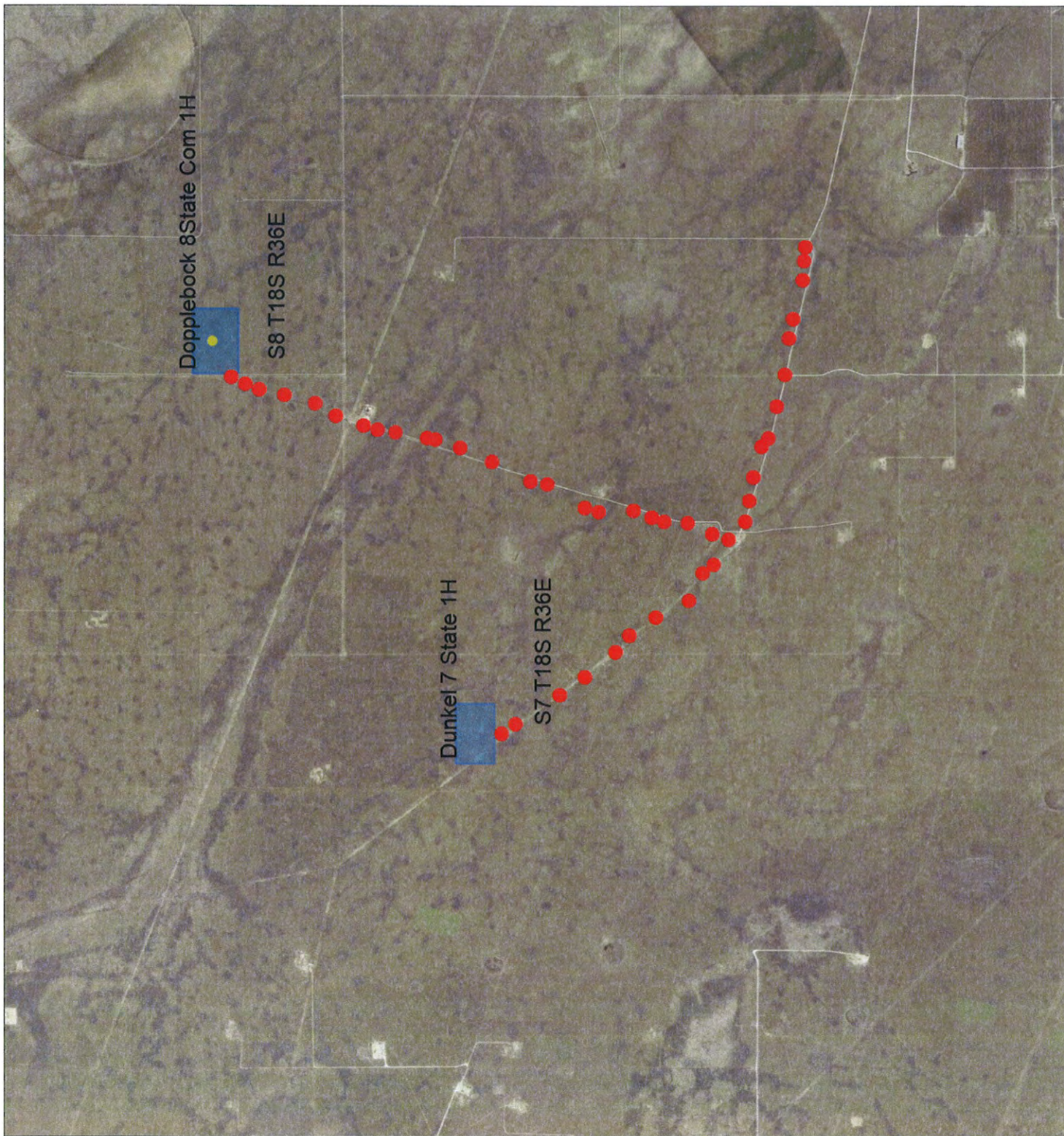


This map is for illustrative purposes only and is not intended to be used as a warranty or representation of any kind regarding the map.



WGS_1984_Web_Mercator_Auxiliary_Sphere
Prepared by:
Map is current as of: 10-Sep-2015

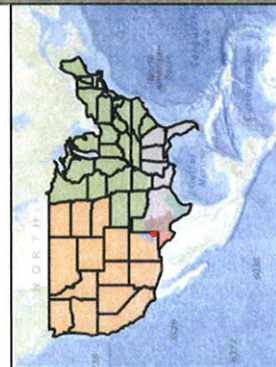


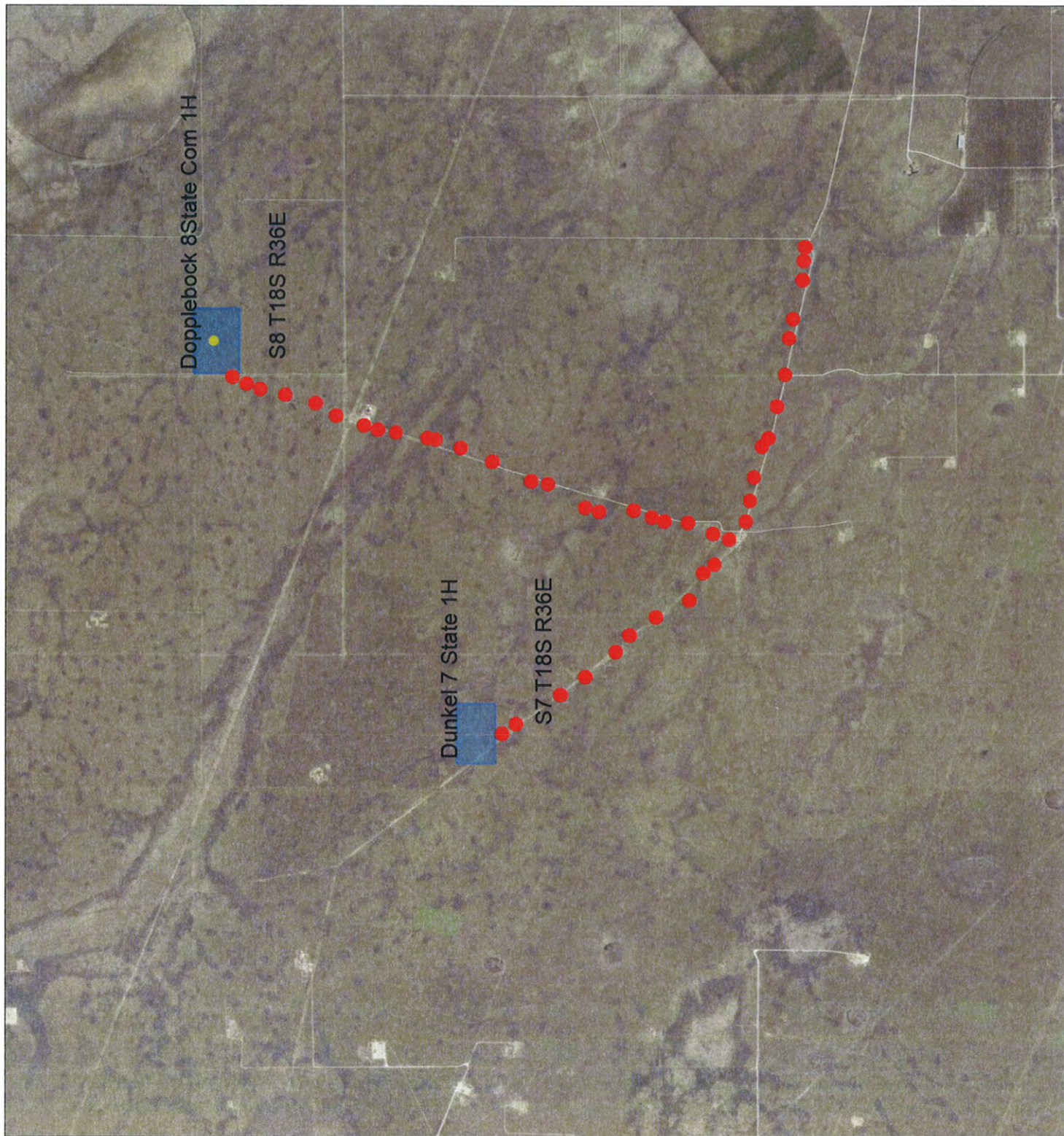


This map is for illustrative purposes only and is not intended to be used as a warranty, representation, or guarantee of any kind regarding the map.



WGS_1984_Web_Mercator_Auxiliary_Sphere
 Prepared by:
 Map is current as of: 10-Sep-2015

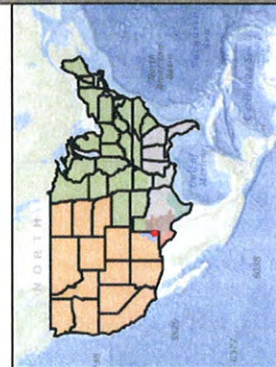


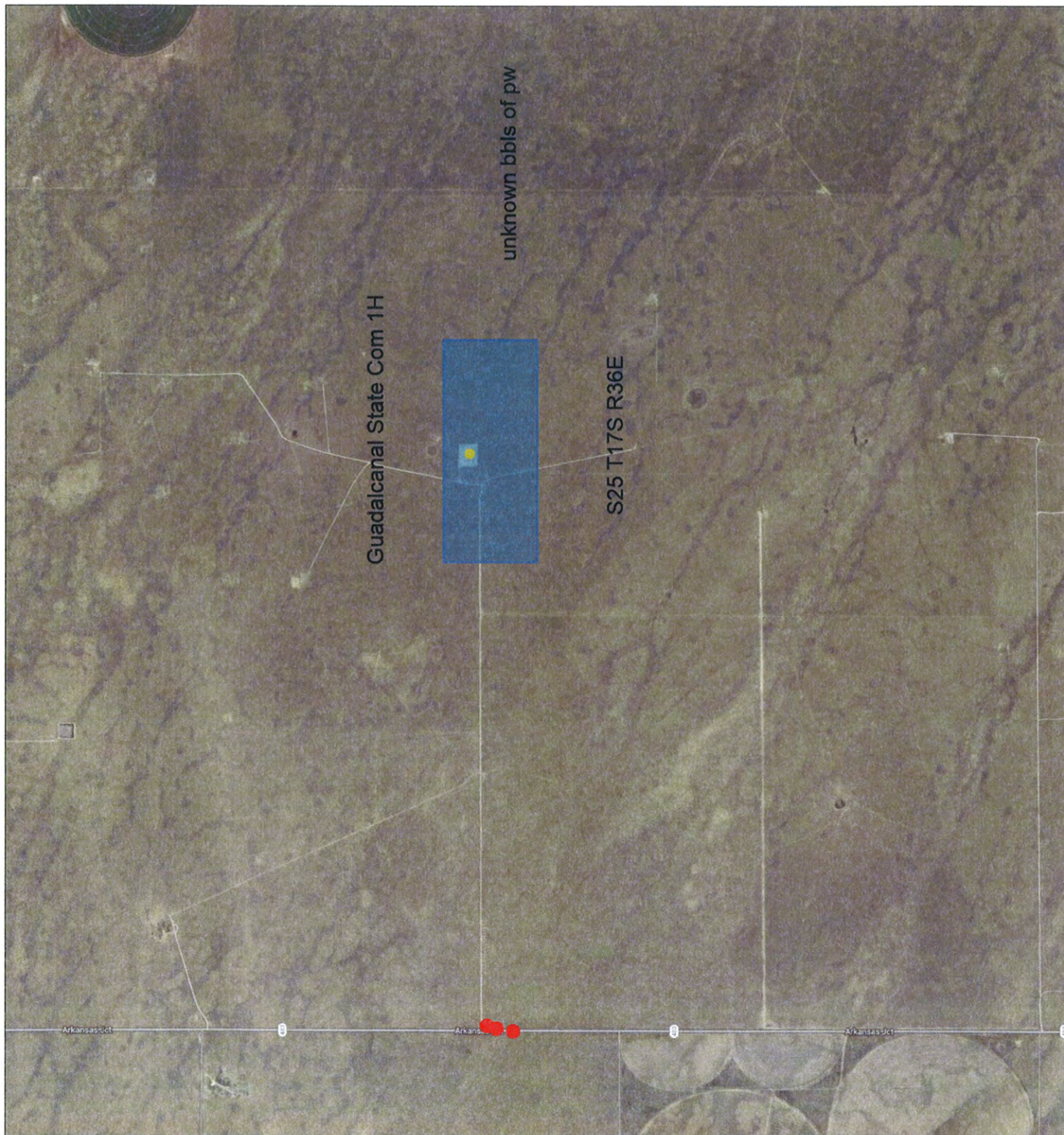


This map is for illustrative purposes only and is not intended to be used as a warranty, representation, or guarantee of any kind regarding the map.



WGS_1984_Web_Mercator_Auxiliary_Sphere
 Prepared by:
 Map is current as of: 10-Sep-2015





This map is for illustrative purposes only and is not intended to be used as a legal document. It is not intended to be used as a legal document. It is not intended to be used as a legal document.

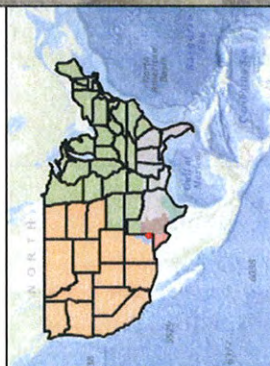
WGS_1984_Web_Mercator_Auxiliary_Sphere

Prepared by:

Map is current as of: 10-Sep-2015

Miles

0 0.14 0.28 0.56 1: 28,457





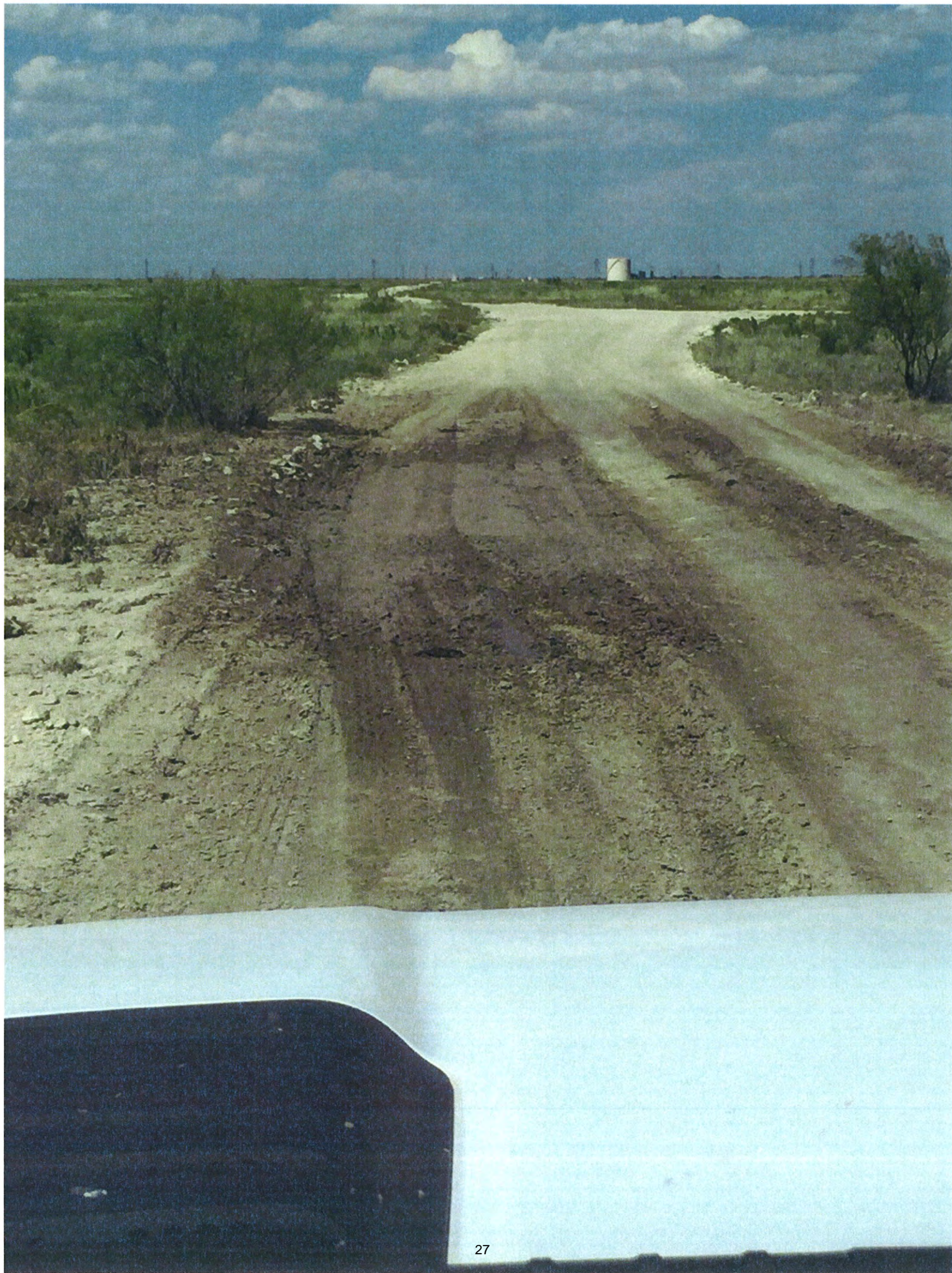
















Appendix B

Photographs



Altbeir 10 State 1H Site Location



Altbeir Site Prior to Remediation Viewing West, November 1, 2017



Altbeir Site Prior to Remediation Viewing North, November 1, 2017



Altbeir Site Prior to Remediation Viewing East, November 1, 2017



Altbeir Site Prior to Remediation Viewing South, November 1, 2017



Dopplebock 8 State Com 1H Site Location



Dopplebock Site Prior to Remediation Viewing North, November 1, 2017



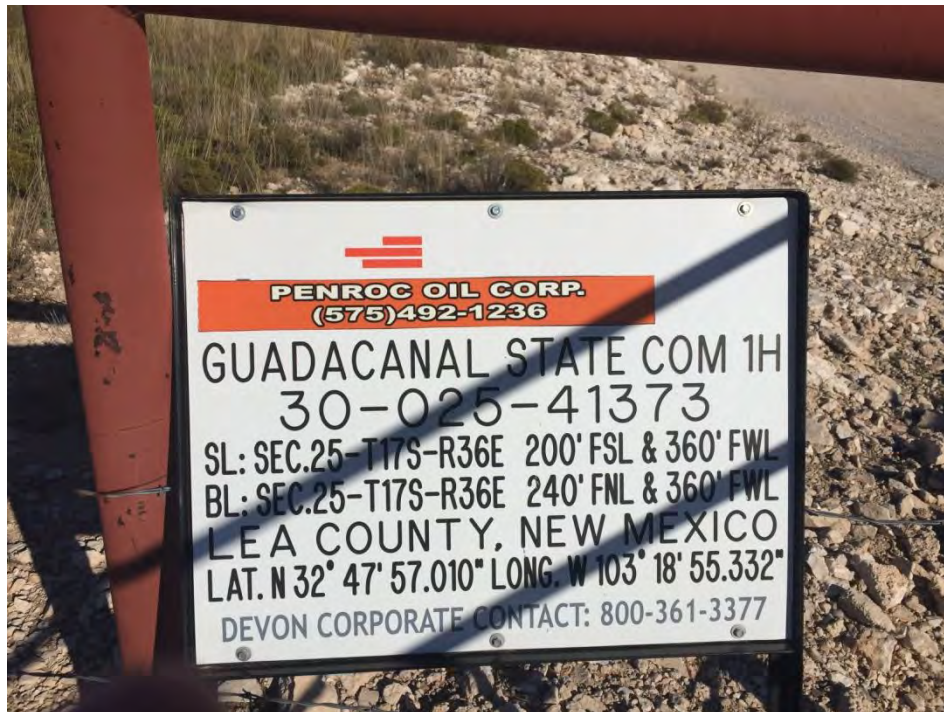
Dopplebock Site Prior to Remediation Viewing Northwest, November 1, 2017



Dopplebock Site Prior to Remediation Viewing South, November 1, 2017



Dunkel 7 State 1H Prior to Remediation viewing North, November 1, 2017



Guadacanal State Com 1H Site Location



Guadacanal Site Viewing South, November 6, 2017



Guadacanal Site Prior to Remediation Viewing North, November 6, 2017



Guadacanal Site Prior to Remediation Viewing South, November 6, 2017