BGT A

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

<u>Pit, Below-Grade Tank, or</u> <u>Proposed Alternative Method Permit or Closure Plan Application</u>

Type of action: \square 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

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.

| Operation Entermine Designation LLC OCDID # 151(19 |
|--|
| Operator: <u>Enterprise Products Operating, LLC</u> OGRID #: <u>151618</u> |
| Address: <u>P.O. Box 4324, Houston, TX 77210</u> |
| 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: <u>Rio Arriba</u> |
| Center of Proposed Design: Latitude <u>36.600378</u> Longitude <u>-107.549400</u> NAD83 |
| Surface Owner: 🔲 Federal 🔀 State 🗌 Private 🗌 Tribal Trust or Indian Allotment |
| 2. |
| <u>Pit</u>: 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: Thicknessmil LLDPE HDPE PVC Other |
| String-Reinforced |
| Liner Seams: 🗌 Welded 🗋 Factory 🗋 Other Volume: bbl Dimensions: L x W x D |
| 3. |
| S. 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: <u>Steel wall and bottom</u> |
| Secondary containment with leak detection 🗌 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off |
| 🗌 Visible sidewalls and liner 🔲 Visible sidewalls only 🛛 Other <u>7-inch lift present, overflow prevention unknown, visible sidewalls, liner unknown</u> |
| Liner type: Thickness <u>Unknown</u> mil HDPE PVC Other |
| |
| 4. |
| 4. |
| |
| Alternative Method: |
| Alternative Method: |
| Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. S. 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, |
| Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. S. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) |

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)

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

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

| 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 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached. Mydrogeologic 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 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) | cuments are 9 NMAC 15.17.9 NMAC |
| 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 doc attached. | .15.17.9 NMAC |
| | |

| ^{12.} <u>Permanent Pits Permit Application Checklist</u> : 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 attached. | documents are |
| 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 H₂S, 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 F | luid Management Pit |
| Alternative | fuld Management Fit |
| 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. <u>Waste Excavation and Removal Closure Plan Checklist</u> : (19.15.17.13 NMAC) Instructions: Each of the following items must be | attached to the |
| <i>closure plan. Please indicate, by a check mark in the box, that the documents are attached.</i> 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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. | |
| 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 | □ Yes □ No □ NA |
| Ground water is between 25-50 feet below the bottom of the buried waste | \square Yes \square No |
| - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | |
| 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 | ☐ Yes ☐ No ☐ 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). | 🗌 Yes 🗌 No |
| - Topographic map; Visual inspection (certification) of the proposed site | |
| 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 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. | 🗌 Yes 🗌 No |
| - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 300 feet of a wetland. | 🗌 Yes 🗌 No |
| US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | 🗌 Yes 🗌 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 | |
|---|--------------------------------------|
| | 🗌 Yes 🗌 No |
| Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | 🗋 Yes 🗌 No |
| Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological | |
| Society; Topographic map Within a 100-year floodplain. | 🗋 Yes 🗌 No |
| - FEMA map | 🗌 Yes 🗌 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 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 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - 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 cann 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 | .11 NMAC 15.17.11 NMAC |
| 17. Operator Application Contification | |
| 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 beli | ef |
| Jon F. Fields | |
| Name (Print): | ntal |
| Signature: Date: 3 2/202 | |
| | |
| jefields@eprod.com 713-381-6684 | |
| e-mail address: Telephone: | |
| e-mail address: Telephone: 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) | |
| e-mail address: Telephone: 18. OCD Approval: Permit Application (including closure plan) \blacksquare Closure Plan (only) OCD Conditions (see attachment) | 7, 2021 |
| e-mail address: Telephone: 18. OCD Approval: Permit Application (including closure plan) \square Closure Plan (only) \square OCD Conditions (see attachment) OCD D \bigcirc OLD b | 7, 2021 |
| c-mail address: | the closure report |
| c-mail address: Telephone: 18. OCD Approval: OCD Representative Signature: Closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Closure Plan (only) OCD Representative Signature: Closure Plan (only) OCD Representative Signature: Closure Plan (only) OCD Representative Signature: July Title: Environmental Specialist OCD Permit Number: BGT A 19. Closure Report (required within 60 days of closure completion): 19. Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. | the closure report |
| c-mail address: | the closure report. complete this |

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:

+)000

Ranee Deechilly Environmental Scientist

Umm

Kyle Summers, CPG Sr. Project Manager

Table of Contents

| 1.0 | INTRODUCTION | 1 |
|-----|--|---|
| | 1.1 Site Description & Background | 1 |
| 2.0 | SITING REQUIREMENTS | 1 |
| 3.0 | SITE CHARACTERIZATION | 3 |
| | 3.1 Regional Geology and Hydrogeology3.2 Local Geology and Hydrogeology | 3 |
| | 3.2 Local Geology and Hydrogeology | 3 |
| 4.0 | VARIANCE REQUEST | 4 |
| 5.0 | STANDARDS OF CARE, LIMITATIONS, AND RELIANCE | 4 |
| | 5.1 Standard of Care | 4 |
| | 5.2 Limitations5.3 Reliance | 4 |
| | 5.3 Reliance | 5 |

LIST OF APPENDICES

| Appendix A: | Figures | |
|--------------|---------------|--|
| | Figure 1 | Topographic Map |
| | Figure 2 | Site Vicinity Map |
| | Figure 3 | Site Map |
| | Figure 4 | Below-Grade Tank Schematic |
| Appendix B: | Siting Figu | ires and Documentation |
| | 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 C | Construction Specifications |
| | Operational F | • |

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

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

| Tank Information | | | | | | | |
|---|---------------------------------|--|--|--|--|--|--|
| Tank Capacity: | Approximately 40 barrels (bbls) | | | | | | |
| Tank Dimensions: Height: 5 feet: Diameter: 8 feet | | | | | | | |
| Tank Contents: | Produced water and condensate | | | | | | |
| Tank Construction: | 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).



- 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 Aldolfo 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.



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 semiconfined 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 $1x10^{-9}$ m/sec to $2x10^{-5}$ m/sec, which is equivalent to between $2.8x10^{-4}$ feet per day (ft/day) to 5.7 ft/day. The sand unit at the Site would be, on average, $2x10^{-6}$ 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:



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.



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.



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: <u>https://ocdimage.emnrd.state.nm.us/imaging/AEOrderFileView.aspx?appNo=pENV000003RP95</u> (accessed January 2021).

New Mexico Office of the State Engineer, 2010, New Mexico Water Rights Reporting System: <u>http://nmwrrs.ose.state.nm.us/nmwrrs/index.html</u> (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: <u>https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u> (accessed January 2021).

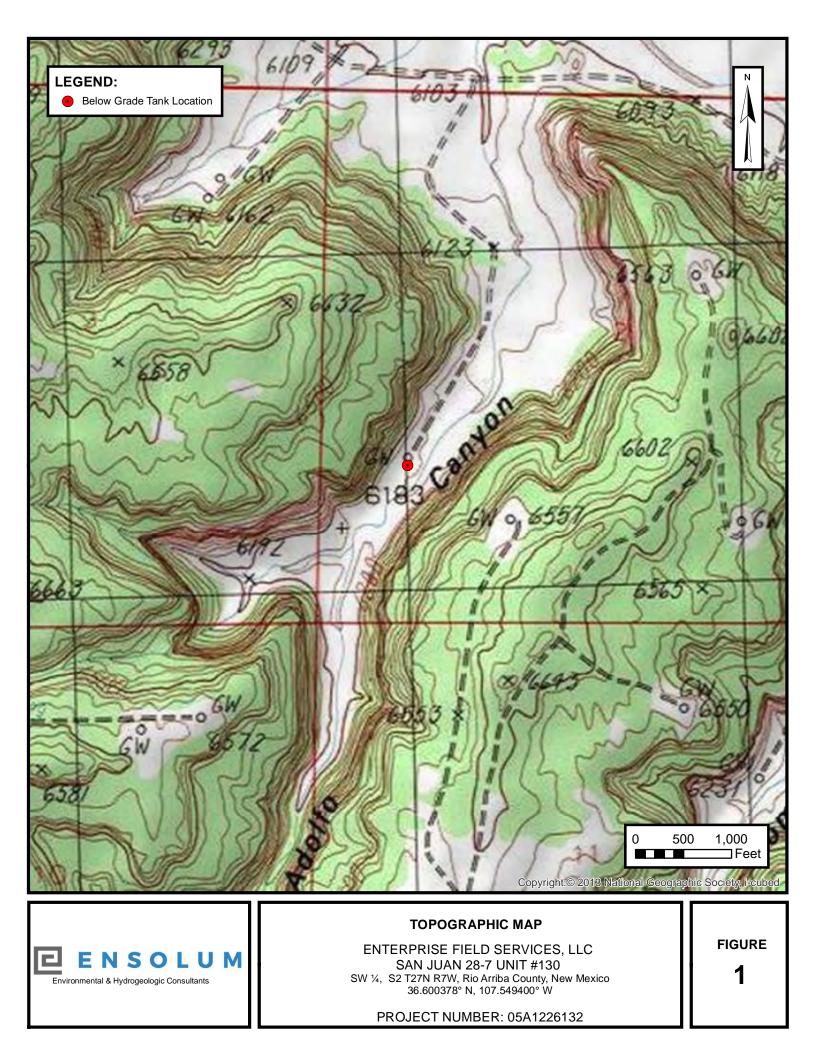
U.S. Fish & Wildlife Service, 2020, Wetlands Mapper: <u>https://www.fws.gov/wetlands/data/mapper.html</u> (accessed January 2021).

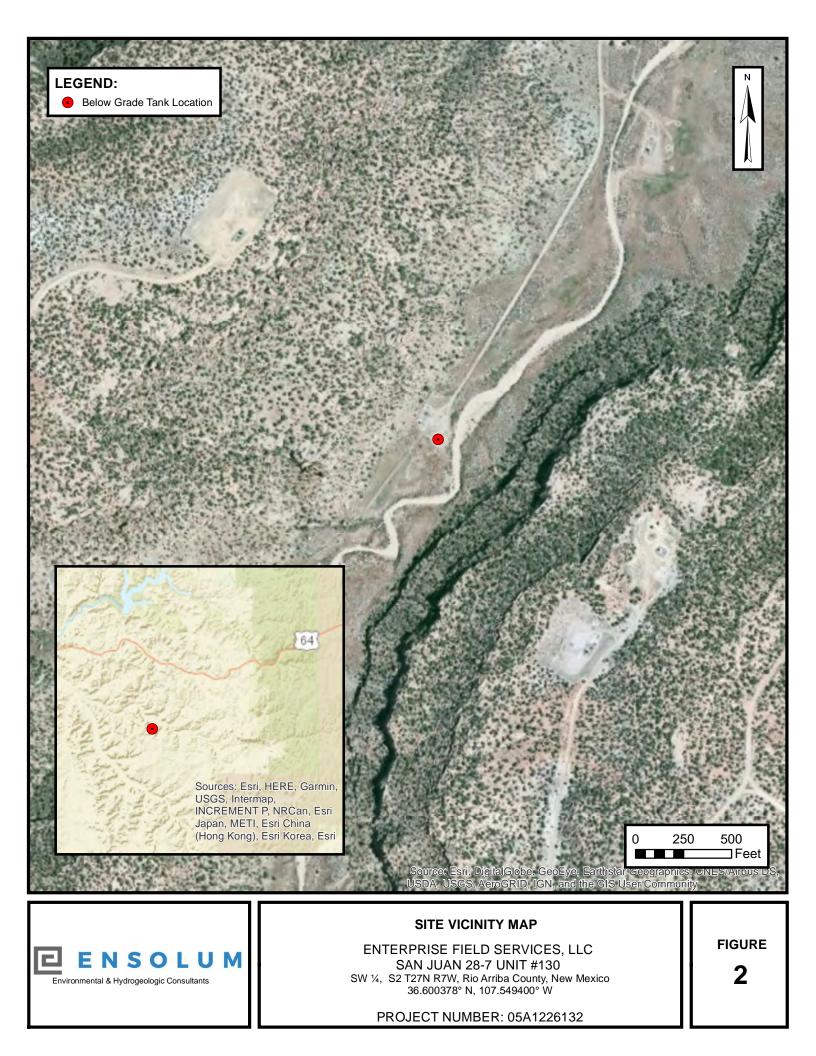
U.S. Geological Survey The National Map, 2019, ArcGIS Online Map Viewer: <u>https://apps.nationalmap.gov/viewer/</u> (accessed January 2021).



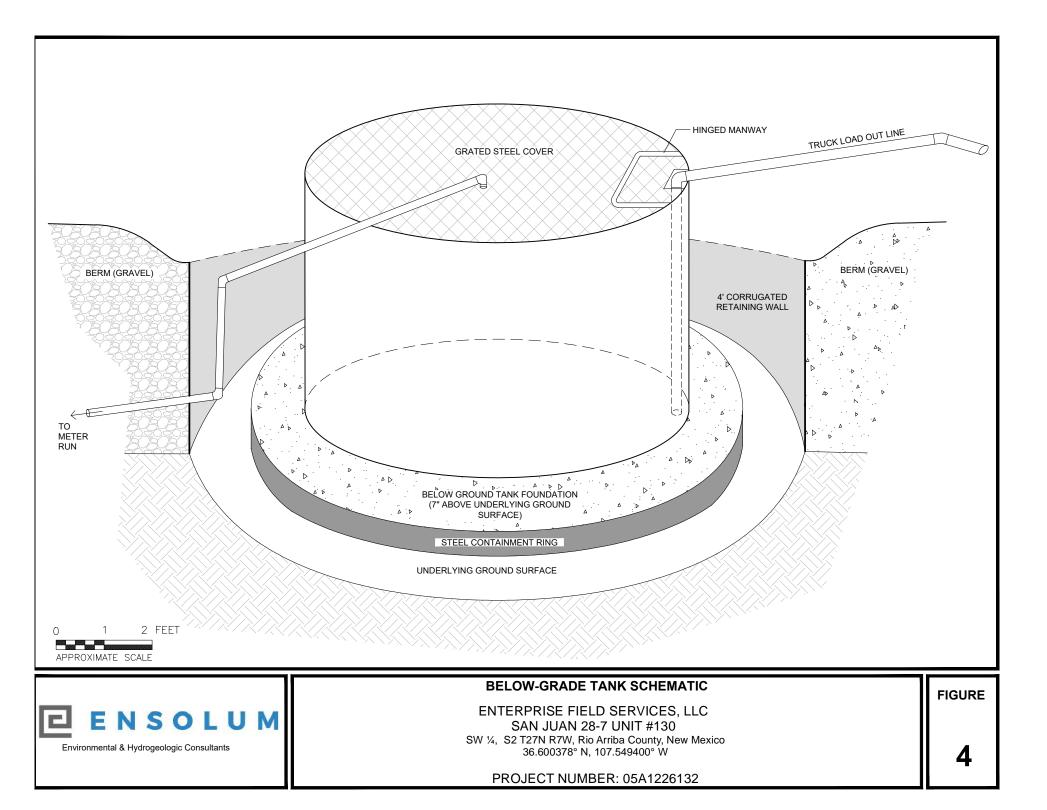
APPENDIX A

Figures





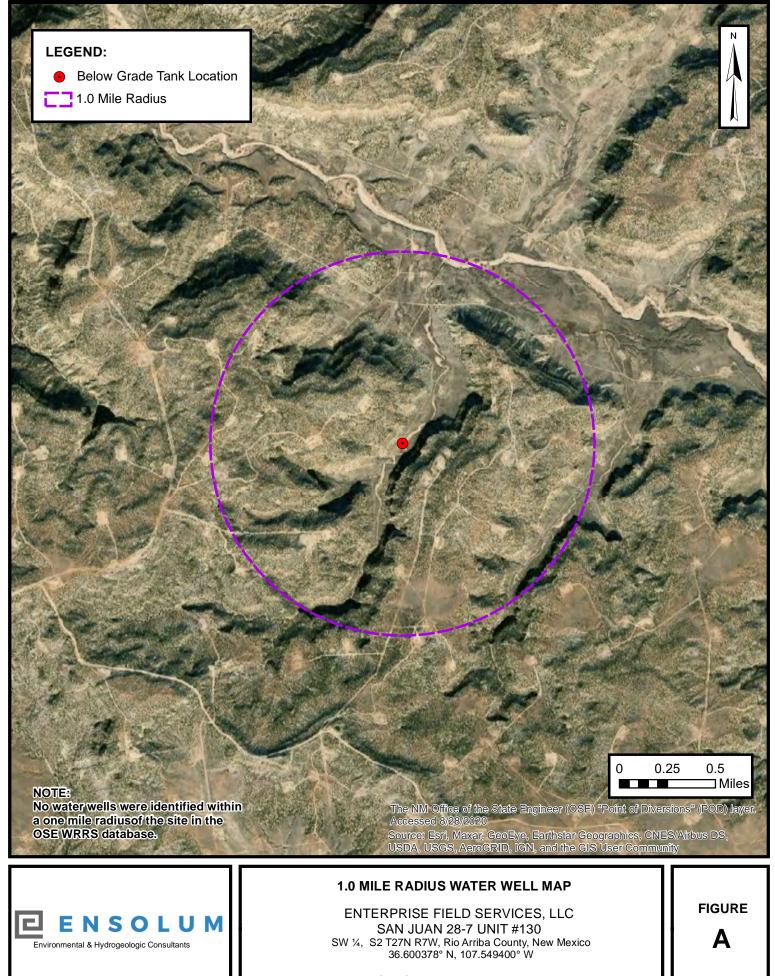






APPENDIX B

Siting Figures and Documentation



PROJECT NUMBER: 05A1226132

LEGEND:

- Below Grade Tank Location
- Cathodic Well

San Juan 28-7 Unit #131M (Water Depth = NA)

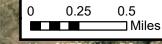
> San Juan 28-7 Unit #227F (Water Depth = 60' BGS)

San Juan 28-7 Unit #181G (Water Depth = NA)

> San Juan 28-7 Unit #182F (Water Depth = NA)

San Juan 28-7 Unit #182N (Water Depth = NA) San Juan 28-7 Unit #126F (Water Depth = 100' BGS)

San Juan 28-7Unit #124F (Water Depth = 140' BGS)



FIGURE

Β

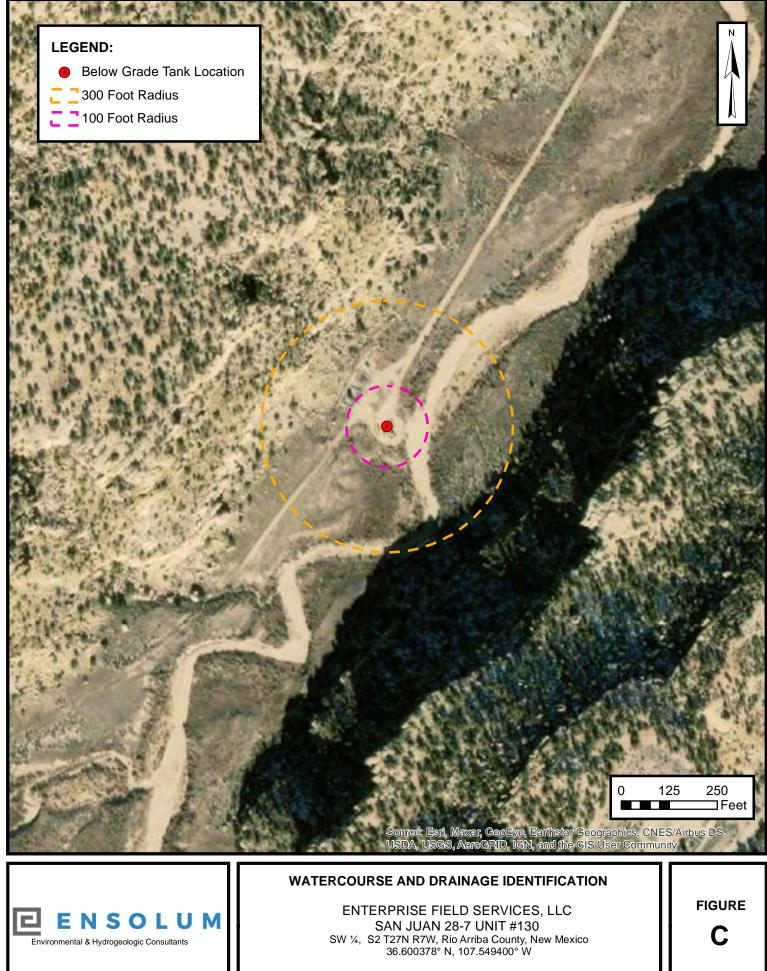
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



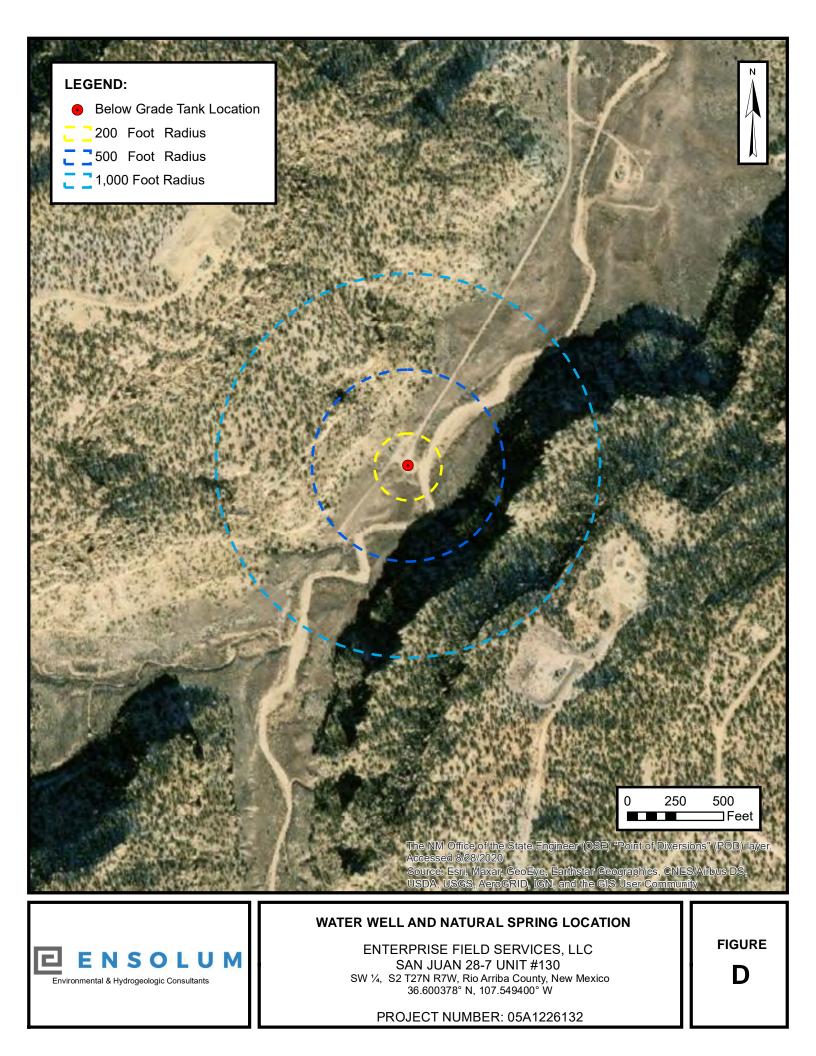
DEPTH TO WATER ENTERPRISE FIELD SERVICES, LLC SAN JUAN 28-7 UNIT #130 SW ¼, S2 T27N R7W, Rio Arriba County, New Mexico 36.600378° N, 107.549400° W

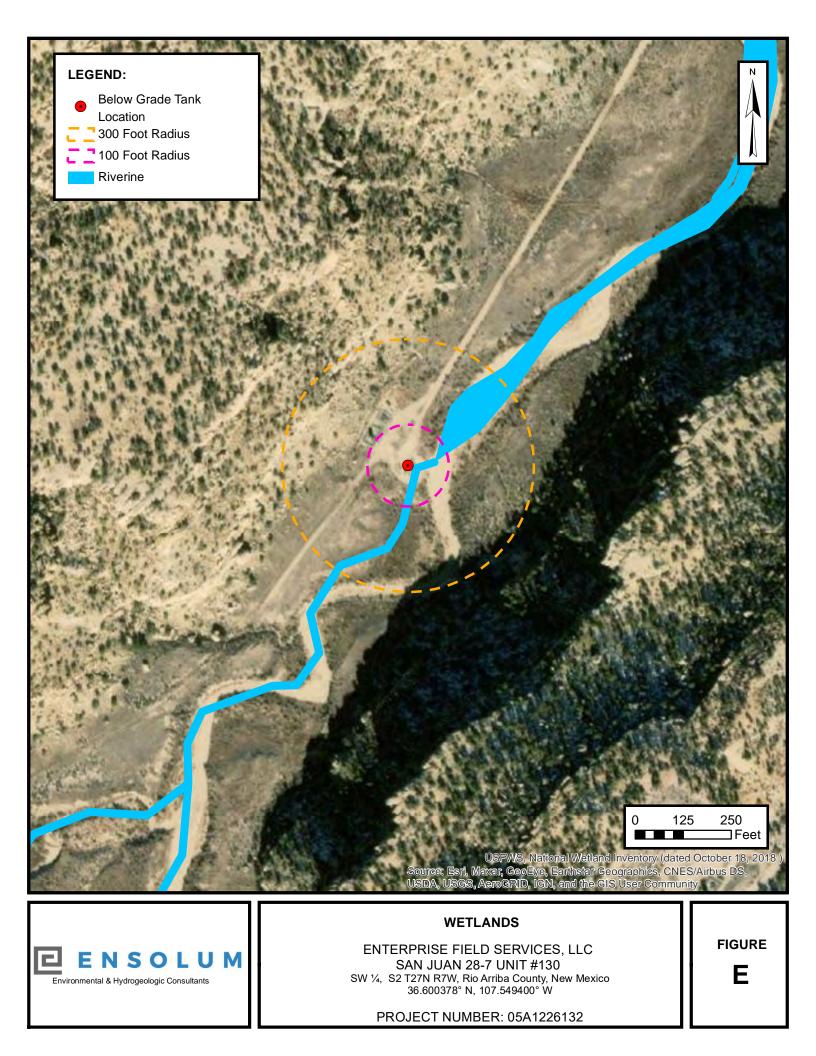
CATHODIC PROTECTION WELL RECORDED

PROJECT NUMBER: 05A1226132



PROJECT NUMBER: 05A1226132







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, Township: 27N Range: 07W 12

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.



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.

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

| FARMIN | TOR: COP IGTON, NM 87401 : 599-3400 |
|---|---|
| API NUMBER: 3003930 | 1635 |
| WELL NAME OR PIPLINE 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: 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): | RCVD NOV 20 '13 |
| GAS DEPTH: CEMENT PLUGS: | OIL CONS. DIV. |
| | DIST. 3 |
| OTHER INFORMATION | |
| Image: Text of the second s | |
| 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.

đ

| сом | COMPANY: | ConocoPhillip JOHN TAFOY | | - | DATE: _ | <u>10/29/2013</u> 7 7/8 | | CASING: AMETER: | SCH40 PVC | _ | | Drr | oro' |
|-----------|---------------------|-----------------------------|----------|------------|------------|---------------------------------------|-----------|--------------------|-------------------|-------------|------------|-----------------|---------------------------------------|
| | LOCATION: | SAN JUAN 28-7 1 | 82 N | _ | DEPTH: | 300' | | DEPTH: | 20' | _ | R | ECTIFIER MFG: | |
| | JOB NO.: | 340140542 | | - c | OKE TYPE: | SW | | ANODES: | 10 | _ | | MODEL: | · · · - |
| | FOREMAN: | RON LUNA | | - | # OF COKE: | 50 BAGS | | DE TYPE: | 2284Z | - | | SERIAL #: | |
| | DRILLER: | DARREL FERRI | FR | - | BENTONITE: | 0 | - | DE LEAD: | HWMPE#8 | | V-DC: | - | DC: |
| | | | | - **** | | | | | | | | | |
| | | | | WÊ | LL LOG | | | | | | ANO | DE PLACEMEN | Г |
| DEPTH | DRILLERS | LOG - | | COMMENTS / | DEPTH | DRILLERS LOG - | | | COMMENTS / | ANODE | ANODE | AMPS | AMPS |
| FT. | SOIL TY | | AMPS | ANODE # | FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | NO. | DEPTH | W/O COKE | W/ COKE |
| 0 | SANDST | | | CASING | 250 | SANDSTONE | | 2.10 | #4 - 250' | 1 | 280 | 2.20 | 4.60 |
| 5 | SANDSTO | | <u> </u> | CASING | 255 | SHALE | _ | 2.20 | | 2 | 270 | 2.00 | 6.10 |
| 10 | SANDSTO | | | CASING | 260 | SHALE | | 2.00 | #3 - 260' | 3 | 260 | 2.10 | 6.20 |
| 15 | SANDSTO | DNE | | CASING | 265 | SHALE | | 1.70 | | 4 | 250 | 2.20 | 6.30 |
| 20 | SANDSTO | DNE | | CASING | 270 | SHALE | | 2.20 | #2 - <u>2</u> 70' | 5 | 240 | 1.60 | 5.10 |
| 25 | SANDSTO | DNE | | | 275 | SHALE | | 2.50 | | 6 | 230 | 0.60 | 3.90 |
| 30 | SANDSTO | | | | 280 | SHALE | | 2.30 | #1 - 280' | 7 | 218 | 0.60 | 3.30 |
| 35 | SANDSTO | | | | 285 | SHALE | | 2.20 | | 8 | 206 | 0.40 | 3.20 |
| 40 | SANDSTO | | | | 290 | SHALE | | | | 9 | 194 | 0.80 | 3.20 |
| 45 | SANDSTO | | | | 295 | SHALE | | | | 10 | 182 | 0.50 | 2.90 |
| 50 | SANDSTO | | | | 300 | SHALE | | | | 11 | | | |
| 55 | SANDSTO | | | | 305 | | | [] | | 12 | | L | |
| 60 | SANDSTO | | | | 310 | | | | | 13 | | | |
| 65 | SANDSTO | | | | 315 | | | | | 14 | | | |
| 70 | SANDSTO | | | | 320 | | TD: 292' | | | 15 | | | |
| 75 | SANDSTO | | | | 325 | | Vent Pipe | Depth: 300 |)' | 16 | | | |
| 80 | SANDSTO | | 1.40 | | 330 | | | | | 17 | | L | |
| 85 | SANDSTO | | 1.50 | | 335 | | | | | 18 | | | |
| 90 | SANDSTO | | 1.40 | | 340 | | | | | 19 | | | |
| 95 100 | SANDSTO | | 1.30 | | 345 | | | | | 20 | | | |
| 105 | SANDSTO SANDY SH | | 1.40 | · | 350 355 | | | | | 21 | | | |
| 110 | SANDT SF | | 0.70 | · | 360 | | | | | 22 | | ├─── ┼ | |
| 115 | SANDT SP | | 0.70 | | 365 | | | | | 23 | | ├ ───┼ | |
| 120 | SANDSTO | | 0.40 | | 370 | | | | · ···· | 25 | | | ······ |
| 125 | SANDSTO | | 0.40 | | 375 | · · · · · · · · · · · · · · · · · · · | | | | | | <u> </u> | |
| 130 | SANDSTO | | 0.40 | | 375 | | | | | | GROUN | IDBED RESISTANC | ~ = |
| 135 | SANDSTO | | 0.50 | | 385 | | | | | | GROON | IDBED RESISTAN | /C |
| 140 | SANDSTO | | 0.70 | · | 390 | | | | | TOTAL VO | I TS | 13 | 3.80 |
| 145 | SANDSTO | | 0.80 | - | 395 | | | | | TOTAL AM | | | 3.00 |
| 150 | SANDSTO | | 0.50 | | 400 | | | | | | n 0. | | |
| 155 | SANDSTO | | 0.40 | 1 | 405 | | | | | - | | | |
| 160 | SANDSTO | | 0.30 | | 410 | | | | | | | 1.06 | OHMS |
| 165 | SANDSTO | | 0.30 | | 415 | <u>, -</u> - 1 | | | | | | | |
| 170 | SANDSTO | | 0.30 | | 420 | | | | | SITE ELEV | | 6591' | |
| 175 | SANDSTO | | 0.30 | | 420 | | | <u>├</u> | | WATER LE | | N/A | |
| 180 | SANDSTO | | 0.40 | #10 - 182' | 430 | | | | | WATER LE | | N/A | · · · · · · · · · · · · · · · · · · · |
| 185 | SANDY SH | | 0.40 | | 435 | | | | | COKE LEV | | 167' | |
| 190 | SANDY SH | | 0.30 | | 440 | | | <u> · · · </u> | | | | N/A | |
| 195 | SANDSTO | | 0.80 | #9 - 194' | 445 | | | | | | AL COMMENT | | |
| 200 | SANDSTO | | 0.70 | | 450 | | | | | 0-20' - CAS | | - | |
| 205 | SANDY SH | | 0.40 | #8 - 206' | 455 | | | - | | 20-250' - D | | | |
| 210 | SANDY SH | | 0.40 | | 460 | | | | | | NJECT WATE | R | |
| 215 | SANDSTO | DNE | 0.60 | | 465 | | | | | 1 | | | |
| 220 | SANDSTO | | 0.50 | #7 - 218' | 470 | | | | | 1 | | | |
| 225 | SANDSTO | | 0.60 | | 475 | | | | | | | | |
| 230 | SANDSTO | DNE | 0.80 | #6 - 230' | 480 | | | | | | | | |
| 235 | SANDSTO | NE | 1.10 | | 485 | | | | | | | | |
| 240 | SANDSTO | | 1.70 | #5 - 240' | 490 | | | | | | | | |
| 245 | SANDSTC | | 2.00 | | 495 | | | | | 1 | | | |

P

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

| | OPERATOR: ConocoPhillips CO. FARMINGTON, NM 87401 |
|--|--|
| SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE | PHONE: 599-3400 |
| LOCATION INFORMATION API N | umber 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 | 1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 |
| GAS DEPTH: CEMENT PLUGS: | |
| OTHER INFORMATION | 11919191919191919191919191919191919191 |
| 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.

1

RCVD MAR28'07 DIL CONS. DIV.

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

| SUBMIT 2 COPIES TO O.C.D. AZ | OPERATOR: ConocoPhillips CO. FARMINGTON, NM 87401 PHONE: 599-3400 | | | |
|-------------------------------|---|----------------|------------|------------------------------|
| LOCATION INFORMATION | <u> </u> | | API Number | 3003927068 |
| WELL NAME OR PIPELINE SERVED: | 28-7 124 F | LEGAL LOCATION | 11-27-7 | INSTALLATION DATE: 4/27/2006 |
| PPGO. REGTIFIER NO.: FM-1033/ | A ADDITIONAL WELLS: | N/A | | |
| TYPE OF LEASE FEDE | RAL LEASE N | IUMBER: NMSF | 078496A |] |

GROUND BED INFORMATION

| TOTAL DEPTH | 360 CASING | DIAMETER: 8-IN | TYPE OF CASING: PVC | CASING DEPTH 20 | CASING GEMENTED: |
|-----------------|---------------|-----------------------|-------------------------|-----------------|------------------|
| TOP ANODE DEPTH | 180 BO | TTOM ANODE DEPTH | 350 | | |
| ANODE DEPTHS: | 180,190,2 | 200,210,220,230,250 | ,260,270,300,310,320,33 | 0,340,350 | |
| AMOUNT OF COKE: | 2900# | | | | |

WATER INFORMATION

| WATER DEPTH (1) | 140 | WATER | DEPTH 121 | |
|-----------------|------|-----------|-----------|---|
| GAS DEPTH | CEME | NT PLUGS: | |] |

OTHER INFORMATION

| TOP OF VEN | IT PERFORATIONS: | 220' | VENT PIPE DEPTH | 360 | |
|------------|------------------|------------|-----------------|-----|--|
| REMARKS: | START UP ON 5- | 4-06. STAT | ic Read756 | | |

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.

RCVD MAR28'07 DIL CONS. DIV.

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

| | OPERATOR: ConocoPhillips CO. FARMINGTON, NM 87401 |
|---|--|
| SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE | PHONE: 599-3400 |
| LOCATION INFORMATION | API Number |
| 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- | F-079294 |
| | |
| GROUND BED INFORMATION | |
| TOTAL DEPTH: 320 CASING DIAMETER: 8-IN TYPE OF CASING: PV | CASING DEPTH: CASING CEMENTED: |
| TOP ANODE DEPTH: 190 BOTTOM ANODE DEPTH: 310 | |
| ANODE DEPTHS: 190,200,210,230,240,250,280,290,300,310 | 10 |

WATER INFORMATION

AMOUNT OF COKE

| WATER DEPTH [1] | 60 | WATER DEPTH (2) |
|-----------------|------|-----------------|
| GAS DEPTIL | CEME | INT PLUGS: |

2500#

OTHER INFORMATION

| TOP OF VEN | IT 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.

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

| SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE | | FARMIN | OR: COP GTON, NM 87401 599-3400 |
|---|-------------|----------------|---------------------------------------|
| LOCATION INFORMATION | API NUMBER: | 3003925 | 547 |
| WELL NAME OR PIPLINE SERVED: SAN JUAN 28-7 UNIT 131M LEGAL LOCATION: 34 | I 028N 007W | INSTALLATION D | ATE: 10/17/2013 |
| PPCO. RECTIFIER NO.: 10639W ADDITIONAL WELLS: | | |] |
| TYPE OF LEASE: | NOT PROVID | ED | |
| GROUND BED INFORMATION | | | |
| TOTAL DEPTH: 300' CASING DIAMETER: 8" TYPE OF CASING: | PVC CASIN | 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): | | | RCVD NOV 20'13 OIL CONS. DIV. |
| GAS DEPTH: CEMENT PLUGS: | | | DIST. 3 |
| OTHER INFORMATION | | | |
| TOP OF VENT PERFORATIONS: 160' VENT PIPE DEPTH: 30 |)0' | | |
| 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.

.

| COMPANY: | ConocoPhillips | DATE: | 10/17/2013 | CASING: | SCH40 PVC | |
|----------------|---------------------|-----------------|------------|---------------|-----------|---|
| COMPANY REP .: | JOHN TAFOYA | DIA. HOLE: | 7 7/8 | DIAMETER: | 8" | A CONTRACTOR OF |
| LOCATION: | SAN JUAN 28-7 #131M | DEPTH: | 300' | CASING DEPTH: | 140' | RECTIFIER MFG: |
| JOB NO.: | 340140470 | COKE TYPE: | SW | # OF ANODES: | 10 | MODEL: |
| FOREMAN: | RON LUNA | # OF COKE: | 50 BAGS | ANODE TYPE: | 2284Z | SERIAL #: |
| DRILLER: | DARREL FERRIER | # OF BENTONITE: | 0 | ANODE LEAD: | HWMPE#8 | V-DC: A -DC: |

| | | | | WE | LL LOG | · · · · · · · · · · · · · · · · · · · | | | | 1 | ANODE PLACEMENT | | |
|-------|------------------|----------|------|------------|--------|---------------------------------------|-----------|------------|--------------------------------|-----------|-----------------|----------------|---------|
| DEPTH | DRILLERS LOG - | | 1 | COMMENTS / | DEPTH | DRILLERS LOG - | T | | COMMENTS / | ANODE | ANODE | AMPS | AMPS |
| FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | NO. | DEPTH | W/O COKE | W/ COKE |
| 0 | Brown Sand | 1 | | 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 | <i>n</i> (2 (0 | 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 | 1.40 | | 4 | 248 | 0.80 | 4.00 |
| 20 | Brown Sand | | | Casing | 270 | Shale & Grey Sand Stone | 1 | 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 | 1.00 | #1-278 | 7 | 218 | 2.00 | 6.40 |
| 35 | Brown Sand | | 1 | Casing | 285 | Shale & Grey Sand Stone | 1 | 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 | | TD: 292' | | | 15 | | | |
| 75 | Brown Sand | | | Casing | 325 | | Vent Pipe | Depth: 300 |) ' | 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 | | | | | | GROUN | IDBED RESISTAN | CE |
| 135 | Green Sand Stone | | 0.90 | Casing | 385 | | | | | | | | |
| 140 | Green Sand Stone | | 1.10 | Casing | 390 | | | | | TOTAL VO | LTS: | | 4.00 |
| 145 | Green Sand Stone | | 1.70 | | 395 | | | | | TOTAL AM | PS: | 1 | 3.50 |
| 150 | Green Sand Stone | | 1.90 | | 400 | | | | | | | | |
| 155 | Green Sand Stone | | 1.20 | | 405 | | | | | | | | |
| 160 | Green Sand Stone | | 0.90 | | 410 | | | | | | | 1.04 | OHM |
| 165 | Green Sand Stone | | 0.80 | | 415 | | | | | | | | |
| 170 | Green Sand Stone | | 0.70 | | 420 | | | | | SITE ELEV | ATION: | N/A | |
| 175 | Green Sand Stone | | 0.70 | | 425 | | | | | WATER LE | VEL #1: | N/A | |
| 180 | Green Sand Stone | | 0.70 | | 430 | | | | | WATER LE | VEL #2: | | |
| 185 | Grey Sand Stone | | 0.70 | #10-185 | 435 | | | | | COKE LEV | | 170' | |
| 190 | Grey Sand Stone | | 0.80 | | 440 | | | | | EXTRA CA | SING USED: | | |
| 195 | Grey Sand Stone | | 0.90 | 1 | 445 | | | | | | AL COMMENT | | |
| 200 | Grey Sand Stone | | 1.00 | #9-198 | 450 | | | | | | L 130' CASING | G HOLE | |
| 205 | Grey Sand Stone | | 1.60 | | 455 | | | | | | L - 130' - 300' | | |
| 210 | Grey Sand Stone | ļ | 2.30 | #8-208 | 460 | | | | | | | | |
| 215 | Grey Sand Stone | L | 2.00 | | 465 | | | | | _ | | | |
| 220 | Grey Sand Stone | L | 2.10 | #7-218 | 470 | | | | | _ | | | |
| 225 | Sandy Shale | | 1.60 | | 475 | | | | | | | | |
| 230 | Sandy Shale | | 0.80 | #6-228 | 480 | | | | | | | | |
| 235 | Sandy Shale | <u> </u> | 0.80 | | 485 | | | | | | | | |
| 240 | Sandy Shale | | 0,90 | #5-238 | 490 | | | | | | | | |
| 245 | Sandy Shale | | 0.90 | <u> </u> | 495 | · · · · · · · · · · · · · · · · · · · | | | | | | | |

[©]

ъ

2

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

OPERATOR: COP

| | MINGTON, NM 87401 NE: 599-3400 |
|---|-----------------------------------|
| LOCATION INFORMATION API NUMBER: 30039 | 27000 |
| WELL NAME OR PIPLINE SERVED: SAN JUAN 28-7 UNIT 182F LEGAL LOCATION: 03 027N 007W INSTALLATIO | N DATE: 12/16/2013 |
| PPCO. RECTIFIER NO.: 10661W ADDITIONAL WELLS: #270 | |
| TYPE OF LEASE: 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 | RCVD DEC 31 '13 |
| WATER DEPTH (1): N/A WATER DEPTH (2): | OIL CONS. DIV. |
| GAS DEPTH: CEMENT PLUGS: | 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, Nove

| s. | | | | | | | | | | | ı | | |
|------------|--------------------------------------|------------|----------------------|------------------|----------------------|---------------------------------------|--------------------------------------|-------------|--|--------------------------|-------------------|----------------|---------------------|
| | | | | | | | | | | | | | |
| | | coPhillips | | | DATE: DIA. HOLE: | 12/16/2013 | | CASING: | SCH40 PVC | - | | orr | oro |
| | PANY REP.: JOHN LOCATION:SAN JUAN | | 1825 | - | DIA. HOLE: DEPTH: | 300' | | | <u> </u> | - | | | |
| | | 140563 | 1021 | COKE TYPE: SW | | | CASING DEPTH: 20' # OF ANODES: 10 | | | RECTIFIER MFG: MODEL: | | | |
| | | N LUNA | | - | # OF COKE: | 50 BAGS | | DE TYPE: | | - | | SERIAL #: | |
| | | | 2 | - | | 0 | | DE LEAD: | 1.1 million (1.1 m | - | V-DC: | _ | DC: |
| | | | | • | | | | | | - | | | |
| | | | | | LL LOG | <u> </u> | | | | | | DE PLACEMEN | |
| DEPTH | DRILLERS LOG - | | | COMMENTS / | DEPTH | DRILLERS LOG - | | | COMMENTS / | ANODE | ANODE | AMPS | AMPS |
| FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | NO. | DEPTH | W/O COKE | 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 15 | BROWN SAND BROWN SAND | + + | | CASING CASING | 260 265 | YELLOW SANDSTONE YELLOW SANDSTONE | | 2.40 | | 3 | 256 244 | 2.60 | <u>5.60</u> 5.30 |
| 20 | BROWN SAND | <u> </u> | | CASING | 203 | GREY SHALE | | 1.10 | #2 - 268' | 5 | 232 | 0.70 | 3.20 |
| 25 | BROWN SAND | 1 | | | 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 | | | | 295 300 | YELLOW SANDSTONE | | | | 10 | 172 | 3.70 | 5.30 |
| 50 55 | BROWN SAND BROWN SAND | | | | 300 | | | | | 11 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 | | 335 340 | | | | | 18 | | | |
| 90 95 | GREY SAND GREY SAND | + + | 2.20 | | 340 | | | | | 19 20 | | | |
| 100 | GREY SAND | | 2.00 | | 350 | | | | | 20 | | | |
| 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 | | | | | | GROUN | DBED RESISTANC | <u>×</u> |
| 135 140 | YELLOW SHALE YELLOW SAND\$TONE | | 2.10 1.30 | | 385 390 | ·· - • | | | | TOTAL VO | 1 79. | 10 | 80 |
| 140 | YELLOW SANDSTONE | + + | 0.80 | | 390 | | | | | TOTAL AM | | | .80 |
| 140 | YELLOW SANDSTONE | | 0.60 | | 400 | · · · · · · · · · · · · · · · · · · · | | | | | | 10 | |
| 155 | YELLOW SANDSTONE | | 0.60 | | 405 | | | | | | | | |
| 160 | YELLOW SANDSTONE | | 0.50 | | 410 | | | | | | | 1.00 | OHMS |
| 165 | YELLOW SANDSTONE | | 0.50 | | 415 | | | | | | | | |
| 170 | GREY SHALE | | 3.20 | #10 - 172' | 420 | | | | | SITE ELEV | | 6573' | |
| 175 | GREY SHALE | ┞───┤ | 2.20 | | 425 | | | | | WATER LE | | N/A | |
| 180 | GREY SHALE | | 1.30 | #0 194 | 430 435 | | | | | WATER LE | | N/A | |
| 185 190 | GREY SHALE YELLOW SANDSTONE | ┼───┼ | 1.40 | #9 - 184' | 435 | | + | | | COKE LEV | EL: SING USED: | 150' | |
| 190 | YELLOW SANDSTONE | <u> </u> | 2.00 | | 440 | | + | | | | AL COMMENT | | |
| 200 | YELLOW SANDSTONE | †† | 1.70 | #8 - 196' | 450 | | | | | 0-20' - CAS | | | |
| 205 | YELLOW SANDSTONE | | 1.00 | | 455 | | | | | 20-300' - D | | | |
| 210 | YELLOW SANDSTONE | | 0.60 | #7 - 208' | 460 | | | | | | | | |
| 215 | YELLOW SANDSTONE | | 0.50 | | 465 | | ┥Ҭ | | | | | | |
| 220 | GREY SHALE | + | 0.80 | #6 - 220' | 470 475 | | +- | | | İ | | | |
| 225 | GREY SHALE | | 0.80 | | | | | | | | | | |
| | | | 0.70 | #5 _ 222' | 480 | | 4 | | | | | | |
| 230 | GREY SHALE | | 0.70 | #5 - 232 | 480 485 | | | | | | | | |
| | | | 0.70 1.30 2.10 | #5 - 232' | 480 485 490 | | | - | | | | | |

.

3

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

| SUBMIT 2 COPIES TO O.C.D. AZTEC OFFICE | OPERATOR: FARMINGTO PHONE: 599 | N, NM 87401 |
|--|--------------------------------------|---|
| LOCATION INFORMATION API NUMBER: | 3003926880 | |
| WELL NAME OR PIPLINE 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: NOT PROVID | ED | |
| GROUND BED INFORMATION TOTAL DEPTH: <u>300'</u> Casing Diameter: <u>8''</u> Type of Casing: <u>PVC</u> Casing Top Anode Depth: <u>172'</u> Bottom Anode Depth: <u>280'</u> | G DEPTH: 20' C | ASING CEMENTED – |
| 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: — | | ND DEC 31 '13 Il Cons. DIV. DIST. 3 |
| OTHER INFORMATION TOP OF VENT PERFORATIONS: 160' VENT PIPE DEPTH: 300' REMARKS: 150' - GOKE 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.

ś

| | COMPANY: ConocoPhillips COMPANY REP.: JOHN TAFOYA | | DATE: <u>12/12/2013</u> DIA. HOLE: <u>7 7/8</u> | | | CASING: SCH40 PVC DIAMETER: 8" | | | _ <i>corrpro</i> * | | | | |
|-------|--|--------------|--|------------|----------------|-----------------------------------|-----------|------------|--------------------|-------------|------------|----------------|---------|
| | LOCATION: S | | | 20' | RECTIFIER MFG: | | | | | | | | |
| | JOB NO.: | 340140565 | | - c | OKE TYPE: | SW | # OF 7 | ANODES: | 10 | - | | MODEL: | |
| | FOREMAN: | RON LUNA | | - 1 | # OF COKE: | 50 BAGS | | DE TYPE: | 2284Z | | | SERIAL #: | |
| | DRILLER: | DARREL FERRI | ER | | ENTONITE: | 0 | | DE LEAD: | HWMPE#8 | - | V-DC: | | -DC: |
| | | | | - | | | | | | - | | <u> </u> | |
| L | | | | WELL LOG | | | | | | | ANO | DE PLACEMEN | |
| DEPTH | DRILLERS LO | 0G - | | COMMENTS / | DEPTH | DRILLERS LOG - | | | COMMENTS / | ANODE | ANODE | AMPS | AMPS |
| FT. | SOIL TYP | E VOLTS | S AMPS | ANODE # | FT. | SOIL TYPE | VOLTS | AMPS | ANODE # | NO. | DEPTH | W/O COKE | W/ COKE |
| 0 | TAN SANDST | ONE | | CASING | 250 | TAN SANDSTONE | | 0.40 | | 1 | 280 | 0.60 | 1.80 |
| 5 | TAN SANDST | | | CASING | 255 | TAN SANDSTONE | · | 0.40 | #3 - 256' | 2 | 268 | 0.70 | 1.90 |
| 10 | TAN SANDST | ONE | | CASING | 260 | TAN SANDSTONE | <u> </u> | 0.40 | | 3 | 256 | 0.90 | 2.50 |
| 15 | TAN SANDST | | | CASING | 265 | TAN & BLACK SANDY SHALE | | 0.40 | | 4 | 244 | 0.50 | 2.50 |
| 20 | TAN SANDST | ONE | | CASING | 270 | TAN & BLACK SANDY SHALE | | 0.40 | #2 - 268' | 5 | 232 | 1.00 | 3.30 |
| 25 | TAN SANDST | | | | 275 | TAN & BLACK SANDY SHALE | | 0.60 | | 6 | 220 | 1.50 | 4.20 |
| 30 | TAN SANDST | | | | 280 | TAN & BLACK SANDY SHALE | | 0.50 | #1 - 280' | 7 | 208 | 1.90 | 4.30 |
| 35 | TAN SANDST | | | | 285 | TAN & BLACK SANDY SHALE | | 0.50 | | 8 | 196 | 1.20 | 3.80 |
| 40 | TAN SANDST | | | | 290 | TAN & BLACK SANDY SHALE | | 0.40 | | 9 | 184 | 1.70 | 4.30 |
| 45 | TAN SANDST | | | | 295 | TAN & BLACK SANDY SHALE | | | | 10 | 172 | 2.10 | 4.60 |
| 50 | TAN SANDST | | | | 300 | TAN & BLACK SANDY SHALE | | | | 11 | | | |
| 55 | GREY SHAL | | | | 305 | | | | | 12 | | | |
| 60 | GREY SHAL | | | | 310 | | | | | 13 | | | |
| 65 | GREY SHAL | | | | 315 | | | | | 14 | | | |
| 70 | GREY SHAL | | | | 320 | | TD: 290' | | | 15 | | | |
| 75 | TAN SANDST | | | | 325 | | Vent Pipe | Depth: 300 | !* | 16 | | | |
| 80 | TAN SANDST | | 0.20 | | 330 | | | | - | 17 | i i | | |
| 85 | TAN SANDST | | 0.20 | | 335 | | | | | 18 | | | |
| 90 | TAN SANDST | | 0.00 | | 340 | | | | | 19 | | | |
| 95 | TAN SANDST | | 0.40 | | 345 | | | | | 20 | | | |
| 100 | TAN SANDST | | 0.70 | | 350 | | | | | 21 | | | |
| 105 | TAN SANDST | | 0.60 | | 355 | | · | | | 22 | | | |
| 110 | TAN SANDST | | 0.90 | | 360 | | | | | 23 | | | |
| 115 | TAN SANDST | | 0.50 | | 365 | | | | | 24 | | | |
| 120 | TAN SANDST | | 0.50 | | 370 | | | | | 25 | | I | |
| 125 | TAN SANDST | | 0.90 | | 375 | | | | | | | | |
| 130 | TAN SANDST | | 1.10 | | 380 | | | | | | GROUN | IDBED RESISTAN | CE |
| 135 | TAN SANDST | | 1.10 | | 385 | | | • | | | | | |
| 140 | TAN SANDST | | 1.10 | | 390 | | | | | TOTAL VO | | | 4.20 |
| 145 | TAN SANDST | | 1.50 | | 395 | | | | | TOTAL AN | IPS: | | 9.80 |
| 150 | TAN SANDST | | 1.70 | | 400 | | | | | 1 | | | |
| 155 | GREY SANDY S | | 1.80 | | 405 | | | | | 4 | | | |
| 160 | GREY SANDY S | | 1.70 | | 410 | | | | | 4. | | 1.45 | OHMS |
| 165 | GREY SANDY S | | 1.40 | | 415 | | | | | | | | |
| 170 | GREY SANDY S | | 1.20 | #10 - 172' | 420 | | | | | SITE ELEV | | N/A | |
| 175 | GREY SANDY S | | 1.10 | | 425 | | | | | WATER LE | | N/A | |
| 180 | GREY SANDY S | | 1.20 | | 430 | | | | | WATER LE | | N/A | |
| 185 | GREY SANDY S | | 1.10 | #9 - 184' | 435 | | | | | COKE LEV | | 150' | |
| 190 | GREY SANDY S | | 1.10 | | 440 | | | | | | SING USED: | | |
| 195 | GREY SANDY S | | 1.10 | | 445 | | | | | | AL COMMENT | S: | |
| 200 | GREY SANDY S | | 1.40 | #8 - 196' | 450 | | | | | 0-20' - CAS | SING | | |
| 205 | GREY SANDY S | | 1.20 | //= | 455 | | | | | ם - '20-300 | RILL DRY | | |
| 210 | GREY SANDY S | | 1.50 | #7 - 208' | 460 | | | | | | | | |
| 215 | GREY SANDY S | | 0.80 | | 465 | | | | | | | | |
| 220 | GREY SANDY S | | 0.60 | #6 - 220' | 470 | | | | | 4 | | | |
| 225 | GREY SANDY S | | 0.50 | #5 0001 | 475 | | | | | 4 | | | |
| 230 | GREEN SANDY | | 0.50 | #5 - 232' | 480 | | | | | | | | |
| 235 | GREEN SANDY | | 0.70 | | 485 | | | | | l | | | |
| 240 | GREEN SANDY | | 0.60 | #4 044 | 490 | | | | | | | | |
| 245 | GREEN SANDY S | SHALE | 0.50 | #4 - 244' | 495 | | | | | | | | |

1-4



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 standard set forth in Table I of 19.15.17.13 NMAC. If there is less than the standard 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 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 belowgrade 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).

| Applicable for Soils Beneath Below-Grade Tanks | | | | | | |
|--|----------------------------------|-----------|--|--|--|--|
| 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 belowgrade 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.

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.

Mendez, Brenda

| From: | Fields, Jon |
|--------------|--|
| Sent: | Tuesday, March 2, 2021 10:44 AM |
| То: | 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.

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: Payment Date: Payment Amoun | 87T7T-210302-C-144B 3/2/2021 t: \$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

This is an automated email please do not reply.