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 June 6, 2013

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.

15656

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

OIL CONS. DIV DIST. 3

OCT 18 2016

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

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 #:
Address: P.O. Box 4324, Houston, TX 77210
Facility or well name: Simms Mesa Compressor Station Tank #10
API Number: OCD Permit Number:
U/L or Qtr/Qtr NE1/4/NE1/4 Section 22 Township 30N Range 07W County: Rio Arriba
Center of Proposed Design: Latitude 36.802433° Longitude -107.551985° NAD: ☐1927 ☒ 1983
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: 1,008 Gal Type of fluid: Waste oil, skid drain fluids, antifreeze, wash down water
Tank Construction material: Steel double walled 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 Double wall tank with level detection and riser pipe in annular space for monitoring
Liner type: Thickness _____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 _____

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6.
Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☒ Other Enclosed

☐ 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_2S, 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ 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). - 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 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	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
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	☐ Yes ☐ No
Within a 100-year floodplain. - 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. 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): Ivan W. Zirbes Title: Vice President-EHS&T

Signature: Date: 10-13-2016

e-mail address: snolan@eprod.com Telephone: 713-381-6595

18.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: **Approval Date:** 12/22/16

Title: Environmental Spec. **OCD Permit Number:**

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: _____

Souder, Miller & Associates • 401 W. Broadway • Farmington, NM 87401
(505) 325-7535 • (800) 519-0098 • fax (505) 326-0045

September 2016 SMA #5124213

Mr. Tom Long
Enterprise Products
Field Environmental-San Juan Basin
614 Reilly Avenue
Farmington, NM 87401

BGT REGISTRATION PACKET FOR SIMMS MESA COMPRESSOR STATION TANK #10, LATITUDE 36.802433°, LONGITUDE -107.551985°

Dear Mr. Long:

Souder, Miller and Associates (SMA) has compiled the following BGT Registration Packet including Form C-144 in Accordance with the NMOCD Pit Rules per 19.15.17 NMAC. The tank is located at latitude 36.802433°, longitude -107.551985° within the fenced area of the Simms Mesa Compressor Station. Tank information is presented in Table 1.

Table 1: Tank Information

Name	Simms Mesa Compressor Station Tank #10			
Location	Latitude/Longitude		Section, Township, Range	
	36.802433°	-107.551985°	NE ¼ / NE ¼ Unit A Section 22	T30N R7W
Date of Site Visit	10-Oct-15			
County	Rio Arriba County			
Land Owner	BLM			
Tank Capacity	1008 Gallons			
Tank Dimensions	3'2" wide x 4'10" long x 5'6" tall			
Tank Serial Number (If Available)	NA			
Tank Contents	waste oil, skid drain fluids, antifreeze, wash down water			
Tank Construction Notes	Steel double wall tank with level detection and riser pipe in annular space for monthly monitoring			
Tank Operation Notes	Tank is inspected monthly			

Siting Criteria (19.15.17.10 NMAC)

The below-ground tank (BGT) is located at the Simms Mesa Compressor Station at an elevation of 6264 feet above mean sea level (amsl). The BGT meets all siting criteria listed in 19.15.17.10 NMAC with the exceptions for which variances are requested.

Depth to groundwater at the site is estimated to be 208 feet below ground surface (bgs). This data is provided by a cathodic protection well record filed with the New Mexico Oil Conservation Division (NMOCD) for well API# 3003924350 (San Juan 30-6 Unit #466)[1]. Local topography and proximity to adjacent water features also support this depth to groundwater. The BGT base is estimated at 4 feet bgs. Because the BGT base is thus estimated to be greater than 25 feet above the ground water level, a variance is not being requested for this siting criterion.

Figure 1 shows the vicinity of the BGT location and the location of the nearby OSE Wells. The base layer of Figure 1 is the ESRI provided Imagery Topo Map[3] and includes USGS Blue Lines[4]. An aerial imagery map of the site is provided as Figure 2 which shows the vicinity of the BGT with 500' and 1000' buffers. Figure 3 demonstrates the BGT is not located within or 200 feet of a spring or freshwater well used for public or livestock consumption, as indicated by the aerial photo[6] and iWaters map layers[2] or within 300 horizontal feet of any permanent residences, schools, hospitals, institutions or churches. The BGT is located within 100 feet of an ephemeral watercourse that flows only briefly during and following a period of rainfall in the immediate area but not within 100 feet of any continuous flowing watercourse, any other significant watercourse, sinkhole, lakebed, wetlands or playa lake as measured from the ordinary high water mark[5].

The BGT subject to the attached application for registration under 19.15.17 NMAC is located within the Simms Mesa Compressor Station boundaries and was in existence prior to the promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose a threat to fresh water, public health or the environment.

Local Geology and Hydrology

The Simms Mesa Compressor Station is located 0.52 miles south of the Frances Creek, in Rio Arriba County, New Mexico. The Compressor Station is located on an eroded surface of a mesa composed of medium-grained mixed clastic rocks belonging to the Eocene San Jose Formation[8]. The canyons surrounding the BGT location are between 200 and 500 feet lower in elevation than the BGT location. Sandstone, shales and conglomerates belonging to the Paleocene Nacimiento Formation is exposed in the canyons to the south and west of the BGT Location.

Groundwater is estimated to be about 208 feet bgs (6056 feet amsl) at this site, based on the following documentation:

- NM OCD API # 3003924350 (San Juan 30-6 Unit #466) has a filed cathodic well report listing ground water at 240 feet bgs. This location is 980 feet west of the BGT, in a geologic and hydrologic regime similar to the BGT location, with a reported elevation of 6296 feet amsl at ground level. This is 32 feet above the BGT location and an estimated depth to ground water at 208 feet bgs.
- Using the New Mexico Oil and Gas Association (NMOGA) differential method for "surface drainage influenced groundwater", depth to groundwater is estimated to be greater than 100 feet bgs[2]. The elevation of Frances Creek, at its closest location to the BGT, is 171 feet below the BGT at 6093 feet amsl.

Regional Geology and Hydrology

The San Juan Basin is located in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons, topographic relief is generally low. Native vegetation is sparse and shrubby consisting primarily of desert scrub (sage and chamisa) in the lower elevations and juniper and piñon in the higher elevations. Drainage of the San Juan Basin is by the San Juan River and its associated tributaries, including the La Plata and the Animas Rivers. The San Juan River is a tributary of the Colorado River. The climate is arid to semi-arid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of physically weathered parent rock. Aeolian depositional systems are responsible for a majority of the material transport in the San Juan Basin, fluvial systems are also present though less predominant[10].

The primary aquifers in the San Juan Basin are contained in Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial Deposits[10]. The Nacimiento Formation of Paleocene age occurs at the surface in a broad belt at the western and southern edges of the central San Juan Basin and dips beneath the San Jose Formation in the center. The lower part of the Nacimiento Formation is composed of interbedded black carbonaceous mudstones and white coarse grained sandstones. The upper part is comprised of mudstones and sandstones. Shales and conglomerates are often interbedded within the mudstones and sandstones, but they are not the primary rock type. The Nacimiento Formation is generally slope forming, even in the sandstone units. Thickness of the Nacimiento ranges from 418 to 2232 feet[11]. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000 feet deep in this section of the basin. Wells within these bodies flow from 16 to 100 gallons per minute (gpm) and transmissivities are expected to be 100 ft^2/d. Groundwater within these units flows towards the San Juan River[10].

If there are any questions regarding this report, please contact myself or Reid Allan at 505-325-7535.

Sincerely,
Souder, Miller & Associates

Jesse E Sprague
Staff Scientist

Reid S. Allan
Principal Scientist

FIGURES:
Figure 1 – Vicinity Map
Figure 2 – Site Map with 500' and 1000' buffers
Figure 3 – Site Map with 100', 200' and 300' buffers

ATTACHMENTS:
Form C-144
Variance Request
Tank Diagrams
Operation and Maintenance Plan
Depth to Groundwater Documentation

References

[1]New Mexico Oil Conservation Division (OCD) Imaging System Well Files and Permits, March 15, 2016. http://ocdimage.emnrd.state.nm.us/imaging/Default.aspx

[2]Office of the State Engineer (OSE) Water Administrative Technical Engineering Resource System (WATERS), September 4, 2015. *"Water Wells – 2015 – OSE"*, released September, 2015. http://gstore.unm.edu/apps/rgis/datasets/6925a8e3-6f8d-4334-a15e-bf95a11fdaaa/OSE_Wells_May_2015.original.zip

[3]ESRI ArcGIS Online, *"USGSImageryTopo"*, August, 2013. The USGS Imagery Topo base map service from The National Map is a combination of imagery and contours, along with vector layers, such as geographic names, governmental unit boundaries, hydrography, structures, and transportation, to provide a composite base map that resembles the US Topo product. Vector data sources are the National Atlas for small scales, and The National Map for medium to large scales. Imagery data sources are Blue Marble: Next Generation at small scales and NAIP at large scales, with Global Land Survey (Landsat) imagery for medium scales that lack NAIP coverage. Coordinate System: Web Mercator Auxiliary Sphere (WKID 102100) http://www.arcgis.com/home/item.html?id=c641cc5c41d44faba509959748098471

[4]New Mexico Oil and Gas Association Training Manual for 19.15.17 NMAC (Pit Rule) *"NMOGA & NMOCD Pit Rules Training.pdf"* State of New Mexico, October 17, 2014.

[5]National Wetlands Inventory, September 2002. *"San Juan Wetland/Riparian Project"*, R02Y02P01 San Juan, NMRGIS geodatabase. http://rgis.unm.edu/gstore/datasets/757361ef-2000-4f2a-aff8-15fa0a8bd5db/nwi_san_juan_02.original.zip

[6]Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community. November 2015 *"World Imagery"*, Coordinate System: Web Mercator Auxiliary Sphere (WKID 102100) http://server.arcgisonline.com/arcgis/services/World_Imagery/MapServer

[7]Green, Gregory N., Jones, Glen E., 2009. *"Digital Geologic Map of New Mexico – Formations"* http://gstore.unm.edu/apps/rgis/datasets/51349b33-92eb-4ab8-9217-81c82b5c3afa/nmmapdd83shp.original.zip

[8]USGS Mineral Resources On-Line Spatial Data, Green, G.N., and Jones, G.E., 1997, The Digital Geologic Map of New Mexico in ARC/INFO Format: U.S. Geological Survey Open-File Report 97-0052, 9p. http://pubs.er.usgs.gov/publication/ofr9752 http://mrdata.usgs.gov/geology/state/state.php?state=NM

[9]Source: "Sandstone Compressor Station and Wash Elevations" 36.802433° N, -107.551985° W. Google Earth. May 2, 2013. November 28, 2015. Elevation Datum: NAVD27.

[10] Stone, et.al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6.

[11]Kelley, et. Al., 2014, Hydrologic Assessment of Oil and Gas Resource Development of the Mancos Shale in the San Juan Basin, New Mexico. Open-File Report 566, New Mexico Bureau of Mines and Mineral Resources.

Simms Mesa Compressor Station, Tank # 10 Variance Request

Enterprise requests a variance for the items listed below. The requested variances, per 19.15.17.15A, provide equal or better protection of fresh water, public health and the environment.

1. Signage
    - BGT is located within a facility signed appropriate to NMAC 20.2.70, Title V General Construction Permit. The sign is legible and contains the operator's name, the location of the compressor station in decimal degrees and township section and range, and emergency contact telephone numbers. Additional signage relevant to the Title V air quality permit is also present and provides equal or better protection of fresh water, public health and the environment.
2. 2008 Pit Rules
    - Simms Mesa Compressor Station Tank #10 was installed prior to the 2008 pit rules. The BGT does not pose an imminent threat to the protection of fresh water, public health or the environment.

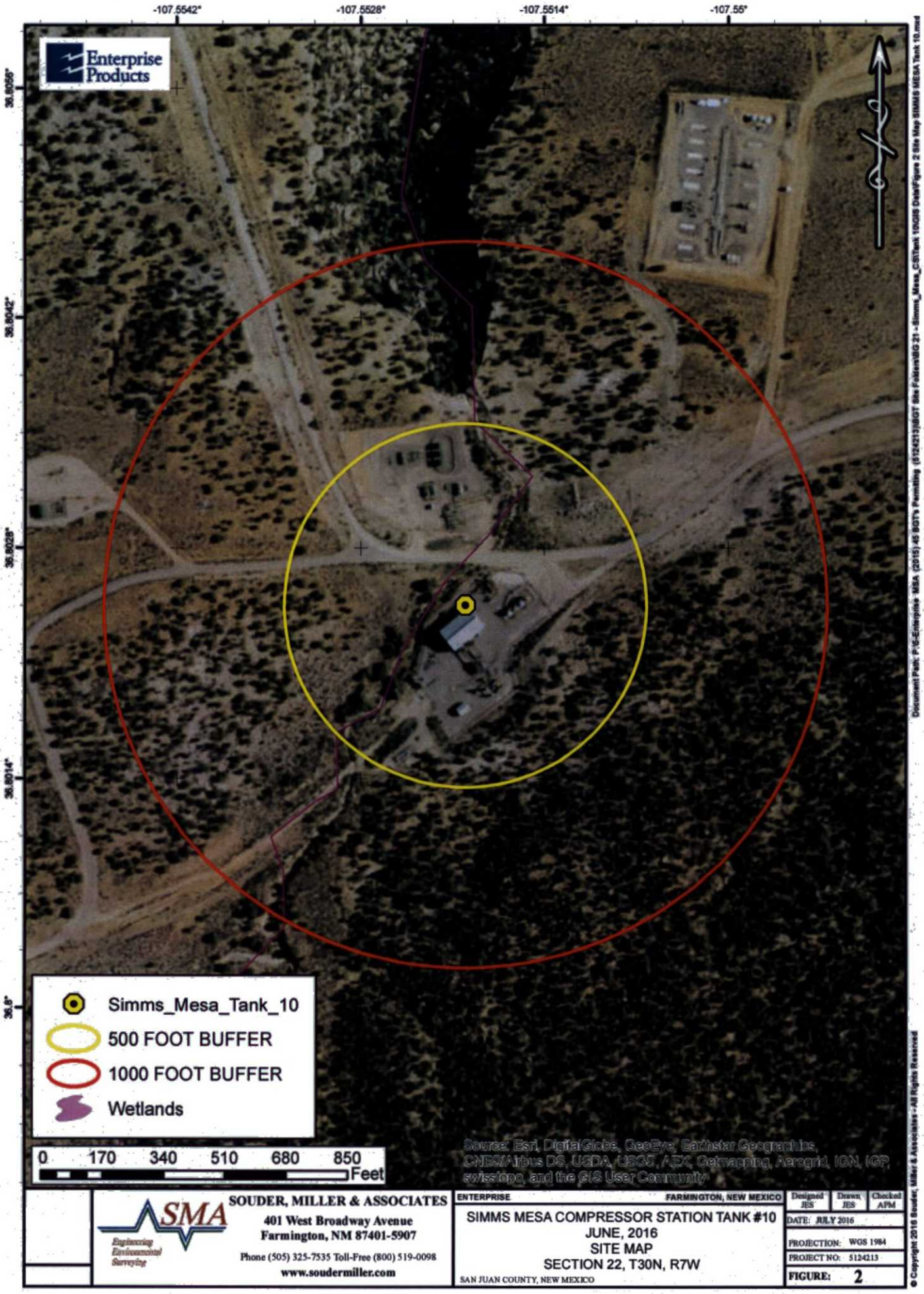
SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098
www.soudermiller.com

ENTERPRISE — FARMINGTON, NEW MEXICO

SIMMS MESA COMPRESSOR STATION TANK #10
JULY, 2016
SITE VICINITY MAP
SECTION 22, T30N, R7W
SAN JUAN COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: JULY 2016
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 1



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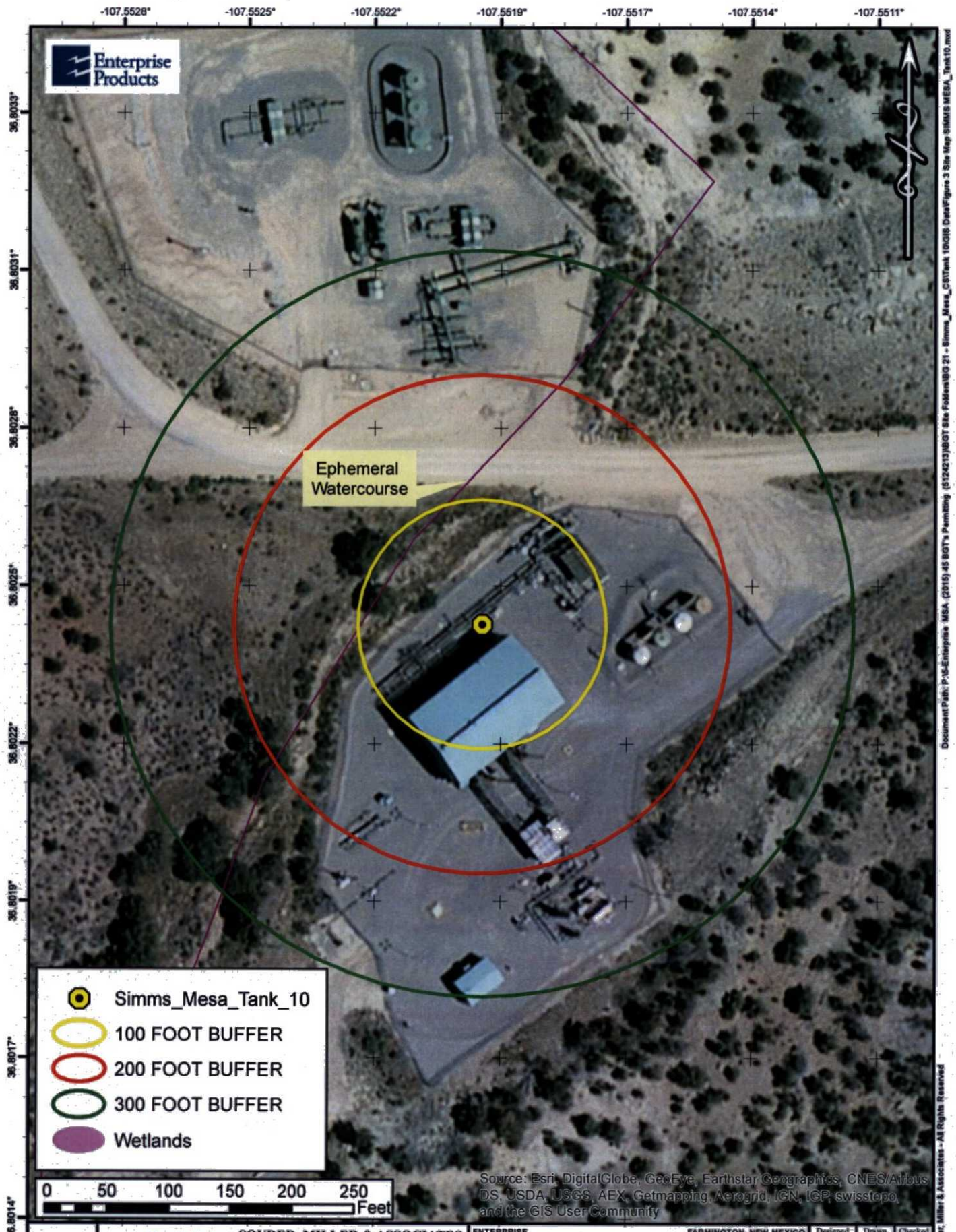
ENTERPRISE — FARMINGTON, NEW MEXICO

SIMMS MESA COMPRESSOR STATION TANK #10
JUNE, 2016
SITE MAP
SECTION 22, T30N, R7W
SAN JUAN COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: JULY 2016
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 2

Document Path: P:\E-Enterprise\MSA (2015) 45 BGT's Permitting (5124213)\BGT files Folders\BG 21 - Simms_Mesa_CS\Tank 10\GIS Data\Figure 2 Site Map SIMMS MESA Tank 10.mxd



SMA Engineering Environmental Surveying

SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098
www.soudermiller.com

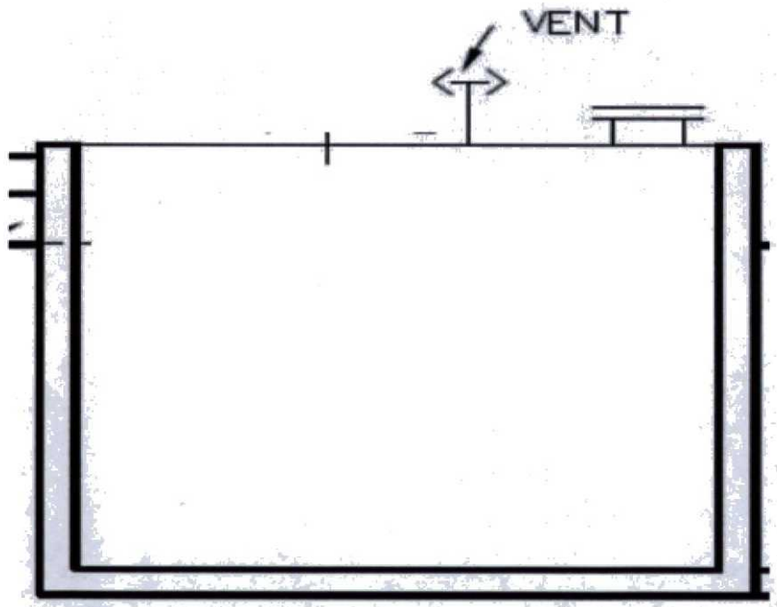
ENTERPRISE — FARMINGTON, NEW MEXICO

SIMMS MESA COMPRESSOR STATION TANK #10
JUNE, 2016
1:1,200 SITE MAP
SECTION 22, T30N, R7W
RIO ARRIBA COUNTY, NEW MEXICO

Designed	Drawn	Checked
JES	JES	APM

DATE: 1/15/2016
SCALE: 1:1,000
PROJECTION: WGS 1984
PROJECT NO: 5124213
FIGURE: 3

Below Grade Tank Diagram
Simms Mesa Compressor Station Tank #10



Enterprise Field Services, LLC
Existing Buried Double-Wall Steel Tank(s)
San Juan Basin - Below Grade Tank(s)
Design and Construction Plan

In accordance with Rule 19.15.17 NMAC, the following plan describes the general design and construction of the Below Grade Tank(s) (BGT) using double-wall steel tanks at Enterprise Field Services, LLC (Enterprise) facilities in the San Juan Basin of New Mexico.

Plan requirements:

1. The existing BGT(s) is/are located within a facility signed appropriately to NMAC 20.2.70, Title V General Construction Permit requirements. The sign is legible and contains the operator's name, the location of the compressor station in decimal degrees and township section and range, and emergency contact telephone numbers. Additional signage relevant to the Title V air quality permit is also present and provides equal or better protection of fresh water, public health and the environment than the 19.15.17.11 NMAC Subsection C signage requirement.

2. The existing BGT(s) is/are located within a facility with a minimum six foot high chain link fence topped with barbed or razor wire which provides equal or better protection of fresh water, public health and the environment than the 19.15.17.11 NMAC Subsection D fencing requirement.

3. The existing BGT(s) has/have an enclosed double wall steel top which provides equal or better protection of fresh water, public health and the environment than the 19.15.17.11 NMAC Subsection E netting requirement.

4. The existing BGT(s) foundation(s) is/are level and free of rocks, debris, sharp edges or irregularities and has compacted bottom and sidewalls that are stable for the soil conditions.

5. The existing BGT(s) is/are protected from rainwater run-on because the top of the BGT(s) is a minimum of six inches above the ground surface.

6. The existing BGT(s) is steel double-wall and bottom equipped with an Electronic Flow Meter (EFM) to monitor high liquid levels and automatically shuts off liquid discharges to prevent overflows. The annulus between the double walls is also monitored and inspected monthly.

Operational Plan

NMAC 19.15.17.12

OPERATIONAL REQUIREMENTS

Enterprise will operate and maintain the below-grade tank to contain liquids and solids and maintain the secondary containment system to prevent contamination of fresh water and protect public health and the environment.

Enterprise shall not discharge into or store any hazardous waste in the below-grade tank.

If the below-grade tank develops a leak, Enterprise shall remove all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office and repair the damage or replace the below-grade tank as applicable per 19.15.29 NMAC.

Enterprise shall operate and install the below-grade tank to prevent the collection of surface water run-on.

Enterprise shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.

Enterprise shall remove any measurable layer of oil from the fluid surface of a below-grade tank.

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.

Enterprise shall maintain adequate freeboard to prevent overtopping of the below-grade tank.

CLOSURE REQUIREMENTS

Enterprise shall not commence closure without first obtaining approval of the closure plan submitted with the permit application or registration pursuant to 19.15.17.13 NMAC.

Enterprise shall close the below-grade tank by first removing all contents and transferring the materials to a division approved facility.

Enterprise shall test the soils beneath the below-grade tank as follows:

A minimum of one composite sample to include any obvious stained or wet soils, or other evidence of contamination shall be collected from under the below-grade tank and the sample shall be analyzed for the identified constituents with respective concentrations listed in Table I of 19.15.17.13 NMAC below.

Table I
Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed

Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	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
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 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
*** Or Method 8015 with GRO, DRO, & MRO

If any contaminant concentration is higher than the above parameters, the division may require additional delineation upon review of the results and Enterprise must receive approval before proceeding with closure.

If all contaminant concentrations are less than or equal to the parameters listed above, Enterprise can proceed to backfill the excavation with non-waste containing, uncontaminated, earthen material.

CLOSURE NOTICE

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 the Enterprise name and the location to be closed, including the unit letter, section, township, and range.

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. 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.

CLOSURE REPORT AND BURIAL IDENTIFICATION

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 shall certify that all 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

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.

Within six months of cessation of operations, 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 a below-grade tank, Enterprise shall remove the equipment, unless the equipment is required for some other purpose.

SOIL COVER DESIGNS FOR BELOW-GRADE TANKS

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.

Enterprise shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

RECLAMATION AND RE-VEGETATION

RECLAMATION OF AREAS NO LONGER IN USE

All areas disturbed by the closure of the below-grade tanks, 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.

Enterprise shall replace topsoils and subsoils to their original relative positions and shall be contoured 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-grade tank.

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

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 any operations subject to those provisions, provided the other requirements provide equal or better protection of fresh water, human health and the environment.

Enterprise shall notify the division when reclamation and re-vegetation are complete.

30-039-07818
30-039-24350

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit B Sec. 22 Twp 30 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 UNIT #72, #466

cps 147w

Elevation 6298" Completion Date 4/25/89 Total Depth 460' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 240'

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST. 3

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 325', 315', 308', 301', 294', 287', 280', 273', 267', 245'

Depths vent pipes placed: 465' OF 1" PVC VENT PIPE

Vent pipe perforations: BOTTOM 280'

Remarks: gb #4

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned 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.

FM-07-0236 (Rev. 10-82)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto) ☒ Completion Date 4-25-89

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
147-W	S.J. 30-6 #466 S.J. 30-6 #72	3506A 69799		☒ Good ☐ Bad

Location:	Anode Size:	Anode Type:	Size Bit:
B22-30-7	2" x 60"	Duriron	6 3/4"

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
460'	460'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	325'	315'	305'	301'	294'	287'	280'	273'	267'	245
Anode Output (Amps)	2.2	3.5	3.8	3.7	3.8	4.3	4.4	3.9	2.3	2.0
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.94	Amps 10.6	Ohms 1.126		

Remarks: DRILLED 460' LOGGED 460'. DRILLER SAID WATER AT 240'. INSTALLED 465' of 1" PVC VENT PIPE PERFORATED BOTTOM 280'

* INSTALL 60/30 RECTIFIER IN PLACE OF 147-W

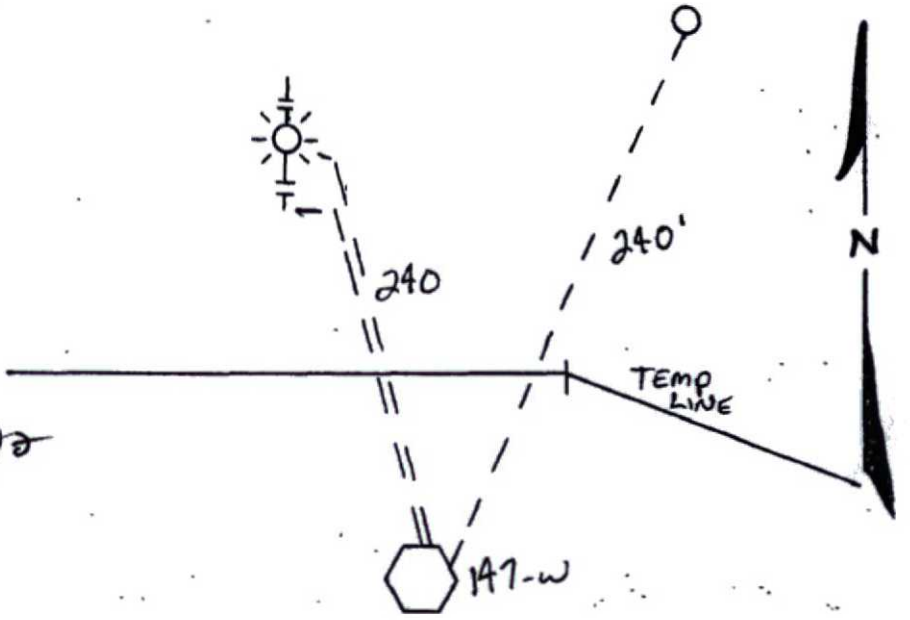
Rectifier Size: 60 V 30 A
Addn'l Depth
Depth Credit: 40' 5.75
Extra Cable: 270 .20
Ditch & 1 Cable: 480' .70
25 'Meter Pole: -
20' Meter Pole: -
10' Stub Pole: -
Junction Box: 1

3870.00
789.00
-150.00
54.00
336.00
237.00
5136.00
264.30 25680
5400.30
TOTAL 5392.80 OKQ8

All Construction Completed

m Williams
(Signature)

GROUND BED LAYOUT SKETCH



O. Crass DRILLING CO.

Drill No. 3

DRILLER'S WELL LOG

S. P. No. San Juan 30-6 #466 Date 4-25-89

Client Meridian Oil Co. Prospect

County San Juan State New Mex.

If hole is a redrill or if moved from original staked position show distance and direction moved:

FROM	TO	FORMATION — COLOR — HARDNESS
0	50	Sandy Shale
50	75	Sandstone
75	130	Shale
130	200	Sandstone
200	220	Shale
220	250	Sand
250	270	Sandy Shale
270	330	Shale
330	460	Sandstone

Mud Bran Lime

Rock Bit Number Make

Remarks: Water @ 240'

Driller Ronnie Brown

30-039-07818
30-039-24350

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NE Sec. 22 Twp 30 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 UNIT #72, #466

cps 147w

Elevation 6298' Completion Date 7/30/80 Total Depth 460' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 240' SAMPLE TAKEN - FULL OF SOAP

Depths gas encountered: N/A GB MAKING A LOT OF GAS

Type & amount of coke breeze used: 4800 lbs.

Depths anodes placed: 400', 390', 375', 335', 325', 315', 305', 295', 285', 275'

Depths vent pipes placed: 460'

Vent pipe perforations: 260'

Remarks: gb #3

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned 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.

Paso Natural Gas Company
rm 7-238 (Rev. 11-71)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Redrill
ORIGINAL GB 1963

Drilling Log (Attach Hereto). ☐

2"x60" Duriron

Completion Date 7-30-80

Well Name	Location	CPS No.
S.J. 30-6 # 72	NC 22-30-7	147 W

Type & Size Bit Used	Work Order No.
6 3/4 Rock	52220-19

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
460 Log 460		4800		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	400	390	375	335	325	315	305	295	285	275
Anode Output (Amps)	1.8	2.0	1.5	1.8	2.2	2.8	3.4	3.3	2.9	2.9

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

Total Circuit Resistance				No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.9	Amps 11.3	Ohms 1.1			

Remarks: UNION = good Driller said water at 240' caught water sample - full of soap. Drilled 460' Logged 460' Inst 460' vent pipe with 260' perf. GB making alot of gas

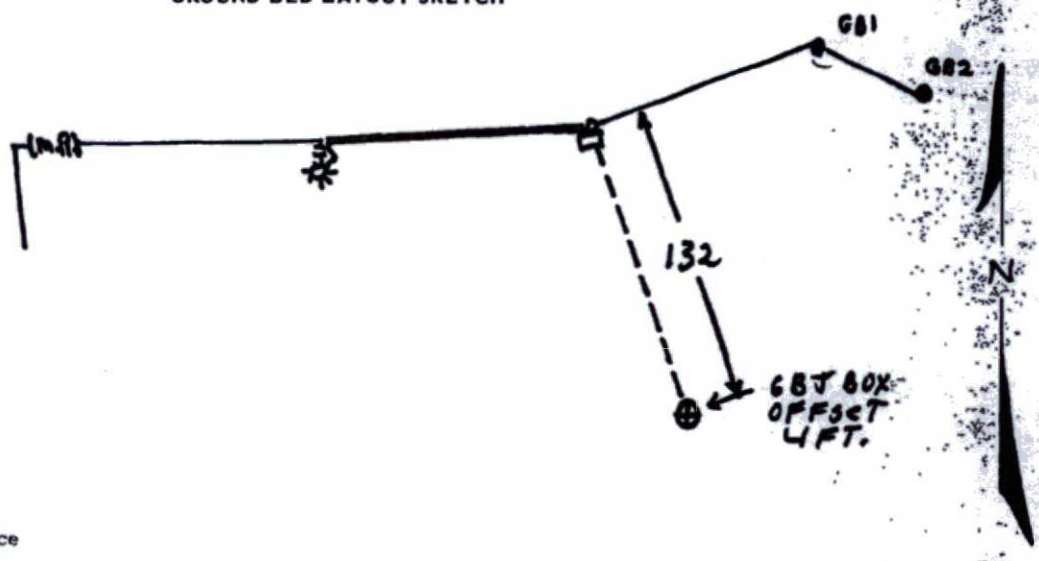
Jct Box
Ditch Cable = 132
Extra Cable = 5
Hole depth = -40

Time	Reg	O.T
7-30-80	8	2

All Construction Completed

Robert J Balcick
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:
WHITE – Division Corrosion Office
YELLOW – Area Corrosion Office
PINK – Originator File

Form 22-2 (Rev. 1-61)

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

San Juan 30-6 LEASE | #72 WELL NO. | Three C Drilling CONTRACTOR | 2 RIG NO. | CB 147W REPORT NO. | 52220-M DATE July 30 1980

MORNING

Driller Kevin Burge | Total Men In Crew 3

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	240	Sandstone shale bentonite clay w/ undersand		
240	340	shale		
340	365	sandstone		
385	400	shale		

BIT NO. | NO. DC ___ SIZE ___ LENG. ___
NO. DC ___ SIZE ___ LENG. ___
SERIAL NO. | STANDS
SIZE 6 3/4 | SINGLES
TYPE | DOWN ON KELLY
MAKE | TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN
400	460	Sandstone shale

REMARKS – Water was at 240 ft was making 2 gpm. Logged 460

DAYLIGHT

Driller | Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. | NO. DC ___ SIZE ___ LENG. ___
NO. DC ___ SIZE ___ LENG. ___
SERIAL NO. | STANDS
SIZE | SINGLES
TYPE | DOWN ON KELLY
MAKE | TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller | Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. | NO. DC ___ SIZE ___ LENG. ___
NO. DC ___ SIZE ___ LENG. ___
SERIAL NO. | STANDS
SIZE | SINGLES
TYPE | DOWN ON KELLY
MAKE | TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Kevin Burge Company Supervisor

Form 7-1 (Rev. 8-75)

El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: 1 of 1
Date: 7-30-80
By: RJB
File: 147W

edrill
.01 1963
.02 1966
500 12A

S.J. 30-6 #72 NE 22-30-7 147W 52220-19 7-30= hrs

UNION = good

gals/mol		
4	C_1	6 4
17	C_2	10 12
10	C_3	10 42
12	iC_4	12.38
12	nC_4	11.93
15	iC_5	13 85
15	nC_5	13 71
18	iC_6	15 50
18	C_6	15 57
21	iC_7	17 2
21	C_7	17.46
23	C_8	19 39
35	$C_2^=$	9 64
38	$C_3^=$	9 67

MW	MISC.	gals/mol
32.00	O_2	3 37
28 01	CO	4 19
44.01	CO_2	6 38
64 06	SO_2	5 50
34 08	H_2S	5 17
28.01	N_2	4 16
2.02	H_2	3.38

				Driller said water at 240' Caught water sample — Drilled to 460' Logged 460. INST 400' OF CSNT Pipe with 260' PERF. Slurried 48 sacks of coke. GB markers
240	.4	440	.5	
	.5		.6	GAS
50	.4	50	.6	
	.8			
60	.9	60	-TD	
	1.0			
70	1.5			
	1.5-10			
80	1.2			
	1.6-9			
90	1.8			
	1.8-8			
300	1.8			
	1.8-7			
10	1.8			
	1.4-6			
20	1.1			
	1.3-5			
30	1.3			
	1.1-4			
40	.5			
	.4			① 400 - 1.3 - 1.8
50	.5			② 390 - 1.4 - 2.0
	.6			③ 375 - 1.0 - 1.5
60	.8			④ 335 - 1.1 - 1.8
	.7			⑤ 325 - 1.3 - 2.2
70	.9			⑥ 315 - 1.8 - 2.8
	1.1-3			⑦ 305 - 2.0 - 3.4
80	.8			⑧ 295 - 2.0 - 3.3
	.8			⑨ 285 - 1.5 - 2.9
90	1.6-2			⑩ 275 - 1.8 - 2.9
	1.5			
400	1.2-			11.9 v 11.3 A = 1.1 ohms
	.7			
10	.4			
	.6			
20	.7			
	.7			
30	.7			
	.7			

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00035			RA	2	2	4	33	30N	07W	270745	4072250*	547	467	80
SJ 00837			RA		4	4	17	30N	07W	269152	4076614*	400		
SJ 02366			RA		1	3	15	30N	07W	271062	4077047	345	225	120
SJ 02698			RA		1	3	15	30N	07W	271173	4076962*	402	255	147
SJ 02818			RA	2	1	3	24	30N	07W	274444	4075362*	86	42	44
SJ 02983			RA	3	4	1	25	30N	07W	274616	4073946*	262	40	222
SJ 03006			RA	3	3	1	24	30N	07W	274255	4075564*	100		
SJ 03053			RA	4	4	3	24	30N	07W	274836	4074750*	200		
SJ 03075			RA	1	2	1	25	30N	07W	274626	4074548*	165	78	87
SJ 03082			RA	1	1	3	24	30N	07W	274244	4075362*	98	61	37
SJ 03301			SJ	4	4	4	34	30N	07W	272344	4071603*	21	10	11
SJ 03385			RA	4	4	4	17	30N	07W	269251	4076513*	520	460	60
SJ 03485			RA	1	1	3	24	30N	07W	274244	4075362*	126	60	66
SJ 03640			RA	1	1	3	15	30N	07W	271072	4077061*	433	241	192
SJ 03773 POD1			RA	2	1	3	24	30N	07W	274444	4075362*	120	70	50
SJ 03774 POD1			RA	3	3	1	25	30N	07W	274214	4073956*	300	220	80
SJ 03946 POD1			RA	4	2	4	15	30N	07W	270941	4076902	455	285	170

Average Depth to Water: **179 feet**

Minimum Depth: **10 feet**

Maximum Depth: **467 feet**

Record Count: 17

PLSS Search:

Township: 30N **Range:** 07W

***UTM location was derived from PLSS - see Help**