

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

Form C-144  
Revised April 3, 2017

**For temporary pits, below-grade tanks, and multi-well fluid management pits**, submit to the appropriate NMOC District Office.  
**For permanent pits** submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOC District Office.

Pit, Below-Grade Tank, or  
Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☒ Below grade tank registration  
☐ Permit of a pit or proposed alternative method  
☐ Closure of a pit, below-grade tank, or proposed alternative method  
☐ Modification to an existing permit/or registration  
☒ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

BGT A

**Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request**

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: Enterprise Products Operating, LLC OGRID #: 151618  
Address: P.O. Box 4324, Houston, TX 77210  
Facility or well name: San Juan 28-7 Unit #130  
API Number: 30-039-07180 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr NW1/4SW1/4 Section 2 Township 27N Range 7W County: Rio Arriba  
Center of Proposed Design: Latitude 36.600378 Longitude -107.549400 NAD83  
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.  
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: Approximately 40 bbl Type of fluid: Produced water and condensate  
Tank Construction material: Steel wall and bottom  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other 7-inch lift present, overflow prevention unknown, visible sidewalls, liner unknown  
Liner type: Thickness Unknown mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

4.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.  
**Fencing:** Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)  
☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)  
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet  
☒ Alternate. Please specify 4 ft hog wire fencing with steel bar on top

6.

**Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☒ Other Grated steel cover
- ☐ Monthly inspections (If netting or screening is not physically feasible)

7.

**Signs:** Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

8.

**Variances and Exceptions:**

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

***Please check a box if one or more of the following is requested, if not leave blank:***

- ☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC***Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.*****General siting****Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- ☒ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☒ Data obtained from nearby wells

☐ Yes ☒ No

☐ NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

☐ Yes ☐ No

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☒ Yes ☐ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

### **Permanent Pit or Multi-Well Fluid Management Pit**

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

10.

#### **Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

11.

#### **Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC

**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ A List of wells with approved application for permit to drill associated with the pit.
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

12.

**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Climatological Factors Assessment  
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Quality Control/Quality Assurance Construction and Installation Plan  
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan  
☐ Emergency Response Plan  
☐ Oil Field Waste Stream Characterization  
☐ Monitoring and Inspection Plan  
☐ Erosion Control Plan  
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

**Proposed Closure:** 19.15.17.13 NMAC**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Multi-well Fluid Management Pit  
☐ Alternative
- Proposed Closure Method: ☒ Waste Excavation and Removal  
☐ Waste Removal (Closed-loop systems only)  
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)  
☐ In-place Burial ☐ On-site Trench Burial  
☐ Alternative Closure Method

14.

**Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  
☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  
☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

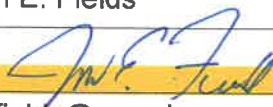
**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

16.  
**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC  
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.  
**Operator Application Certification:**  
 I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.  
 Name (Print): Jon E. Fields Title: Director, Field Environmental  
 Signature:  Date: 3/2/2021  
 e-mail address: jefields@eprod.com Telephone: 713-381-6684

18.  
**OCD Approval:** ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)  
 OCD Representative Signature: CR Whitehead Approval Date: July 7, 2021  
 Title: Environmental Specialist OCD Permit Number: BGT A

19.  
**Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC  
*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*  
☐ Closure Completion Date: \_\_\_\_\_

20.  
**Closure Method:**  
☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)  
☐ If different from approved plan, please explain.

21.  
**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

☐ Proof of Closure Notice (surface owner and division)  
☐ Proof of Deed Notice (required for on-site closure for private land only)  
☐ Plot Plan (for on-site closures and temporary pits)  
☐ Confirmation Sampling Analytical Results (if applicable)  
☐ Waste Material Sampling Analytical Results (required for on-site closure)  
☐ Disposal Facility Name and Permit Number  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique  
☐ Site Reclamation (Photo Documentation)  
 On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983

22.

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_





## BELOW-GRADE TANK REGISTRATION

Property:

**San Juan 28-7 Unit #130  
SW ¼, S2 T27N R7W  
Rio Arriba County, New Mexico**

February 22, 2021  
Ensolum Project No. 05A1226132

Prepared for:

**Enterprise Field Services, LLC  
614 Reilly Avenue  
Farmington, NM 87401  
Attn: Mr. Thomas Long**

Prepared by:

A handwritten signature in blue ink, reading "Rane DeeChilly".

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Ranee DeeChilly  
Environmental Scientist

A handwritten signature in black ink, reading "Kyle Summers".

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Kyle Summers, CPG  
Sr. Project Manager

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Figure A	1.0 Mile Radius Water Well Map
Figure B	Cathodic Protection Well Recorded Depth to Water
Figure C	Watercourse and Drainage Identification
Figure D	Water Well and Natural Spring Location
Figure E	Wetlands

**Attachments:** Design and Construction Specifications  
Operational Plan  
Closure and Reclamation Plan





## 1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared a below grade tank permit application for the Enterprise Field Services, LLC (Enterprise) San Juan 28-7 Unit #130 site, hereinafter referred to as the "Site".

Based on correspondence from the New Mexico Energy Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD), dated December 9, 2020, Enterprise is required to submit a below grade tank permit application no later than March 4, 2021. The permit application includes a detailed plan that is required per New Mexico Administrative Code (NMAC) 19.15.17.

### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	San Juan 28-7 Unit #130 (Site)
<b>Location:</b>	36.600378 ° North, 107.549400 ° West Southwest (SW) ¼ of Section 2, Township 27 North, Range 7 West Rio Arriba County, New Mexico
<b>Property:</b>	New Mexico State
<b>Regulatory:</b>	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

Tank Information	
<b>Tank Capacity:</b>	Approximately 40 barrels (bbls)
<b>Tank Dimensions:</b>	Height: 5 feet: Diameter: 8 feet
<b>Tank Contents:</b>	Produced water and condensate
<b>Tank Construction:</b>	Steel wall tank

A **Topographic Map** depicting the location of the Site is included as **Figure 1**, and a **Site Vicinity Map** is included as **Figure 2** in **Appendix A**. **Figure 3** is a **Site Map** that depicts the location of the below-grade tank and the associated meter run (**Appendix A**).

## 2.0 SITING REQUIREMENTS

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address the activities related to oil and gas pits, closed-loop systems, below-grade tanks and sumps, the New Mexico EMNRD OCD references 19.15.17 NMAC *Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps*. Ensolum utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate siting requirements for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

- The OSE tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified within a one (1) mile radius of the Site in the OSE WRRS database. In addition, no PODs were identified in the adjacent Public Land Survey System (PLSS) section of the Site (**Figure A, Appendix B**) (New Mexico Office of the State Engineer, 2010).

Enterprise Field Services, LLC  
BGT Registration  
San Juan 28-7 Unit #130  
February 22, 2021



- The data record for a monitoring well (unpermitted) that was located at the Conoco, Inc., San Juan 28-7 Unit #126 well site, located approximately one (1) mile east of the Site and at a slightly lower elevation (6,170 feet, based on the published data) than the Site (6,173 feet), indicates an average depth to water of 75 feet below grade surface (bgs) (based on published data) (New Mexico Energy, Minerals and Natural Resources Department, 2012).
- Seven (7) cathodic protection wells were identified within one (1) mile of the Site as well as in adjacent PLSS sections. The closest cathodic protection well (San Juan 28-7 Unit #182F) is located approximately 0.2 miles northwest of the Site and at a higher elevation (6,594 feet) than the Site. The record for this cathodic well does not indicate a depth to water.

The nearest cathodic wells with recorded depths to water are associated with the San Juan 28-7 Unit #126F and San Juan 28-7 Unit #124F oil/gas well locations. San Juan 28-7 Unit #126F is located approximately 1.18 miles east of the Site and at a slightly higher elevation (6,178 feet) than the Site. The record for this cathodic well indicates a depth to water of approximately 100 feet bgs. The record for the cathodic protection well associated with the San Juan 28-7 Unit #124F oil/gas well location (located approximately 1.20 miles southeast of the Site and at a higher elevation (6,564 feet) than the Site) indicates a depth to water of approximately 140 feet bgs.

The record for the cathodic protection well associated with the San Juan 28-7 Unit #227F oil/gas well location (located approximately 2 miles northeast of the Site and at a higher elevation (6,522 feet) than the Site) indicates a depth to water of approximately 60 feet bgs. The records for remaining cathodic wells do not indicate a depth to water (**Figure B, Appendix B**) (New Mexico Energy, Minerals and Natural Resources Department, 2012).

- The Site is located within 100 feet of a New Mexico EMNRD OCD-defined continuously flowing or significant watercourse. The Site is located approximately 50 feet west of Aldofo Canyon wash (**Figure C, Appendix B**).
- The Site is not located within 100 feet of a lakebed, sinkhole, or playa lake (**Figure C, Appendix B**).
- Based on information provided by the OSE WRRS database and the United States Geological Survey (USGS), there are no springs, or fresh water wells used for public or livestock consumption identified within 200 feet of the Site (**Figure D, Appendix B**) (New Mexico Office of the State Engineer, 2010) (U.S. Geological Survey The National Map, 2019).
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not located within 100 feet of a wetland (**Figure E, Appendix B**) (U.S. Fish & Wildlife Service, 2020).

Based on the local topography, proximity to the wash, and the records from nearby cathodic protection wells, the estimated depth to groundwater is less than 50 feet bgs.

Based on the identified siting criteria, the San Juan 28-7 Unit #130 below-grade tank may not meet the siting requirement of Subparagraphs (a) and (c) of Paragraph (8) of Subsection A of 19.15.17.10 NMAC. A variance request is included in Section 4.0 of this document.

Enterprise Field Services, LLC  
BGT Registration  
San Juan 28-7 Unit #130  
February 22, 2021



### 3.0 SITE CHARACTERIZATION

#### 3.1 Regional Geology and Hydrogeology

The Site is located within the San Juan Basin, which is the major structural feature in the northwest region of New Mexico. The structures that bound the basin to the north, south, east, and west formed during the Laramide Orogeny. The basin consists of various sedimentary rocks ranging from Permian to Quaternary in age; however, the rocks that were deposited during the formation of the basin mostly range from Pennsylvanian through Tertiary.

The San Juan Basin is classified as an arid to semiarid region. The central part of the basin receives less than 10 inches of precipitation per year with the mountainous regions surrounding the basin receiving as much as 30 inches a year (U.S. Bureau of Reclamation, 1976, as cited in Stone, et al., 1983).

As described in Stone (2002):

most of the [aquifers] in the San Juan Basin [exist] under confined (artesian) or semi-confined hydrologic conditions...In Mesozoic rocks of the region, the [confined] sandstone aquifers are interbedded with shales that behave as...aquitards. The Triassic mudrock sequence is the aquitard for the Permian Limestone...Groundwater in the alluvium along streams and in the shallow Tertiary sandstone aquifers is generally unconfined...and is open to the atmosphere through pores in the overlying permeable rocks. (Stone, 2020, p.36)

The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is comprised of four aquifers – Uinta-Anima, Mesa Verde, Dakota-Glen, and Coconino-De Chelly. The general composition of the aquifers is moderately to well-consolidated sedimentary rocks of an age ranging from Permian to Tertiary. Each of the four aquifers is separated from the others by an impermeable confining unit. The two thickest confining units are the Mancos and Chinle-Moenkopi, which are completely impermeable and cover the entire area of the aquifers. Other confining units in the region are less extensive and thinner. These units allow water to flow between the principal aquifers (Robson and Banta, 1995).

According to the New Mexico Bureau of Geology and Mineral Resource (Geologic Map of New Mexico, 2003), the Site is located within the lower Eocene San Jose Formation which comprises four lithologic units – Cuba Mesa, Regina, Llaves, and Tapicitos. The rocks that comprise the San Jose Formation were deposited in alluvial or fluvial environments. The San Jose Formation contains a mixture of clastic sedimentary rocks varying from siltstones and mudstones to medium to coarse grain sandstones (Smith and Lucas, 1991).

#### 3.2 Local Geology and Hydrogeology

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) database the Site is located on soil classified as Sparank-San Mateo silt loams. The Sparank-San Mateo silt loams are composed of Quaternary alluvial deposits derived from erosion of the parent San Jose sandstones and siltstones which comprise the canyon walls.

According to Domenico and Schwartz (1990) a default hydraulic conductivity value for the silt unit at the Site would range between  $1 \times 10^{-9}$  m/sec to  $2 \times 10^{-5}$  m/sec, which is equivalent to between  $2.8 \times 10^{-4}$  feet per day (ft/day) to 5.7 ft/day. The sand unit at the Site would be, on average,  $2 \times 10^{-6}$  m/sec which is equivalent to 0.57 feet per day (ft/day).

The groundwater-bearing unit at the Site is estimated to be less than 50 feet bgs. This estimation is based on the following on the following data and published records:

Enterprise Field Services, LLC  
BGT Registration  
San Juan 28-7 Unit #130  
February 22, 2021



**Groundwater Depth based on Cathodic Well Records:**

- The record for the nearest cathodic protection well with a recorded depth to water (San Juan 28-7 Unit #126F) indicates depth to water of 100 feet bgs. The approximate elevation for this cathodic well is 6,178 feet which is five (5) feet higher in elevation than the Site. Using this correlation, the anticipated depth to water at the Site would be approximately 95 feet bgs.

**Groundwater Depth based on Historic Monitoring Well Records:**

- The groundwater data for the monitoring well that was located at the Conoco, Inc., San Juan 28-7 Unit #126 well site indicates depth to water of 75 feet bgs. The elevation for the San Juan 28-7 Unit #126 is 6,170 feet which is three (3) feet lower in elevation than the Site. Using this correlation, the anticipated depth to water at the Site would be approximately 78 feet bgs.

**Groundwater Depth based on Proximity to Wash:**

- The Site is located approximately 50 feet from Aldolfo Canyon wash and is approximately six (6) feet higher in elevation than the wash. It is assumed that subgrade water flows within the wash. Due to the proximity of the wash, it is possible that the depth to groundwater at the Site is less than 50 feet bgs.

## **4.0 VARIANCE REQUEST**

Enterprise requests a variance from the siting requirements of Paragraph (8) of Subsection A of 19.15.17.10 NMAC and the signage requirement of 19.15.17.11 NMAC. The San Juan 28-7 Unit #130 below-grade tank is an out-of-service historical unregistered below-grade tank. The below-grade tank will be removed from service per the closure requirements of 19.15.17 NMAC once the tank is registered with the New Mexico EMNRD OCD. The below-grade tank is located on the Enterprise meter run which includes a signage for the nearby well site.

## **5.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE**

### **5.1 Standard of Care**

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

### **5.2 Limitations**

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

Enterprise Field Services, LLC  
BGT Registration  
San Juan 28-7 Unit #130  
February 22, 2021



### 5.3 Reliance

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

Enterprise Field Services, LLC  
BGT Registration  
San Juan 28-7 Unit #130  
February 22, 2021



### **References:**

Domenico, P.A. and F.W. Schwartz, 1990. *Physical and Chemical Hydrogeology*, John Wiley & Sons, New York, 824 p.

New Mexico Bureau of Geology and Mineral Resources, 2003, Geologic map of New Mexico, series unknown, New Mexico Bureau of Geology and Mineral Resources, scale 1:500,000.

New Mexico Energy, Minerals and Natural Resources Department, 2012, OCD Imaging: <https://ocdimage.emnrd.state.nm.us/imaging/AEOrderFileView.aspx?appNo=pENV000003RP95> (accessed January 2021).

New Mexico Office of the State Engineer, 2010, New Mexico Water Rights Reporting System: <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html> (accessed January 2021).

Robson, S. G. and Banta, E.R: Groundwater Atlas of the United States: Arizona, Colorado, New Mexico, Utah (HA 730-C) US Geol. Survey, Reston, Virginia, 1995.

Smith, L.N. and Lucas, S. G., 1991, Stratigraphy, sedimentology, and paleontology of the lower Eocene San Jose Formation in the central portion of the San Juan Basin, northwestern New Mexico: New Mexico Bureau of Geology and Mineral Resources, Bulletin 126.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of the San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6, 70 p.

Stone, W.J., 2002, Ground water and energy development in the San Juan Basin: New Mexico Bureau of Geology and Mineral Resources, Decision Makers Field Conference 2002 Guidebook, p.36.

United States Department of Agriculture National Resources Conservation Service, 2019, Web Soil Survey: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (accessed January 2021).

U.S. Fish & Wildlife Service, 2020, Wetlands Mapper: <https://www.fws.gov/wetlands/data/mapper.html> (accessed January 2021).

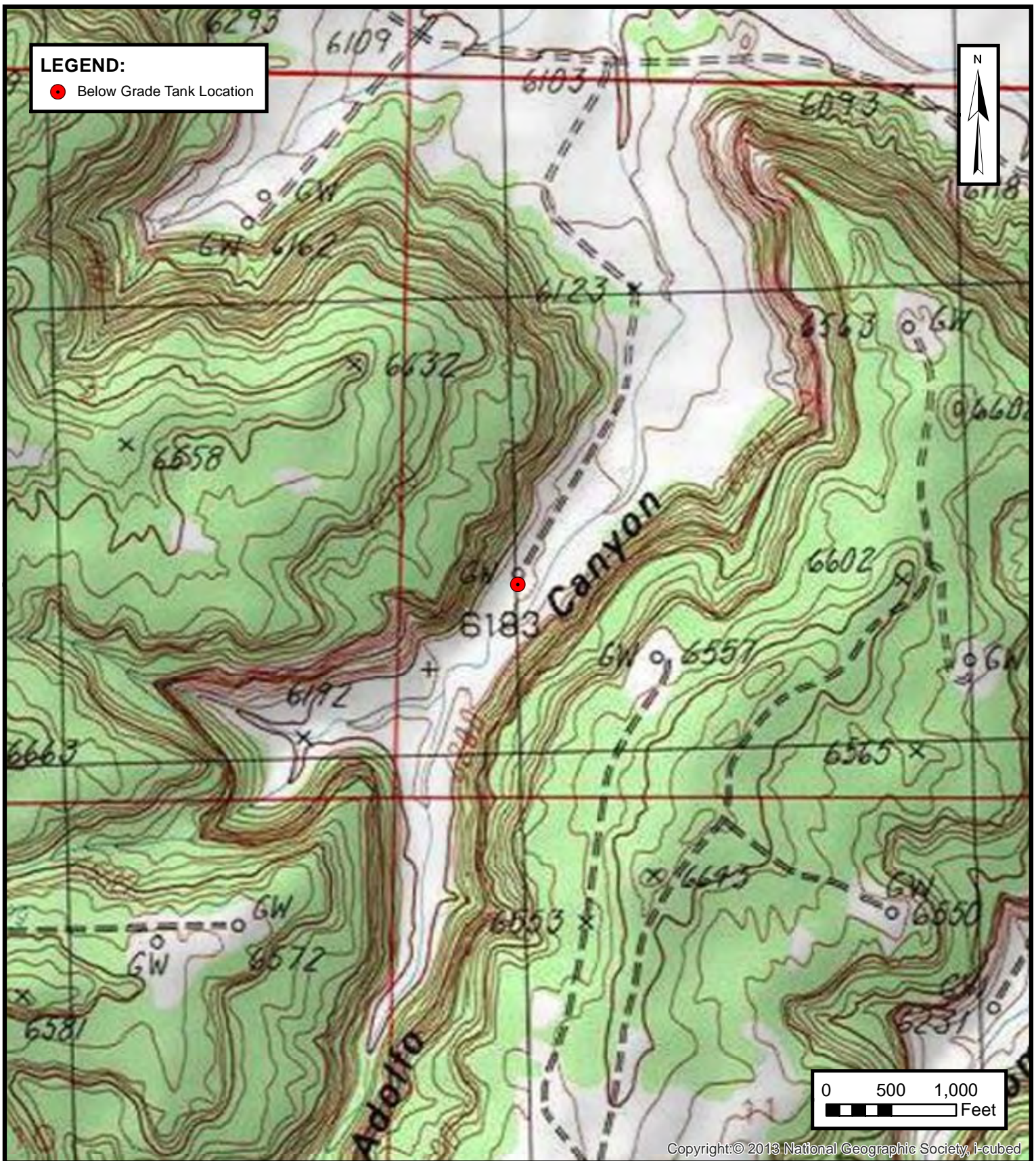
U.S. Geological Survey The National Map, 2019, ArcGIS Online Map Viewer: <https://apps.nationalmap.gov/viewer/> (accessed January 2021).



## APPENDIX A

### Figures





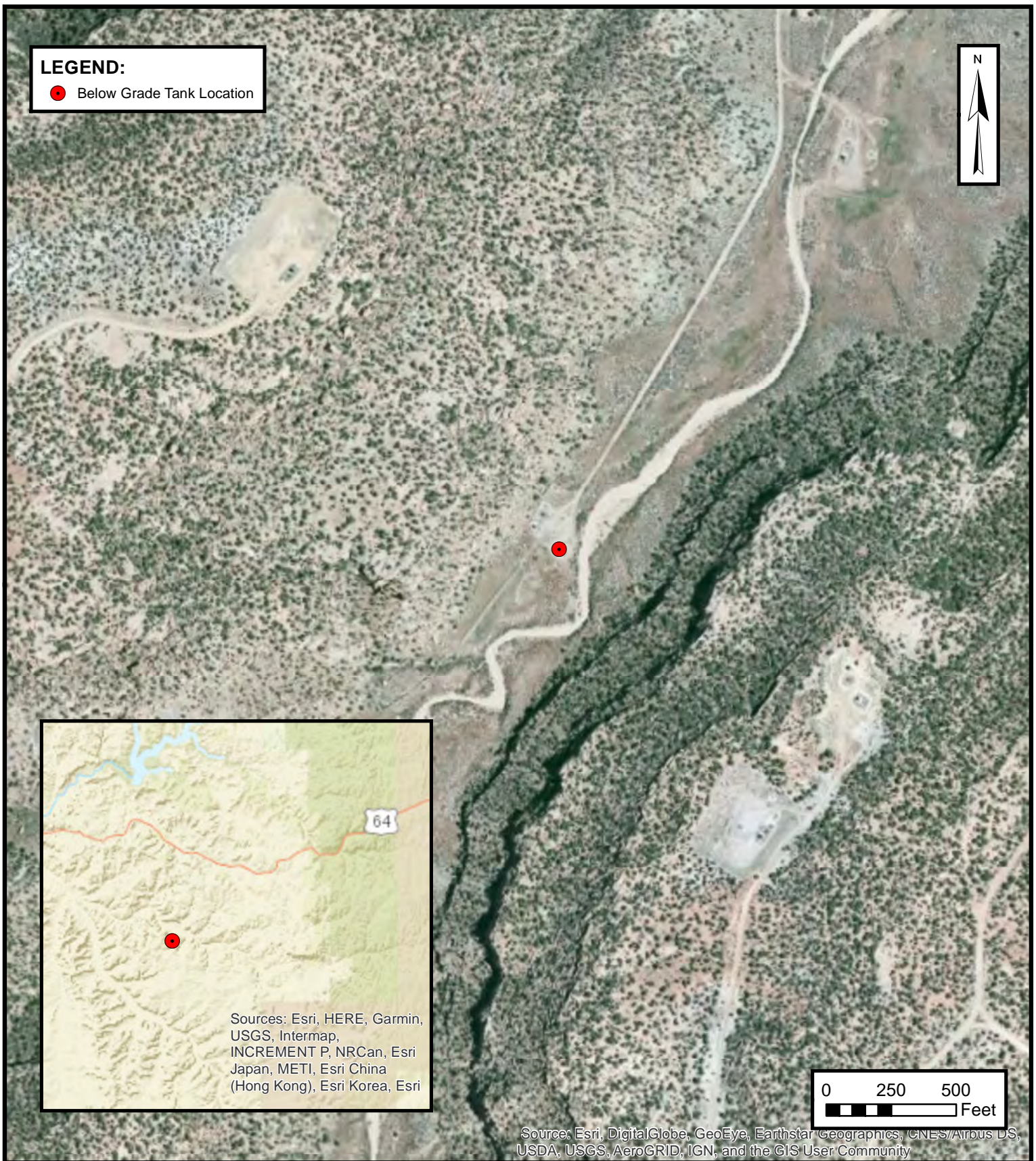
**ENSOLUM**  
Environmental & Hydrogeologic Consultants

**TOPOGRAPHIC MAP**  
ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

**FIGURE**  
**1**









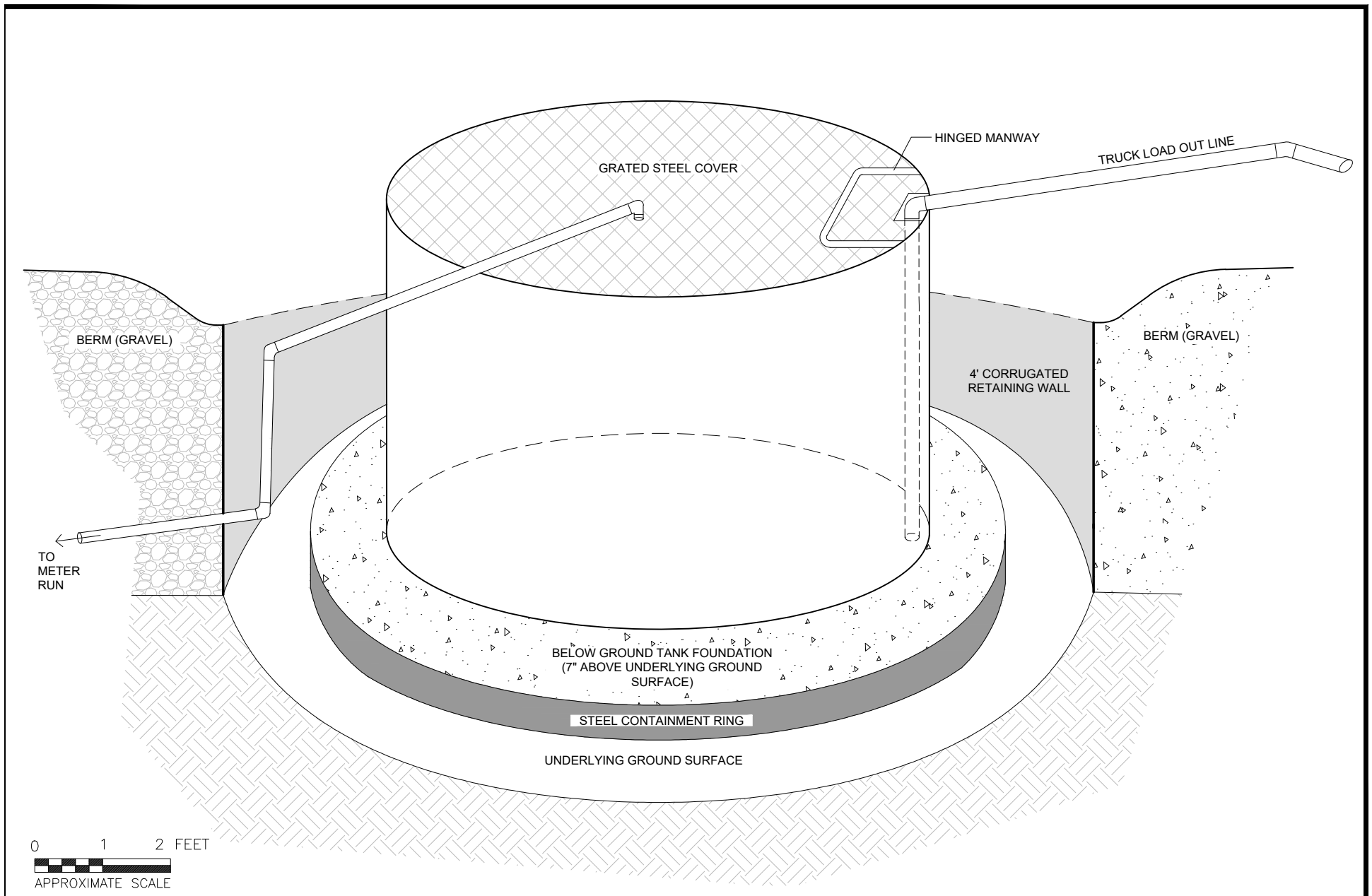
### SITE MAP

ENTERPRISE FIELD SERVICES, LLC  
 SAN JUAN 28-7 UNIT #130  
 SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
 36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

FIGURE

3



### BELOW-GRADE TANK SCHEMATIC

ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

FIGURE

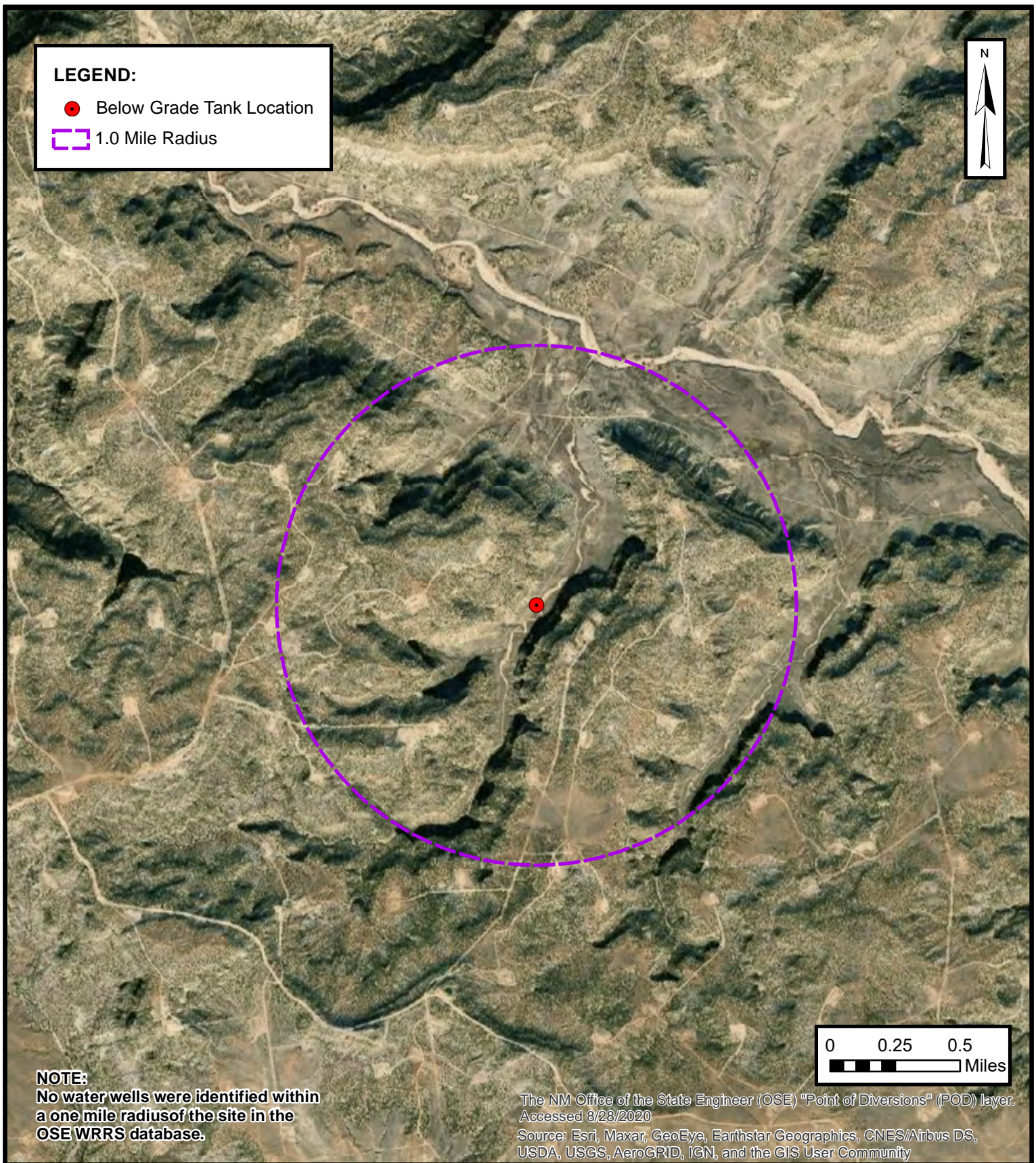
4



## APPENDIX B

### Siting Figures and Documentation



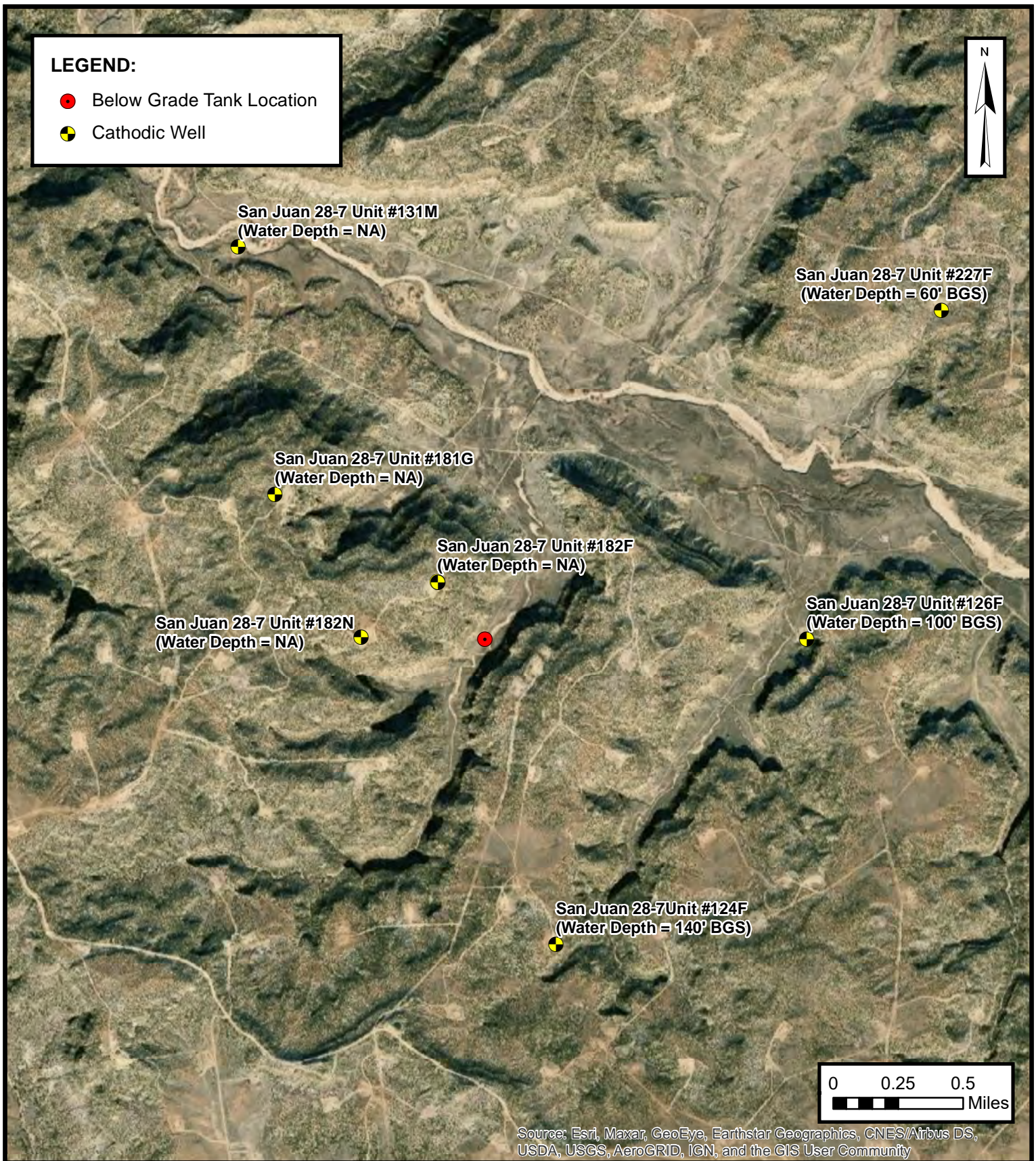
**1.0 MILE RADIUS WATER WELL MAP**

ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

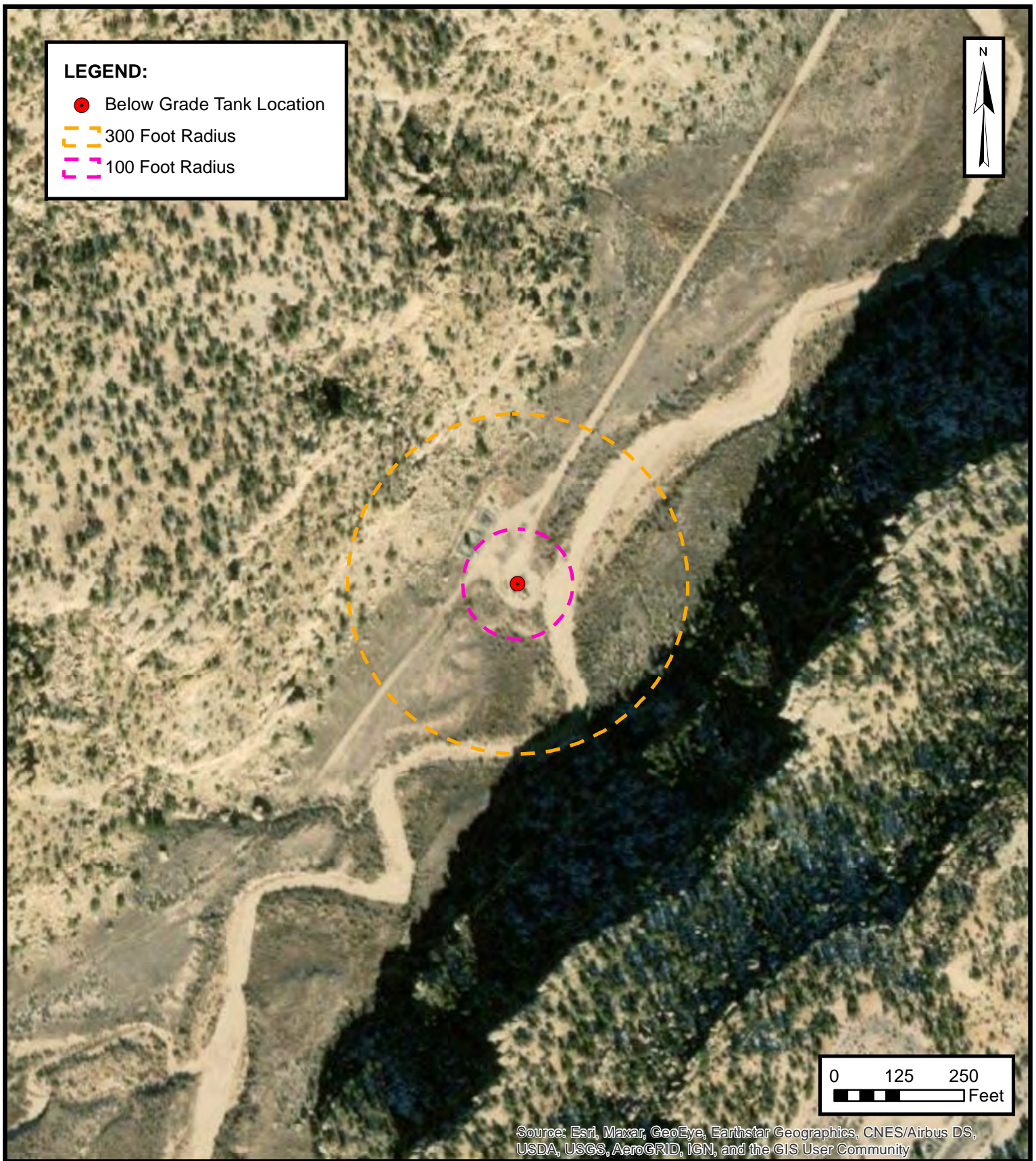
PROJECT NUMBER: 05A1226132

**FIGURE****A**









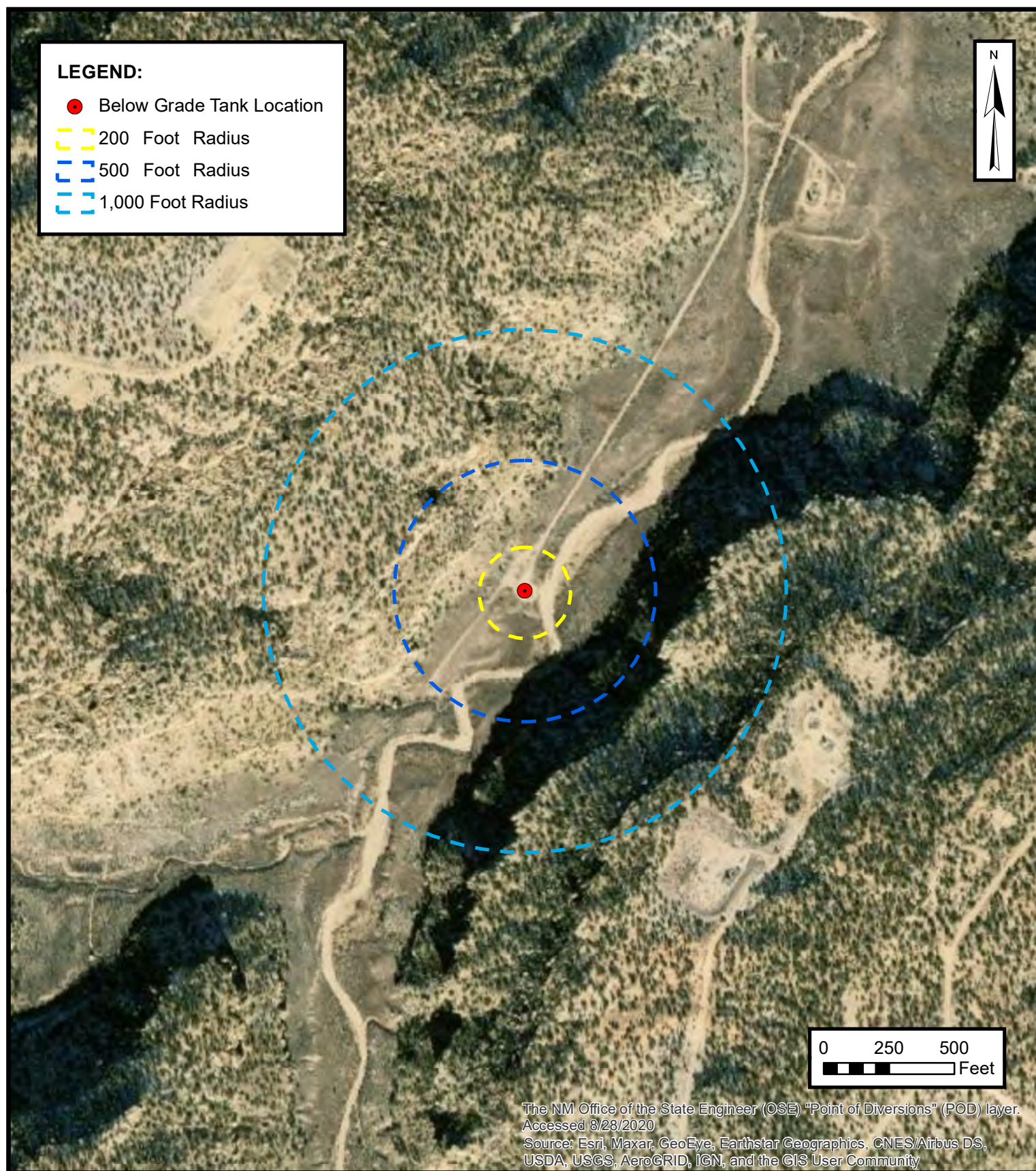
#### WATERCOURSE AND DRAINAGE IDENTIFICATION

ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

**FIGURE**  
**C**





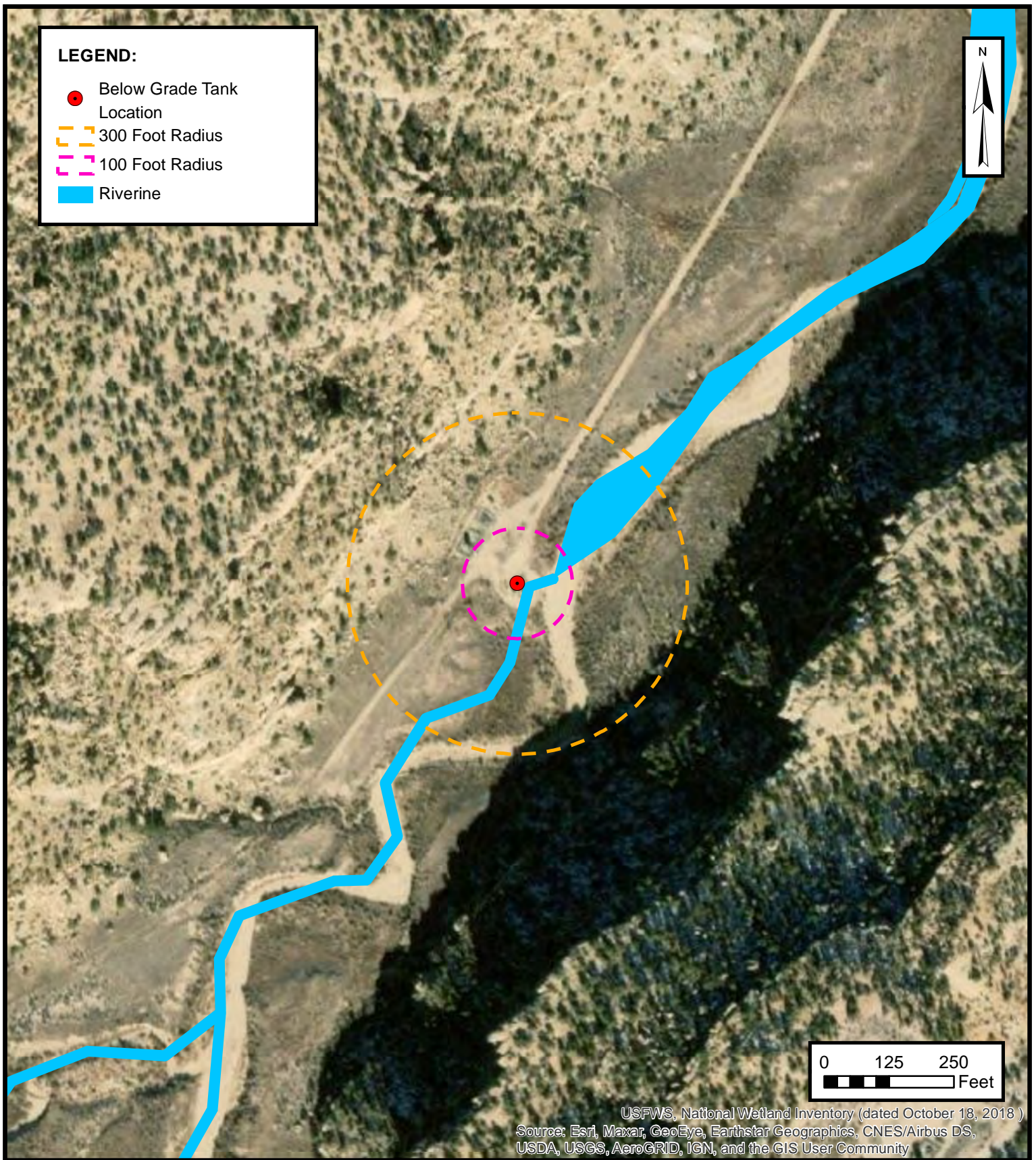
### WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

**FIGURE**  
**D**





#### WETLANDS

ENTERPRISE FIELD SERVICES, LLC  
SAN JUAN 28-7 UNIT #130  
SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico  
36.600378° N, 107.549400° W

PROJECT NUMBER: 05A1226132

**FIGURE**  
**E**



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

---

No records found.

**PLSS Search:**

**Section(s):** 2, 1, 3, 10, 11, 12    **Township:** 27N    **Range:** 07W

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

---

1/11/21 2:04 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

---

No records found.

**PLSS Search:**

**Section(s):** 34, 35, 36

**Township:** 28N

**Range:** 07W

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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1/11/21 2:05 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT  
DATA SHEET: NORTHWESTERN NEW MEXICO

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATOR: COP  
FARMINGTON, NM 87401  
PHONE: 599-3400**LOCATION INFORMATION**

API NUMBER: 3003930635

WELL NAME OR PIPELINE SERVED: SAN JUAN 28-7 UNIT 182N LEGAL LOCATION: 03 027N 007W INSTALLATION DATE: 10/29/2013

PPCO. RECTIFIER NO.: FM-186A ADDITIONAL WELLS: #182M

TYPE OF LEASE: LEASE NUMBER: SF-078972

**GROUND BED INFORMATION**

TOTAL DEPTH: 300' CASING DIAMETER: 8" TYPE OF CASING: PVC CASING DEPTH: 20' CASING CEMENTED

TOP ANODE DEPTH: 182' BOTTOM ANODE DEPTH: 280'

ANODE DEPTHS: 182, 194, 206, 218, 230, 240, 250, 260, 270, 280

AMOUNT OF COKE: 167'

**WATER INFORMATION**

WATER DEPTH (1): N/A WATER DEPTH (2):

GAS DEPTH: CEMENT PLUGS:

RCVD NOV 20 '13  
OIL CONS. DIV.  
DIST. 3**OTHER INFORMATION**

VENT PERFORATIONS: 160' VENT PIPE DEPTH: 300'

REMARKS:

COKE DEPTH - 167'

IF ANY OF THE ABOVE INFORMATION IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING  
DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN  
AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.\* LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Wednesday, Nove

Ca

Page 1 of 1



COMPANY: ConocoPhillips  
 COMPANY REP.: JOHN TAFOYA  
 LOCATION: SAN JUAN 28-7 182 N  
 JOB NO.: 340140542  
 FOREMAN: RON LUNA  
 DRILLER: DARREL FERRIER

DATE: 10/29/2013  
 DIA. HOLE: 7 7/8  
 DEPTH: 300'  
 COKE TYPE: SW  
 # OF COKE: 50 BAGS  
 # OF BENTONITE: 0

CASING: SCH40 PVC  
 DIAMETER: 8"  
 CASING DEPTH: 20'  
 # OF ANODES: 10  
 ANODE TYPE: 2284Z  
 ANODE LEAD: HWMPE#8

**corrpro**®

RECTIFIER MFG: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 SERIAL #: \_\_\_\_\_  
 V-DC: \_\_\_\_\_ A-DC: \_\_\_\_\_

WELL LOG										ANODE PLACEMENT			
DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	ANODE NO.	ANODE DEPTH	AMPS W/O COKE	AMPS W/ COKE
0	SANDSTONE			CASING	250	SANDSTONE		2.10	#4 - 250'	1	280	2.20	4.60
5	SANDSTONE			CASING	255	SHALE		2.20		2	270	2.00	6.10
10	SANDSTONE			CASING	260	SHALE		2.00	#3 - 260'	3	260	2.10	6.20
15	SANDSTONE			CASING	265	SHALE		1.70		4	250	2.20	6.30
20	SANDSTONE			CASING	270	SHALE		2.20	#2 - 270'	5	240	1.60	5.10
25	SANDSTONE				275	SHALE		2.50		6	230	0.60	3.90
30	SANDSTONE				280	SHALE		2.30	#1 - 280'	7	218	0.60	3.30
35	SANDSTONE				285	SHALE		2.20		8	206	0.40	3.20
40	SANDSTONE				290	SHALE				9	194	0.80	3.20
45	SANDSTONE				295	SHALE				10	182	0.50	2.90
50	SANDSTONE				300	SHALE				11			
55	SANDSTONE				305					12			
60	SANDSTONE				310					13			
65	SANDSTONE				315					14			
70	SANDSTONE				320					15			
75	SANDSTONE				325					16			
80	SANDSTONE		1.40		330					17			
85	SANDSTONE		1.50		335					18			
90	SANDSTONE		1.40		340					19			
95	SANDSTONE		1.30		345					20			
100	SANDSTONE		1.40		350					21			
105	SANDY SHALE		1.00		355					22			
110	SANDY SHALE		0.70		360					23			
115	SANDSTONE		0.60		365					24			
120	SANDSTONE		0.40		370					25			
125	SANDSTONE		0.40		375								
130	SANDSTONE		0.50		380								
135	SANDSTONE		0.50		385								
140	SANDSTONE		0.70		390								
145	SANDSTONE		0.80		395								
150	SANDSTONE		0.50		400								
155	SANDSTONE		0.40		405								
160	SANDSTONE		0.30		410								
165	SANDSTONE		0.30		415								
170	SANDSTONE		0.30		420								
175	SANDSTONE		0.30		425								
180	SANDSTONE		0.40	#10 - 182'	430								
185	SANDY SHALE		0.40		435								
190	SANDY SHALE		0.30		440								
195	SANDSTONE		0.80	#9 - 194'	445								
200	SANDSTONE		0.70		450								
205	SANDY SHALE		0.40	#8 - 206'	455								
210	SANDY SHALE		0.40		460								
215	SANDSTONE		0.60		465								
220	SANDSTONE		0.50	#7 - 218'	470								
225	SANDSTONE		0.60		475								
230	SANDSTONE		0.80	#6 - 230'	480								
235	SANDSTONE		1.10		485								
240	SANDSTONE		1.70	#5 - 240'	490								
245	SANDSTONE		2.00		495								
										GROUNDBED RESISTANCE			
										TOTAL VOLTS:		13.80	
										TOTAL AMPS:		13.00	
												1.06	OHMS
										SITE ELEVATION:		6591'	
										WATER LEVEL #1:		N/A	
										WATER LEVEL #2:		N/A	
										COKE LEVEL:		167'	
										EXTRA CASING USED:		N/A	
										ADDITIONAL COMMENTS:			
										0-20' - CASING			
										20-250' - DRILL DRY			
										250-300' - INJECT WATER			



# OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT DATA SHEET: NORTHWESTERN NEW MEXICO

OPERATOR: ConocoPhillips CO.  
FARMINGTON, NM 87401  
PHONE: 599-3400

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

## LOCATION INFORMATION

API Number

30-039-26942

WELL NAME OR PIPELINE SERVED:

28-7 126F

LEGAL LOCATION:

1-27-7

INSTALLATION DATE:

3/24/2004

PPCO. RECTIFIER NO.:

FM-137A

ADDITIONAL WELLS:

TYPE OF LEASE:

FEDERAL

LEASE NUMBER:

SF-079321-A

## GROUND BED INFORMATION

TOTAL DEPTH:

295

CASING DIAMETER:

8-IN

TYPE OF CASING:

PVC

CASING DEPTH:

20'

CASING CEMENTED:

☐

TOP ANODE DEPTH:

205

BOTTOM ANODE DEPTH:

295

ANODE DEPTHS:

205,215,225,235,245,255,265,275,285,295

AMOUNT OF COKE:

2200#

## WATER INFORMATION

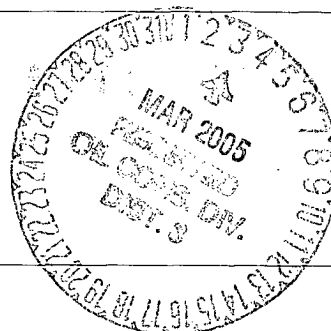
WATER DEPTH (1):

100

WATER DEPTH (2):

GAS DEPTH:

CEMENT PLUGS:



## OTHER INFORMATION

TOP OF VENT PERFORATIONS:

120

VENT PIPE DEPTH:

300

REMARKS:

IF ANY OF THE ABOVE DATA IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.

\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE

IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Tuesday, January

Page 72 of 927

**OCD CATHODIC PROTECTION DEEPWELL GROUNDBED REPORT DIST. 3**  
**DATA SHEET: NORTHWESTERN NEW MEXICO**OPERATOR: ConocoPhillips CO.  
FARMINGTON, NM 87401  
PHONE: 599-3400

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

**LOCATION INFORMATION**

API Number

3003927068

WELL NAME OR PIPELINE SERVED: 28-7 124 F      LEGAL LOCATION: 11-27-7      INSTALLATION DATE: 4/27/2006

PPCO RECTIFIER NO.: FM-1033A      ADDITIONAL WELLS: N/A

TYPE OF LEASE: FEDERAL      LEASE NUMBER: NMSF078496A

**GROUND BED INFORMATION**

TOTAL DEPTH: 360      CASING DIAMETER: 8-IN      TYPE OF CASING: PVC      CASING DEPTH: 20      CASING CEMENTED: ☐

TOP ANODE DEPTH: 180      BOTTOM ANODE DEPTH: 350

ANODE DEPTHS: 180,190,200,210,220,230,250,260,270,300,310,320,330,340,350

AMOUNT OF COKE: 2900#

**WATER INFORMATION**

WATER DEPTH (1): 140      WATER DEPTH (2):

GAS DEPTH:      CEMENT PLUGS:

**OTHER INFORMATION**

TOP OF VENT PERFORATIONS: 220'      VENT PIPE DEPTH: 360

REMARKS: START UP ON 5-4-06. STATIC READ -.756

IF ANY OF THE ABOVE DATA IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.

\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Monday, March 26

Page 56 of 1112

OCD CATHODIC PROTECTION DEEPWELL GROUNDBED REPORT DIST. 3  
DATA SHEET: NORTHWESTERN NEW MEXICO

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATOR: ConocoPhillips CO.  
FARMINGTON, NM 87401  
PHONE: 599-3400**LOCATION INFORMATION**

API Number

~~300327260~~

30-039-27261

WELL NAME OR PIPELINE SERVED: 28-7 227F LEGAL LOCATION: 36-28-7 INSTALLATION DATE: 5/25/2006

PPGO RECTIFIER NO.: FM-1318A ADDITIONAL WELLS: N/A

TYPE OF LEASE: FEDERAL LEASE NUMBER: SF-079294

**GROUND BED INFORMATION**

TOTAL DEPTH: 320 CASING DIAMETER: 8-IN TYPE OF CASING: PVC CASING DEPTH: CASING CEMENTED: ☐

TOP ANODE DEPTH: 190 BOTTOM ANODE DEPTH: 310

ANODE DEPTHS: 190,200,210,230,240,250,280,290,300,310

AMOUNT OF COKE: 2500#

**WATER INFORMATION**

WATER DEPTH (1): 60 WATER DEPTH (2):

GAS DEPTH: CEMENT PLUGS:

**OTHER INFORMATION**

TOP OF VENT PERFORATIONS: 180 VENT PIPE DEPTH: 320

REMARKS:

IF ANY OF THE ABOVE DATA IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.

\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Monday, March 26

Page 43 of 1112

**OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT  
DATA SHEET: NORTHWESTERN NEW MEXICO**

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATOR: COP  
FARMINGTON, NM 87401  
PHONE: 599-3400**LOCATION INFORMATION**

API NUMBER: 3003925547

WELL NAME OR PIPELINE SERVED: SAN JUAN 28-7 UNIT 131M LEGAL LOCATION: 34 028N 007W INSTALLATION DATE: 10/17/2013

PPCO. RECTIFIER NO.: 10639W ADDITIONAL WELLS:

TYPE OF LEASE: LEASE NUMBER: NOT PROVIDED

**GROUND BED INFORMATION**

TOTAL DEPTH: 300' CASING DIAMETER: 8" TYPE OF CASING: PVC CASING DEPTH: 140' CASING CEMENTED ■

TOP ANODE DEPTH: 185' BOTTOM ANODE DEPTH: 278'

ANODE DEPTHS: 185, 198, 208, 218, 228, 238, 248, 258, 268, 278

AMOUNT OF COKE: 50 BAGS

**WATER INFORMATION**

WATER DEPTH (1): N/A WATER DEPTH (2): —

GAS DEPTH: — CEMENT PLUGS: —

RCVD NOV 20 '13  
OIL CONS. DIV.  
DIST. 3**OTHER INFORMATION**

TOP OF VENT PERFORATIONS: 160' VENT PIPE DEPTH: 300'

REMARKS:  
COKE DEPTH 170'IF ANY OF THE ABOVE INFORMATION IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING  
DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN  
AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Wednesday, Nove

Ca

Page 1 of 1

COMPANY: ConocoPhillips  
 COMPANY REP.: JOHN TAFOYA  
 LOCATION: SAN JUAN 28-7 #131M  
 JOB NO.: 340140470  
 FOREMAN: RON LUNA  
 DRILLER: DARREL FERRIER

DATE: 10/17/2013  
 DIA. HOLE: 7 7/8  
 DEPTH: 300'  
 COKE TYPE: SW  
 # OF COKE: 50 BAGS  
 # OF BENTONITE: 0

CASING: SCH40 PVC  
 DIAMETER: 8"  
 CASING DEPTH: 140'  
 # OF ANODES: 10  
 ANODE TYPE: 2284Z  
 ANODE LEAD: HWMPE#8

**corrpro**

RECTIFIER MFG: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 SERIAL #: \_\_\_\_\_  
 V-DC: \_\_\_\_\_ A-DC: \_\_\_\_\_

WELL LOG										ANODE PLACEMENT			
DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	ANODE NO.	ANODE DEPTH	AMPS W/O COKE	AMPS W/ COKE
0	Brown Sand			Casing	250	Shale & Grey Sand Stone		0.80	#4-248	1	278	1.10	2.90
5	Brown Sand			Casing	255	Shale & Grey Sand Stone		0.80		2	268	1.60	4.30
10	Brown Sand			Casing	260	Shale & Grey Sand Stone		0.90	#3-258	3	258	0.80	3.80
15	Brown Sand			Casing	265	Shale & Grey Sand Stone		1.40		4	248	0.80	4.00
20	Brown Sand			Casing	270	Shale & Grey Sand Stone		1.70	#2-268	5	238	0.80	4.20
25	Brown Sand			Casing	275	Shale & Grey Sand Stone		1.10		6	228	1.70	5.60
30	Brown Sand			Casing	280	Shale & Grey Sand Stone		1.00	#1-278	7	218	2.00	6.40
35	Brown Sand			Casing	285	Shale & Grey Sand Stone		0.90		8	208	1.50	5.70
40	Brown Sand			Casing	290	Shale & Grey Sand Stone				9	198	0.80	4.30
45	Brown Sand			Casing	295	Shale & Grey Sand Stone				10	185	0.60	3.10
50	Brown Sand			Casing	300	Shale & Grey Sand Stone				11			
55	Brown Sand			Casing	305					12			
60	Brown Sand			Casing	310					13			
65	Brown Sand			Casing	315					14			
70	Brown Sand			Casing	320					15			
75	Brown Sand			Casing	325					16			
80	Brown Sand			Casing	330					17			
85	Brown Sand			Casing	335					18			
90	Brown Sand			Casing	340					19			
95	Brown Sand			Casing	345					20			
100	Brown Sand			Casing	350					21			
105	Brown Sand			Casing	355					22			
110	Brown Sand			Casing	360					23			
115	Brown Sand			Casing	365					24			
120	Brown Sand			Casing	370					25			
125	Brown Sand			Casing	375								
130	Brown Sand		0.90	Casing	380								
135	Green Sand Stone		0.90	Casing	385								
140	Green Sand Stone		1.10	Casing	390								
145	Green Sand Stone		1.70		395								
150	Green Sand Stone		1.90		400								
155	Green Sand Stone		1.20		405								
160	Green Sand Stone		0.90		410								
165	Green Sand Stone		0.80		415								
170	Green Sand Stone		0.70		420								
175	Green Sand Stone		0.70		425								
180	Green Sand Stone		0.70		430								
185	Grey Sand Stone		0.70	#10-185	435								
190	Grey Sand Stone		0.80		440								
195	Grey Sand Stone		0.90		445								
200	Grey Sand Stone		1.00	#9-198	450								
205	Grey Sand Stone		1.60		455								
210	Grey Sand Stone		2.30	#8-208	460								
215	Grey Sand Stone		2.00		465								
220	Grey Sand Stone		2.10	#7-218	470								
225	Sandy Shale		1.60		475								
230	Sandy Shale		0.80	#6-228	480								
235	Sandy Shale		0.80		485								
240	Sandy Shale		0.90	#5-238	490								
245	Sandy Shale		0.90		495								

# GROUND BED RESISTANCE

TOTAL VOLTS: 14.00

TOTAL AMPS: 13.50

1.04 OHMS

SITE ELEVATION: N/A

WATER LEVEL #1: N/A

WATER LEVEL #2:

COKE LEVEL: 170'

EXTRA CASING USED:

ADDITIONAL COMMENTS:

MUD DRILL 130' CASING HOLE

MUD DRILL - 130' - 300'

OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT  
DATA SHEET: NORTHWESTERN NEW MEXICO

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATOR: COP  
FARMINGTON, NM 87401  
PHONE: 599-3400**LOCATION INFORMATION**

API NUMBER: 3003927000

WELL NAME OR PIPELINE SERVED: SAN JUAN 28-7 UNIT 182F LEGAL LOCATION: 03 027N 007W INSTALLATION DATE: 12/16/2013

PPCO. RECTIFIER NO.: 10661W ADDITIONAL WELLS: #270

TYPE OF LEASE: LEASE NUMBER: NOT PROVIDED

**GROUND BED INFORMATION**

TOTAL DEPTH: 300' CASING DIAMETER: 8" TYPE OF CASING: PVC CASING DEPTH: 20' CASING CEMENTED ■

TOP ANODE DEPTH: 172' BOTTOM ANODE DEPTH: 280'

ANODE DEPTHS: 172, 184, 196, 208, 220, 232, 244, 256, 268, 280

AMOUNT OF COKE: 50 BAGS

**WATER INFORMATION**

WATER DEPTH (1): N/A WATER DEPTH (2): —

GAS DEPTH: — CEMENT PLUGS: —

RCVD DEC 31 '13  
OIL CONS. DIV.  
DIST. 3**OTHER INFORMATION**

TOP OF VENT PERFORATIONS: 160' VENT PIPE DEPTH: 300'

REMARKS:  
150' - COKE DEPTHIF ANY OF THE ABOVE INFORMATION IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING  
DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN  
AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Wednesday, Nov 11

ca

Page 1 of 1

COMPANY: ConocoPhillips  
 COMPANY REP.: JOHN TAFOYA  
 LOCATION: SAN JUAN 28-7 UNIT 182F  
 JOB NO.: 340140563  
 FOREMAN: RON LUNA  
 DRILLER: DARREL FERRIER

DATE: 12/16/2013  
 DIA. HOLE: 7 7/8  
 DEPTH: 300'  
 COKE TYPE: SW  
 # OF COKE: 50 BAGS  
 # OF BENTONITE: 0

CASING: SCH40 PVC  
 DIAMETER: 8"  
 CASING DEPTH: 20'  
 # OF ANODES: 10  
 ANODE TYPE: 2284Z  
 ANODE LEAD: HWMPE#8

**corrpro**

RECTIFIER MFG: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 SERIAL #: \_\_\_\_\_

V-DC: \_\_\_\_\_ A-DC: \_\_\_\_\_

WELL LOG										ANODE PLACEMENT			
DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	ANODE NO.	ANODE DEPTH	AMPS W/O COKE	AMPS W/ COKE
0	BROWN SAND			CASING	250	GREY SHALE		2.50		1	280	1.90	3.00
5	BROWN SAND			CASING	255	GREY SHALE		2.40	#3 - 256'	2	268	1.50	4.60
10	BROWN SAND			CASING	260	YELLOW SANDSTONE		2.40		3	256	2.60	5.60
15	BROWN SAND			CASING	265	YELLOW SANDSTONE		1.70		4	244	2.50	5.30
20	BROWN SAND			CASING	270	GREY SHALE		1.10	#2 - 268'	5	232	0.70	3.20
25	BROWN SAND				275	GREY SHALE		1.20		6	220	1.00	3.20
30	BROWN SAND				280	GREY SHALE		1.70	#1 - 280'	7	208	0.80	2.80
35	BROWN SAND				285	GREY SHALE		1.60		8	196	2.10	4.00
40	BROWN SAND				290	YELLOW SANDSTONE		1.30		9	184	1.60	4.10
45	BROWN SAND				295	YELLOW SANDSTONE				10	172	3.70	5.30
50	BROWN SAND				300					11			
55	BROWN SAND				305					12			
60	BLACK SHALE				310					13			
65	BLACK SHALE				315					14			
70	GREY SAND				320				TD: 297'	15			
75	GREY SAND				325				Vent Pipe Depth: 300'	16			
80	GREY SAND		2.10		330					17			
85	GREY SAND		2.20		335					18			
90	GREY SAND		2.20		340					19			
95	GREY SAND		2.30		345					20			
100	GREY SAND		2.00		350					21			
105	GREY SAND		2.70		355					22			
110	BROWN SAND		2.30		360					23			
115	BROWN SAND		2.20		365					24			
120	GREY SHALE		3.50		370					25			
125	GREY SHALE		3.50		375								
130	YELLOW SHALE		2.90		380								
135	YELLOW SHALE		2.10		385								
140	YELLOW SANDSTONE		1.30		390								
145	YELLOW SANDSTONE		0.80		395								
150	YELLOW SANDSTONE		0.60		400								
155	YELLOW SANDSTONE		0.60		405								
160	YELLOW SANDSTONE		0.50		410								
165	YELLOW SANDSTONE		0.50		415								
170	GREY SHALE		3.20	#10 - 172'	420								
175	GREY SHALE		2.20		425								
180	GREY SHALE		1.30		430								
185	GREY SHALE		1.40	#9 - 184'	435								
190	YELLOW SANDSTONE		1.20		440								
195	YELLOW SANDSTONE		2.00		445								
200	YELLOW SANDSTONE		1.70	#8 - 196'	450								
205	YELLOW SANDSTONE		1.00		455								
210	YELLOW SANDSTONE		0.60	#7 - 208'	460								
215	YELLOW SANDSTONE		0.50		465								
220	GREY SHALE		0.80	#6 - 220'	470								
225	GREY SHALE		0.80		475								
230	GREY SHALE		0.70	#5 - 232'	480								
235	GREY SHALE		1.30		485								
240	GREY SHALE		2.10		490								
245	GREY SHALE		2.50	#4 - 244'	495								

#### GROUND BED RESISTANCE

TOTAL VOLTS: 13.80  
 TOTAL AMPS: 13.80

1.00 OHMS

SITE ELEVATION: 6573'  
 WATER LEVEL #1: N/A  
 WATER LEVEL #2: N/A  
 COKE LEVEL: 150'  
 EXTRA CASING USED: N/A

ADDITIONAL COMMENTS:  
 0-20' - CASING  
 20-300' - DRILL DRY



**OCD CATHODIC PROTECTION DEEPWELL GROUND BED REPORT  
DATA SHEET: NORTHWESTERN NEW MEXICO**

SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE

OPERATOR: COP  
FARMINGTON, NM 87401  
PHONE: 599-3400**LOCATION INFORMATION**API NUMBER: **3003926880**WELL NAME OR PIPELINE SERVED: **SAN JUAN 28-7 UNIT 181G** LEGAL LOCATION: **03 027N 007W** INSTALLATION DATE: **12/12/2013**PPCO. RECTIFIER NO.: **10665W** ADDITIONAL WELLS: TYPE OF LEASE:  LEASE NUMBER: **NOT PROVIDED****GROUND BED INFORMATION**TOTAL DEPTH: **300'** CASING DIAMETER: **8"** TYPE OF CASING: **PVC** CASING DEPTH: **20'** CASING CEMENTED ☒TOP ANODE DEPTH: **172'** BOTTOM ANODE DEPTH: **280'**ANODE DEPTHS: **172, 184, 196, 208, 220, 232, 244, 256, 268, 280**AMOUNT OF COKE: **50 BAGS****WATER INFORMATION**WATER DEPTH (1): **N/A** WATER DEPTH (2): GAS DEPTH:  CEMENT PLUGS: RCVD DEC 31 '13  
OIL CONS. DIV.  
DIST. 3**OTHER INFORMATION**TOP OF VENT PERFORATIONS: **160'** VENT PIPE DEPTH: **300'**REMARKS: 

**150' - COKE DEPTH**

IF ANY OF THE ABOVE INFORMATION IS UNAVAILABLE, PLEASE INDICATE SO. COPIES OF ALL LOGS, INCLUDING DRILLERS LOGS, WATER ANALYSIS, AND WELL BORE SCHEMATICS SHOULD BE SUBMITTED WHEN AVAILABLE. UNPLUGGED UNABANDONED WELLS ARE TO BE INCLUDED.

\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

Wednesday, Nov 10

ca

Page 1 of 1

COMPANY: ConocoPhillips  
 COMPANY REP.: JOHN TAFOYA  
 LOCATION: SAN JUAN 28-7 UNIT 181G  
 JOB NO.: 340140565  
 FOREMAN: RON LUNA  
 DRILLER: DARREL FERRIER

DATE: 12/12/2013  
 DIA. HOLE: 7 7/8  
 DEPTH: 300'  
 COKE TYPE: SW  
 # OF COKE: 50 BAGS  
 # OF BENTONITE: 0

CASING: SCH40 PVC  
 DIAMETER: 8"  
 CASING DEPTH: 20'  
 # OF ANODES: 10  
 ANODE TYPE: 2284Z  
 ANODE LEAD: HWMPE#8

**corrpro**®

RECTIFIER MFG: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 SERIAL #: \_\_\_\_\_  
 V-DC: \_\_\_\_\_ A-DC: \_\_\_\_\_

WELL LOG										ANODE PLACEMENT			
DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	DEPTH FT.	DRILLERS LOG - SOIL TYPE	VOLTS	AMPS	COMMENTS / ANODE #	ANODE NO.	ANODE DEPTH	AMPS W/O COKE	AMPS W/ COKE
0	TAN SANDSTONE			CASING	250	TAN SANDSTONE		0.40		1	280	0.60	1.80
5	TAN SANDSTONE			CASING	255	TAN SANDSTONE		0.40	#3 - 256'	2	268	0.70	1.90
10	TAN SANDSTONE			CASING	260	TAN SANDSTONE		0.40		3	256	0.90	2.50
15	TAN SANDSTONE			CASING	265	TAN & BLACK SANDY SHALE		0.40		4	244	0.50	2.50
20	TAN SANDSTONE			CASING	270	TAN & BLACK SANDY SHALE		0.40	#2 - 268'	5	232	1.00	3.30
25	TAN SANDSTONE				275	TAN & BLACK SANDY SHALE		0.60		6	220	1.50	4.20
30	TAN SANDSTONE				280	TAN & BLACK SANDY SHALE		0.50	#1 - 280'	7	208	1.90	4.30
35	TAN SANDSTONE				285	TAN & BLACK SANDY SHALE		0.50		8	196	1.20	3.80
40	TAN SANDSTONE				290	TAN & BLACK SANDY SHALE		0.40		9	184	1.70	4.30
45	TAN SANDSTONE				295	TAN & BLACK SANDY SHALE				10	172	2.10	4.60
50	TAN SANDSTONE				300	TAN & BLACK SANDY SHALE				11			
55	GREY SHALE				305					12			
60	GREY SHALE				310					13			
65	GREY SHALE				315					14			
70	GREY SHALE				320				TD: 290'	15			
75	TAN SANDSTONE				325				Vent Pipe Depth: 300'	16			
80	TAN SANDSTONE		0.20		330					17			
85	TAN SANDSTONE		0.20		335					18			
90	TAN SANDSTONE		0.00		340					19			
95	TAN SANDSTONE		0.40		345					20			
100	TAN SANDSTONE		0.70		350					21			
105	TAN SANDSTONE		0.60		355					22			
110	TAN SANDSTONE		0.90		360					23			
115	TAN SANDSTONE		0.50		365					24			
120	TAN SANDSTONE		0.50		370					25			
125	TAN SANDSTONE		0.90		375								
130	TAN SANDSTONE		1.10		380								
135	TAN SANDSTONE		1.10		385								
140	TAN SANDSTONE		1.10		390								
145	TAN SANDSTONE		1.50		395								
150	TAN SANDSTONE		1.70		400								
155	GREY SANDY SHALE		1.80		405								
160	GREY SANDY SHALE		1.70		410								
165	GREY SANDY SHALE		1.40		415								
170	GREY SANDY SHALE		1.20	#10 - 172'	420								
175	GREY SANDY SHALE		1.10		425								
180	GREY SANDY SHALE		1.20		430								
185	GREY SANDY SHALE		1.10	#9 - 184'	435								
190	GREY SANDY SHALE		1.10		440								
195	GREY SANDY SHALE		1.10		445								
200	GREY SANDY SHALE		1.40	#8 - 196'	450								
205	GREY SANDY SHALE		1.20		455								
210	GREY SANDY SHALE		1.50	#7 - 208'	460								
215	GREY SANDY SHALE		0.80		465								
220	GREY SANDY SHALE		0.60	#6 - 220'	470								
225	GREY SANDY SHALE		0.50		475								
230	GREEN SANDY SHALE		0.50	#5 - 232'	480								
235	GREEN SANDY SHALE		0.70		485								
240	GREEN SANDY SHALE		0.60		490								
245	GREEN SANDY SHALE		0.50	#4 - 244'	495								

#### GROUND BED RESISTANCE

TOTAL VOLTS: 14.20  
 TOTAL AMPS: 9.80

1.45 OHMS

SITE ELEVATION: N/A  
 WATER LEVEL #1: N/A  
 WATER LEVEL #2: N/A  
 COKE LEVEL: 150'  
 EXTRA CASING USED: N/A

ADDITIONAL COMMENTS:  
 0-20' - CASING  
 20-300' - DRILL DRY



ATTACHMENTS

**Design and Construction Specifications**

A diagram of the below-grade tank is included as **Figure 4** in the attached report. Full piping diagrams for the out-of-service below-grade tank were not available.

**Operation Plan**

The Operation Plan is based on the "Operational Requirements" for below-grade tanks provided in Subsection A and Subsection D of 19.15.17.12 NMAC.

1. Enterprise will operate and maintain a below-grade tank to contain liquids and solids and maintain the integrity of the secondary containment system, to prevent contamination of fresh water and protect public health and the environment.
2. Enterprise shall not discharge into or store any hazardous waste in a below-grade tank.
3. If the below-grade tank develops a leak, Enterprise shall remove all liquids above the damage or leak within 48 hours of discovery, notify the appropriate division office pursuant to 19.15.29 NMAC and repair the damage or replace the below-grade tank as applicable.
4. Enterprise shall operate and install the below-grade tank to prevent the collection of surface water run-on.
5. Enterprise shall install, or maintain on site, an oil absorbent boom or other device to contain an unanticipated release.
6. Enterprise shall not allow the below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.
7. Enterprise shall remove any measurable layer of oil from the fluid surface of a below-grade tank.
8. Enterprise shall inspect the below-grade tank for leakage and damage at least monthly. Enterprise shall document the integrity of each tank at least annually and maintain a written record of the integrity for five years.
9. Enterprise shall maintain adequate freeboard to prevent overtopping of the below-grade tank.
10. If the below-grade tank does not demonstrate integrity or that the below-grade tank develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, Enterprise shall repair the damage or close the existing below-grade tank pursuant to the closure requirements of 19.15.17.13 NMAC.
11. If Enterprise plans to equip or retrofit the existing tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, Enterprise shall visually inspect the area beneath the below-grade tank during the retrofit and document any areas that are wet, discolored or showing other evidence of a release on form C-141. Enterprise shall measure and report to the division the concentration of contaminants in the wet or discolored soil with respect to the standards set forth in Table I of 19.15.17.13 NMAC. If there is no wet or discolored soil or if the concentration of contaminants in the wet or discolored soil is less than the standard set forth in Table I of 19.15.17.13 NMAC, then Enterprise shall proceed with the closure requirement of 19.15.17.13 NMAC prior to initiating the retrofit or replacement.

### **Closure and Reclamation Plan**

The Closure and Reclamation plan is based on the "Closure and Reclamation Requirements" for below-grade tanks provided in Subsection C and Subsection E through Subsection H of 19.15.17.13 NMAC.

1. Enterprise shall not commence closure without first obtaining approval of the closure plan submitted with the permit application or registration pursuant to 19.15.17.9 NMAC.
2. Enterprise shall close the below-grade tank by first removing all contents and, if applicable, synthetic liners and transferring the materials to a division approved facility.

#### **Disposal Facility Name and Permit Number (for liquids)**

**Name: Agua Moss, LLC**

**Permit No. NM-01-009**

3. Enterprise shall test the soil beneath the below-grade tank as follows:
  - a. A minimum of one five-point composite sample to include any obvious stained or wet soils, or other evidence of contamination shall be taken under the below-grade tank and the sample shall be analyzed for the constituents listed in Table I of 19.15.17.13 NMAC (see below).

<b>Applicable for Soils Beneath Below-Grade Tanks</b>		
Constituent	Method*	Limit**
Chloride	EPA 300.0	600 mg/kg
TPH (GRO+DRO+MRO)	EPA SW-846 Method 418.1	100 mg/kg
BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

\*Or other test methods approved by the division

\*\*Numerical limits or natural background level, whichever is greater

- b. If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and Enterprise must receive approval before proceeding with closure.
  - c. If all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, Enterprise can proceed to backfill pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.

#### **Closure Notice**

4. Enterprise shall notify the surface owner by certified mail, return receipt requested that Enterprise plans closure operations at least 72 hours, but not more than one week, prior to any closure operation. Notice shall include well name, API number and location. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.
5. Enterprise shall notify the appropriate division district office verbally and in writing at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include Enterprise's name and the location to be closure by unit letter, section, township, and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

**Closure Report**

6. Within 60 days of closure completion, Enterprise shall submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; and details on back-filling, capping and covering, where applicable. In the closure report, Enterprise will certify that all the information in the report and attachments is correct and that Enterprise has complied with all applicable closure requirements and conditions specified in the approved closure plan.

**Timing Requirements for Closure**

7. Within 60 days of cessation of operations, Enterprise shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.
8. Within six months of cessation of operation, Enterprise shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. If there is any equipment associated with the below-grade tank, then Enterprise shall remove the equipment, unless the equipment is required for some other purpose.

**Reclamation -Site Contouring**

9. Once Enterprise has closed or is no longer using the below-grade tank or an area associated with the below-grade tank, Enterprise shall reclaim the below-grade tank location and all areas associated with the below-grade tank including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. Enterprise shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Paragraph (2) of Subsection H of 19.15.17.13 NMAC, recontour the location and associated areas to a contour that approximates original contour and blends with the surrounding topography and re-vegetate according to Paragraph (5) of Subsection H of 19.15.17.13 NMAC.
10. Enterprise may propose an alternative to the re-vegetation or recontouring requirement if Enterprise demonstrates to the appropriate district office that the propose alternative provides equal or better prevention of erosion, and protection of fresh water, public health, and the environment. The proposed alternative shall be agreed upon by the surface owner. Enterprise shall submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division for approval.
11. Areas reasonably needed for production operations or for subsequent drilling operations shall be compacted, covered, paved, or otherwise stabilized and maintained in such a way as to minimize dust and erosion to the extent practicable.

**Reclamation – Soil Cover Designs**

12. The soil cover for closures after site contouring, where Enterprise has removed the below-grade tank and if necessary, remediated the soil beneath the below-grade tank to chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, shall consist of the background thickness of topsoil or one foot of suitable material, whichever is greater.
13. Enterprise shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

**Reclamation – Reclamation and Revegetation**

14. Reclamation of areas no longer in use. All areas disturbed by the closure of the below-grade tank, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.

15. Enterprise shall replace topsoils and subsoils to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of the below-gradetank.
16. Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

**Other Regulatory Requirements**

17. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of Enterprise subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.
18. Enterprise shall notify the division when reclamation and re-vegetation are complete.



3/2/2021

**State of New Mexico**  
**Energy, Minerals and Natural Resources Department**  
**Oil Conservation Division**



## Receipt of Fee Application Payment

**PO Number: 87T7T-210302-C-144B**

Payment Date: 3/2/2021 9:42:18 AM

Payment Amount: \$150.00

Payment Type: Credit Card

Application Type: Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (Below Grade Tanks)

Fee Amount: \$150.00

Application Status: Under OCD Review

OGRID: 241602

First Name: Jon

Last Name: Fields

Email: jefields@eprod.com

**IMPORTANT:** If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

Oil Conservation Division \* 1220 South St. Francis Drive \* Santa Fe, New Mexico 87505  
(505) 476-3441 \* ocd.fees@state.nm.us \* www.emnrd.state.nm.us/OCD

**Mendez, Brenda**

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**From:** Fields, Jon  
**Sent:** Tuesday, March 2, 2021 10:44 AM  
**To:** Long, Thomas; Stone, Brian; Mendez, Brenda  
**Subject:** FW: [EXTERNAL] OCD Receipt of Fee Application Payment  
**Attachments:** OCDReceiptOfFeePayment.pdf; San Juan 28-7 Unit 130\_BGT\_EPROD\_Final.pdf

Submitted.

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**From:** OCDOnline@state.nm.us <OCDOnline@state.nm.us>  
**Sent:** Tuesday, March 2, 2021 10:42 AM  
**To:** Fields, Jon <JEFIELDS@eprod.com>  
**Subject:** [EXTERNAL] OCD Receipt of Fee Application Payment

[Use caution with links/attachments]

Thank you for your fee application payment! Your receipt is attached.

**PO Number:** 87T7T-210302-C-144B  
**Payment Date:** 3/2/2021  
**Payment Amount:** \$150.00  
**Payment Type:** Credit Card

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**Application Type:** Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (Below Grade Tanks)  
**Fee Amount:** \$150.00  
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**OGRID:** 241602  
**First Name:** Jon  
**Last Name:** Fields  
**Email:** [jefields@eprod.com](mailto:jefields@eprod.com)

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Oil Conservation Division \* 1220 South St. Francis Drive \* Santa Fe, New Mexico 87505  
(505) 476-3441 \* [ocd.fees@state.nm.us](mailto:ocd.fees@state.nm.us) \* [www.emnrd.state.nm.us/OCD](http://www.emnrd.state.nm.us/OCD)

This is an automated email please do not reply.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 21874

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 21874
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By	Condition	Condition Date
cwhitehead	None	7/7/2021