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

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

Form C-144
Revised April 3, 2017

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

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

BGT # 1

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: Dugan Production Corp. OGRID #: 006515

Address: PO Box 420, Farmington, NM 87499-0420

Facility or well name: Sanchez O'Brien SWD #001

API Number: 30-045-25298 OCD Permit Number: BGT 1

U/L or Qtr/Qtr L Section 06 Township 24N Range 09W County: San Juan

Center of Proposed Design: Latitude 36.3403587 Longitude -107.8359222 NAD83 1650' FSL & 990' FWL

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: 60 bbl Type of fluid: Produced Water

Tank Construction material: Steel

☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner ☒ Visible sidewalls only ☐ Other _____

Liner type: _____ ☐ 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_ _____

6.

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

☐ Screen ☒ Netting ☐ Other_____

☐ 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): Eileen Yates Title: Environmental Health and Safety Manager.

Signature: Eileen Yates Date: July 22, 2025

e-mail address: Eileen.Yates@duganproduction.com Telephone: 505-787-9832

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

OCD Representative Signature: Joel Stone **Approval Date:** 07/25/2025

Title: Environmental Scientist & Specialist-A **OCD Permit Number:** BGT1

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: _____

Dugan Production Corp.

Sanchez O'Brien SWD # 001

BGT # 1 Permit Registration Application

API# 30-045-25298

L-06-24N-09W

1650 FSL 990 FWL

Surface Owner: Federal

Dugan Production Company respectfully submits this application for the registration of a below-grade tank at Sanchez O'Brien SWD # 001. The location previously housed an unpermitted below-grade tank that was removed from service due to integrity deficiencies. The proposed replacement tank complies with the applicable provisions of 19.15.17 NMAC.

In accordance with the requirements of 19.15.17 NMAC, the following supporting documentation is provided:

- Operating and maintenance procedures for the below-grade tank are included in **Appendix A**.
- A closure plan, hydrogeologic report, USGS data, and NMSOE iWaters database information demonstrating compliance with the siting criteria in 19.15.17.10 NMAC are included in **Appendix B**.
- The standard design for the below-grade tank, which was previously submitted in the Sanchez O'Brien SWD # 001 Permit Application (October 2008) and approved in March 2012, is included in **Appendix C**.
- The proposed below-grade tank is not located within 100 feet of any continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland, or playa lake, as measured from the ordinary high-water mark. The nearest significant watercourse is located approximately 246.1 feet away. A map showing the distance to the nearest watercourse is included in **Appendix B**.

- The proposed below-grade tank is not located within 200 feet of any spring or freshwater well used for public or livestock consumption. A map showing distances to significant watercourses is provided in **Appendix B**.
- The below-grade tank and surrounding area meet the general specifications outlined in the Design and Construction Specifications of 19.15.17.11 NMAC. These specifications are included in **Appendix C**.

Dugan Production Company affirms that the proposed below-grade tank complies with all applicable regulations and requirements. Should additional information or clarification be needed, please do not hesitate to contact us.

Appendix A: Operating and Maintenance Procedures

Sanchez O'Brien SWD # 001 Below Grade Tank Maintenance and Operating Procedure:

In accordance with NMAC Rule 19.15.17, the following updated information describes the operation and maintenance of below-grade tanks on Dugan Production Corp. locations in the San Juan Basin. This document supersedes previous versions and is intended to ensure compliance with current environmental and public health protection standards. A separate plan shall be submitted for any below-grade tank not covered by this plan.

General Plan:

1. Dugan will operate and maintain each below-grade tank to contain liquids and solids, and to prevent contamination of fresh water and soil, ensuring protection of human health and the environment.

2. All fluids collected in a below-grade tank will be disposed of at a division-approved facility. Current disposal authorization includes Basin Disposal, Inc. Permit # NM-01-005 or Aqua Moss, LLC Permit # SWP 1034. All records of transport and disposal shall be retained for at least five years.

3. Dugan will discharge no waste or sludge into any below-grade tank that is considered hazardous or restricted under federal or state regulations. Only produced water, injection pump waste, and other division-authorized fluids will be permitted.

4. If any below-grade tank shows signs of compromise (e.g., leakage, overflow, or structural instability):
- All liquids will be removed within 48 hours.
- Repairs will be conducted immediately.
- The NMOCD District Office will be notified within 48 hours of the incident.
- Written documentation will be submitted within 7 days.
- If groundwater is suspected to be impacted, an immediate verbal and written notification will be made to the NMOCD Environmental Bureau and other applicable agencies.

5. The recovery and withdrawal of fluids from below-grade tanks will be conducted using hoses and vacuum equipment designed to avoid damaging the tank. All withdrawals will be logged and documented.

6. Surface and stormwater drainage will be diverted away from the tank location. Berms and erosion control measures will be maintained at all times to prevent run-on or runoff contamination.

Appendix A: Operating and Maintenance Procedures

7. The below-grade tank will be protected from external impact and excessive surface loads. Adequate signage, fencing, and security measures will be maintained to prevent unauthorized access.

8. At the time of tank closure:
- All fluids and solids will be removed.
- An absorbent boom or approved media will be used to clean the pit base.
- No waste will be buried onsite unless specifically permitted by the division.
- The tank area will be reclaimed according to 19.15.17.13 NMAC.

9. Dugan will maintain complete inspection records for each below-grade tank, including weekly inspection reports, incident logs, and closure documentation, for a minimum of five years as required.

Appendix B: Siting Criteria

Sanchez O'Brien SWD # 001 Siting Criteria:

1. Depth to Groundwater:

A liquid level measurement was conducted by Dugan Production using an Echometer on June 19, 2024, at the 16'Gs water well located at the Sanchez O'Brien #001 site. The fluid level was recorded at a depth of 573 feet. (See Appendix B: Figure 1.)

2. Proximity to Other Water Wells:

A search of the New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System (WRRS) for Section 06, Township 24N, Range 09W returned no data. An expanded search of Township 24N, Range 09W identified three wells in Sections 07, 25, and 27. The closest well is 1,073 feet from the site, with an average depth of 742 feet among the three (See Appendix B: Figure 2).

3. Nearest Points of Diversion (PODs):

Using the NMOSE POD Locations interactive map, an exploratory water well with a depth to water of 628 feet was identified at a distance of 2,163.7 feet from the site. (See Appendix B: Map 1 & Figure 3).

4. USGS Water Well Data:

A USGS database review identified a water well located 2,481.2 feet from the site with a recorded depth to water of 600 feet, dated October 1963. (See Appendix B: Figure 4).

5. Proximity to Watercourses:

The site is located within 300 feet of an ephemeral/intermittent watercourse, as defined by NM EMNRD OCD. (See Appendix B: Map 2).

6. Proximity to Lakebeds, Sinkholes, or Playa Lakes:

The site is not within 200 feet of any lakebed, sinkhole, or playa lake. (See Appendix B: Map 2).

7. Proximity to Human-Occupied Structures:

The site is not within 300 feet of any permanent residence, school, hospital, institution, or church. (See Appendix B: Map).

8. Proximity to Springs or Private Domestic Wells:

No springs or private domestic freshwater wells used by fewer than five households were identified within 500 feet. (See Appendix B: Map 2.)

9. Proximity to Other Freshwater Wells/Springs:

Appendix B: Siting Criteria

No freshwater wells or springs were identified within 1,000 feet of the site. (See Appendix B: Map 2)

10. Municipal Jurisdiction:

The site is not located within incorporated municipal boundaries or within a defined municipal freshwater well field per NMSA 1978, Section 3-27-3. (See Appendix B: Map 4).

11. Wetlands Proximity:

According to the U.S. Fish & Wildlife Service National Wetlands Inventory, the site is not within 300 feet of a wetland. (See Appendix B: Map).

12. Subsurface Mines:

NM Mining and Minerals Division GIS Maps confirm the site does not overly any known subsurface mines. (See Appendix B: Map 6.)

13. Stability of the Area:

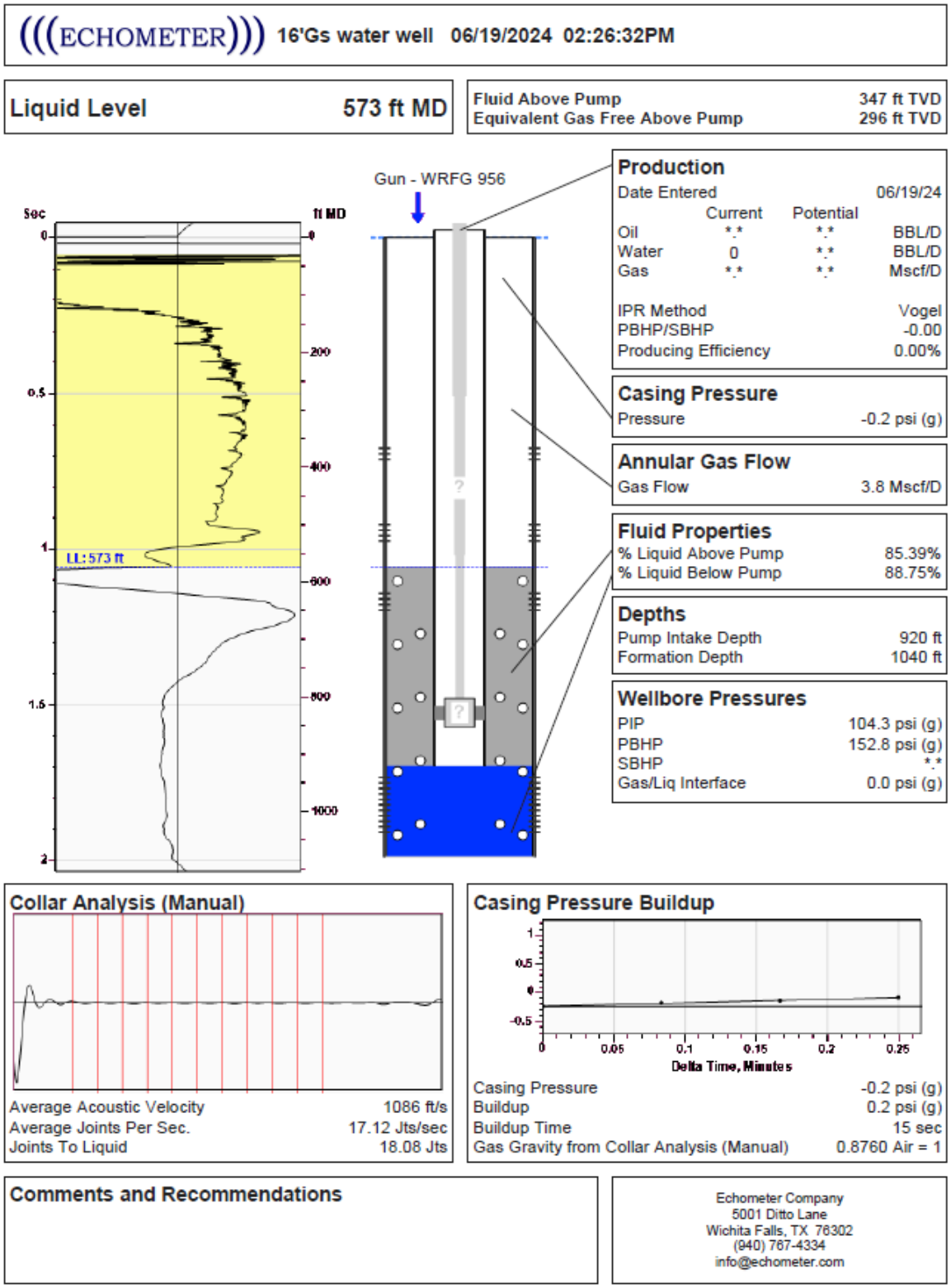
The site is not located in an 'unstable' area as defined in Paragraph (6) of Subsection U of 19.15.2.7 NMAC.

14. Floodplain Designation:

According to FEMA's National Flood Hazard Layer (NFHL), the site is not located within a 100-year floodplain. (See Appendix A: Map 5.)

Appendix B: Siting Criteria

Figure 1: Sanchez O'Brien SWD # 001 Dugan Echometer Depth to Water Report:



Appendix B: Siting Criteria

Figure 2: Sanchez O'Brien SWD # 001 – NMOSE iWaters Data

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 smallest to largest) (In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Well Depth	Depth Water	Water Column
SJ 01255		SJ	SJ		NW	NW	07	24N	09W	245350.0	4024741.0 *		1100	1073	27
SJ 01712		SJ	SJ		NE	SE	27	24N	09W	251195.0	4018933.0 *		528	515	13
SJ 04587 POD1		SJ	SJ		NE	SW	25	24N	09W	253560.7	4018930.3		800	640	160

Average Depth to Water: **742 feet**

Minimum Depth: **515 feet**

Maximum Depth: **1073 feet**

Record Count: 3

Basin/County Search:
County: SJ

PLSS Search:
Range: 09W
Township: 24N
Section: 1-36

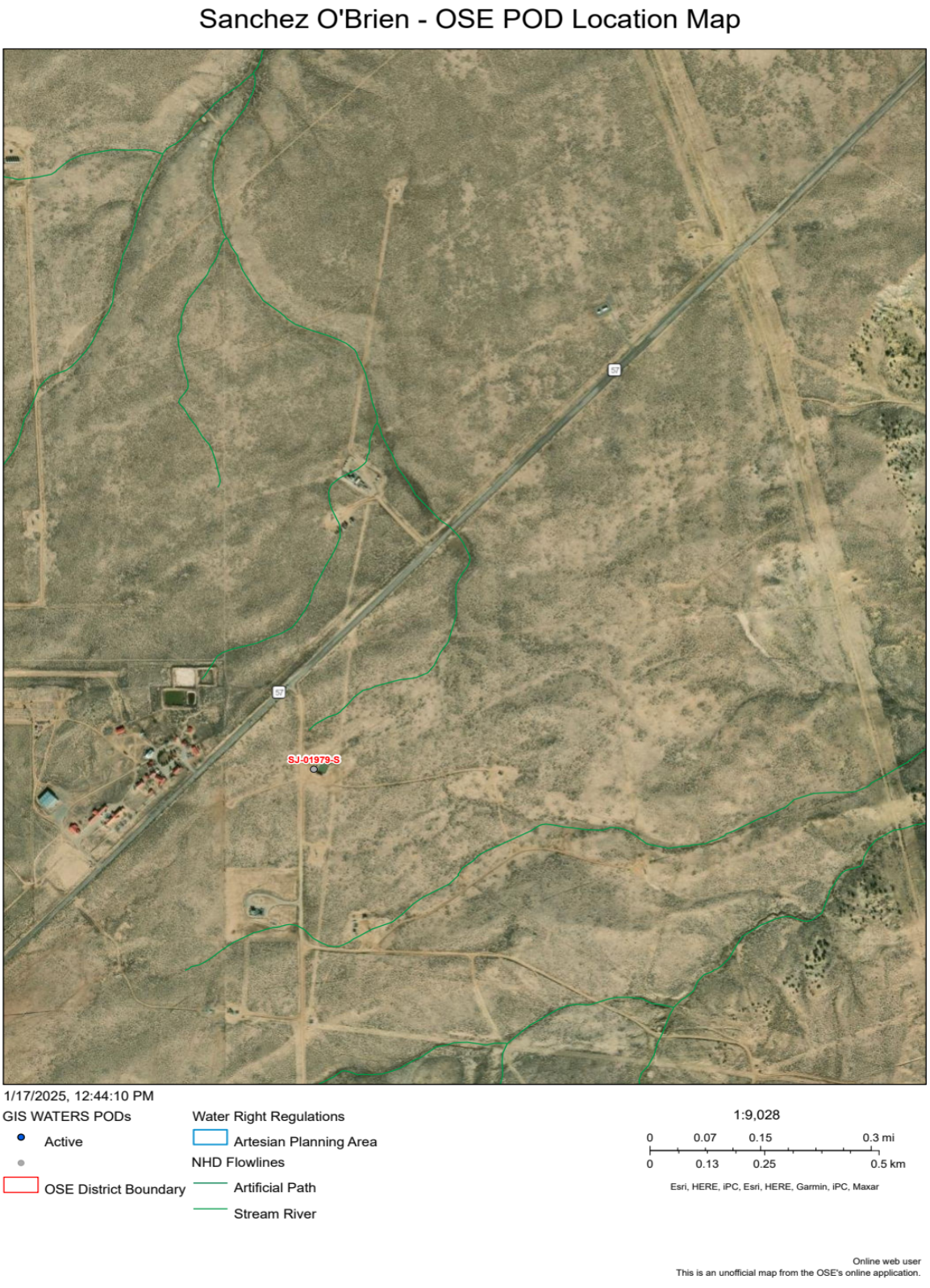
*** UTM location was derived from PLSS - see Help**

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.

January 17, 2025 11:56 AM MST Page 1 of 1 Water Column/Average Depth to Water

Appendix B: Siting Criteria

Map 1: Sanchez O'Brien SWD # 001 POD Map



Appendix B: Siting Criteria

Figure 3: Sanchez O'Brien SWD # 001 POD Summary

Point of Diversion Summary

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

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
	SJ 01979		SW	NE	32	25N	09W	247838.5	4027524.9	

* UTM location was derived from PLSS - see Help

Driller License:		**Driller Company:**			
Driller Name:	SALAZAR DRILLING COMPANY				
Drill Start Date:	1986-02-08	**Drill Finish Date:**	1986-02-15	**Plug Date:**	
Log File Date:	1986-03-18	**PCW Rcv Date:**	1986-03-18	**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	3.5	**Estimated Yield:**	
Casing Size:	10.75	**Depth Well:**	1180	**Depth Water:**	628

Figure 4: Sanchez O'Brien SWD # 001 USGS Data:

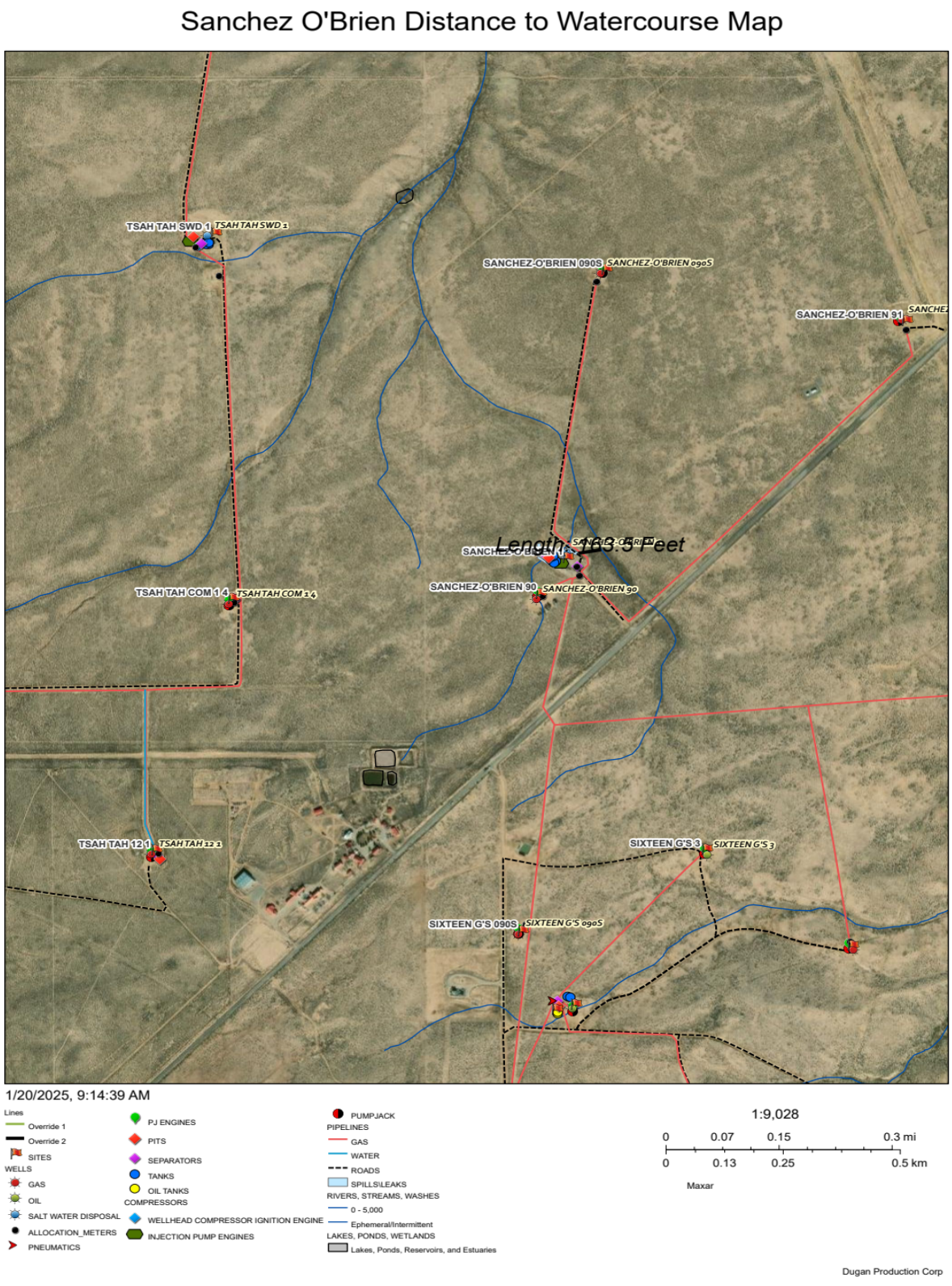
USGS 362004107502501 24N.10W.12.2223

San Juan County, New Mexico
Latitude 36°20'04", Longitude 107°50'25" NAD27
Land-surface elevation 6,878 feet above NGVD29
This well is completed in the Colorado Plateaus aquifers (N300COPLTS) national aquifer.
This well is completed in the Ojo Alamo Sandstone (211OJAM) local aquifer.

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface
1963-10-31		D	62610	
1963-10-31		D	62611	
1963-10-31		D	72019	600.00

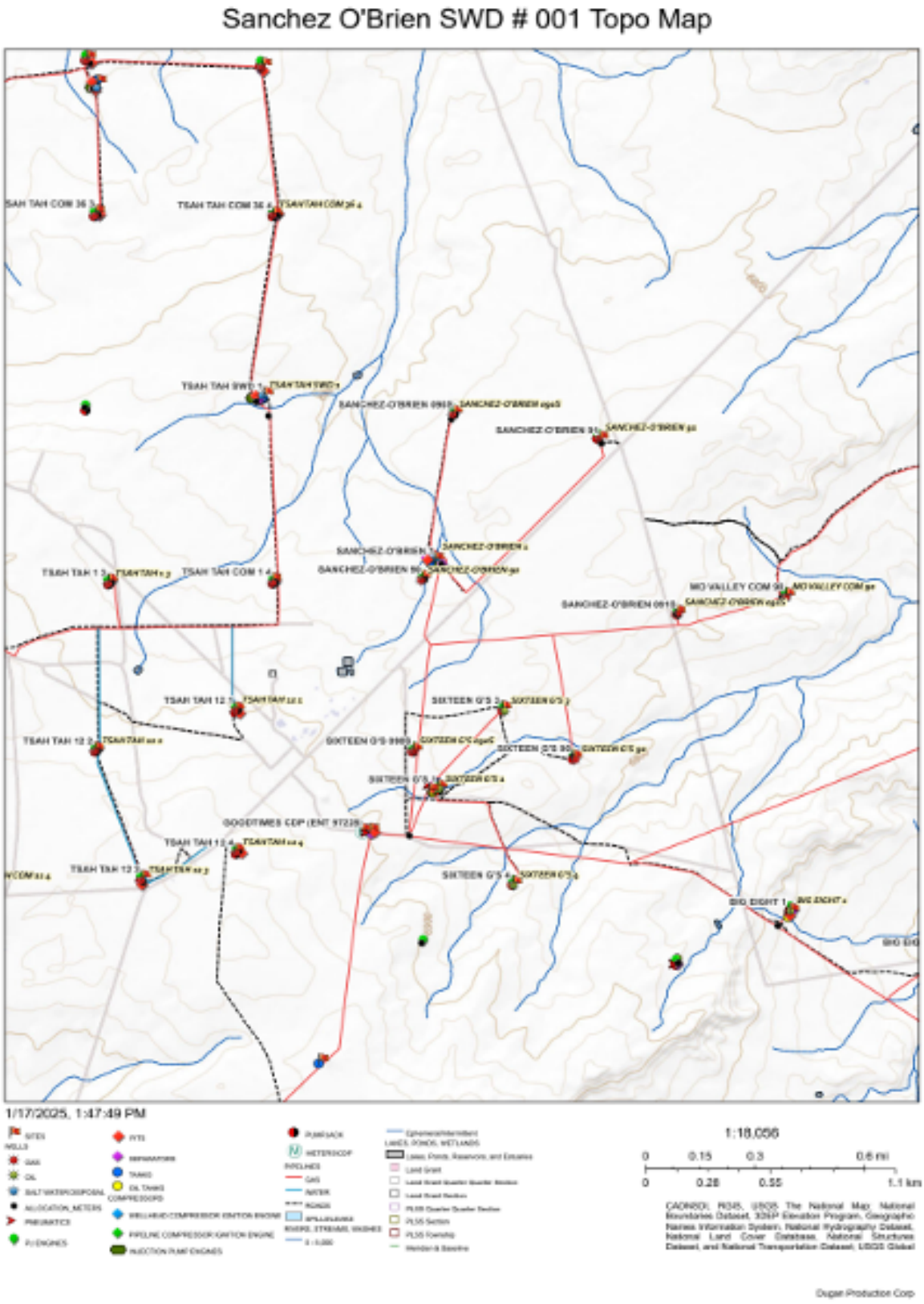
Appendix B: Siting Criteria

Map 2: Sanchez O'Brien SWD #001 Distance to Watercourse



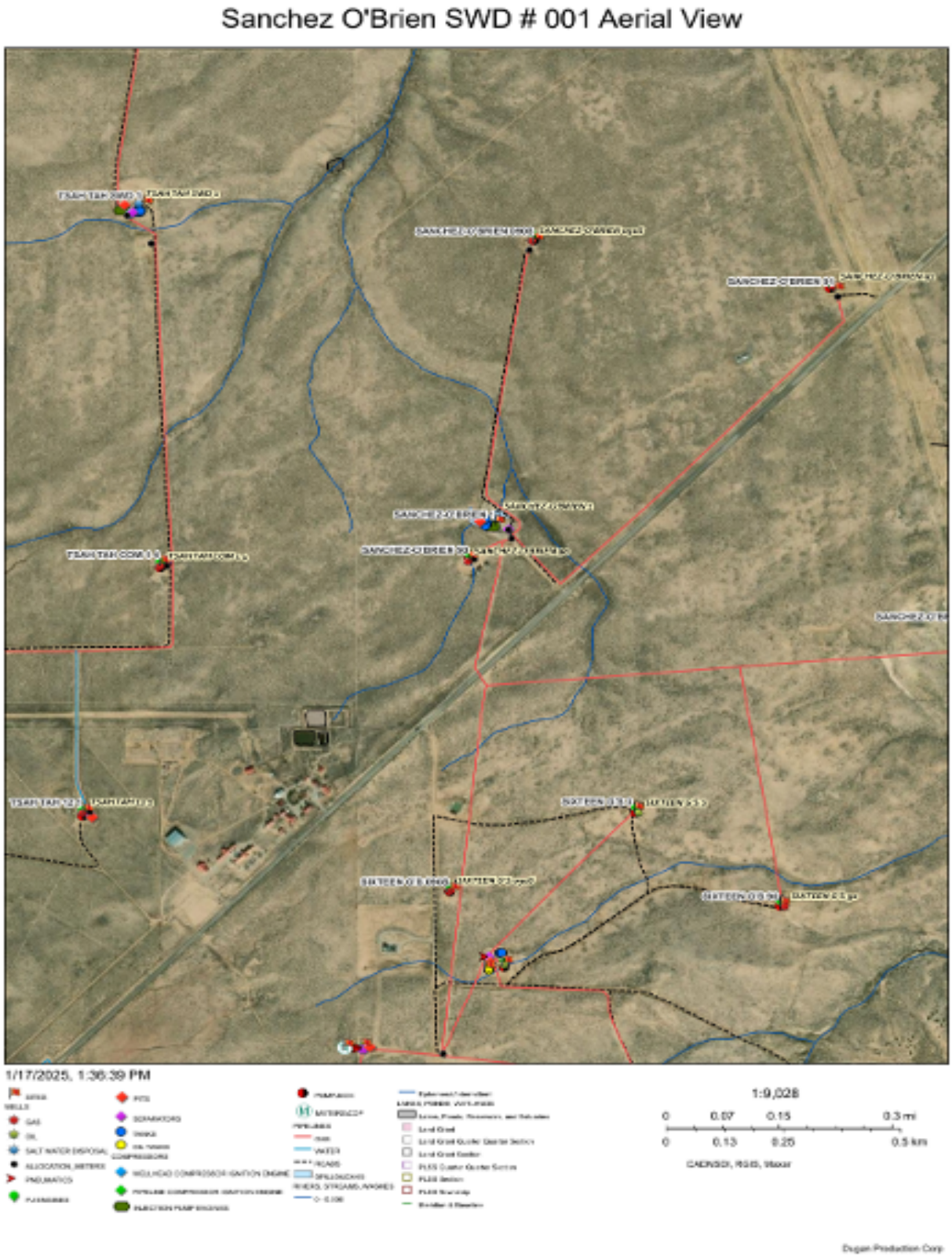
Appendix B: Siting Criteria

Map 3: Sanchez O'Brien SWD # 001 Topo Map:



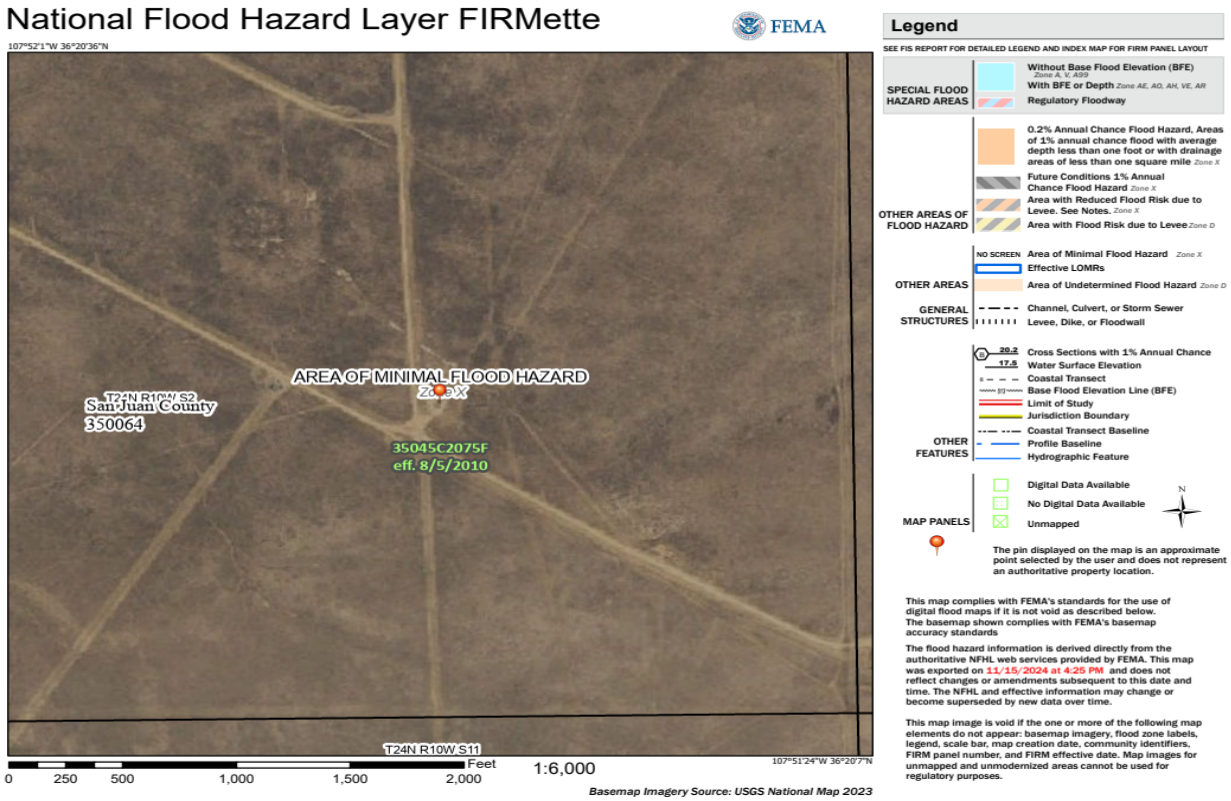
Appendix B: Siting Criteria

Map 4: Sanchez O'Brien SWD # 001 Aerial View Map:



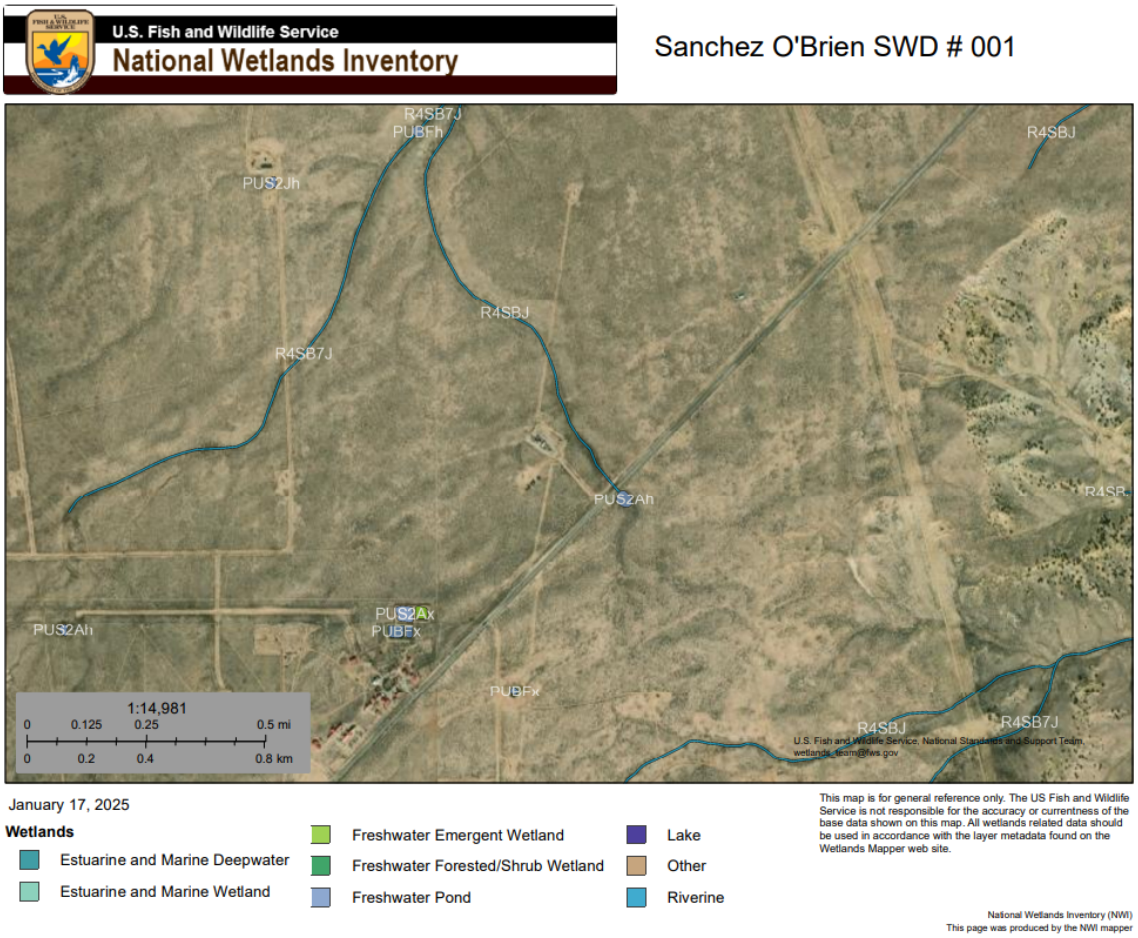
Appendix B: Siting Criteria

Map 5: Sanchez O'Brien SWD # 001 FEMA MAP:



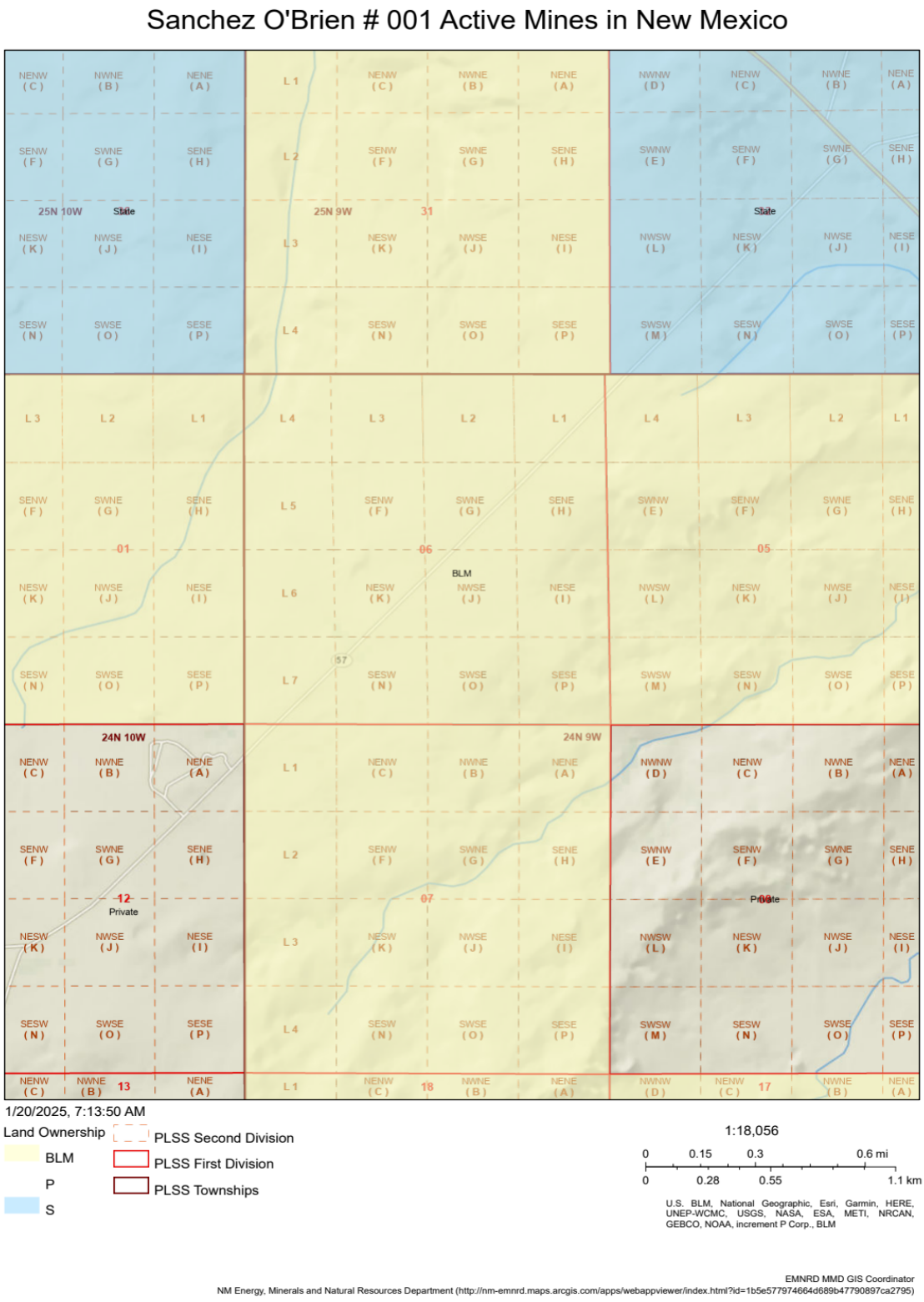
Appendix B: Siting Criteria

Map 6: Sanchez O'Brien SWD # 001 Wetlands Map:



Appendix B: Siting Criteria

Map 7: Sanchez O'Brien SWD # 001 Mine Map:



Appendix B: Siting Criteria

Sanchez O'Brien SWD # 001 Closure Plan:

Dugan Production Corp.
Closure Plan

In accordance with Rule 19.15.17 NMAC, the following information describes the closure requirements of below-grade tanks on Dugan Production Corp. locations. This is Dugan's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of the below-grade tank closure. Closure report will be filed on C-144 and incorporate the following:

- Detail on Capping and Covering, where applicable

- Plot Plan (Exhibit and tank diagram)

- Inspection photos

- Sampling Results

- C-105

- Copy of Deed Notice will be filed with County Clerk

General Plan

1. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email or verbally. The notification of closure will include the following:
   i. Operator's name
   ii. Location by Unit Letter, Section, Township, and Range. Well Name and API Number

2. All free-standing liquids will be removed at the start of the below-grade tank closure process and disposed of in a division-approved facility or recycled, reused if the liquid is in a manner that the appropriate division district office approves.

3. Dugan will remove the below-grade steel tank and recycle, reuse, or reclaim it in a manner that the NMOCD Division district office approves.

4. Any other components associated with the below-grade tank will be removed unless it is required for some other current approved use.

Appendix B: Siting Criteria

5. The grade base and accessible membrane will be removed and disposed of in a division-approved facility.

6. A five-point composite sample will be taken of the soil beneath the below-grade tank to determine if release has occurred. The sample will be analyzed for Benzene, BTEX, TPH, and chlorides as per the requirements of 19.15.17.13(E)(4). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.17.13 i.e., Dig and Haul.

Contaminant Testing Limits

Components	Test Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	10
BTEX	EPA SW-846 8021B or 8260B	50
GRO+DRO	EPA SW-846 Method 8015M	1,000
TPH	EPA SW-846 418.1	2,500
Chlorides	EPA 300.0	80,000

7. If the sampling program demonstrates that the above criteria are met, Dugan Production Corp. will backfill the excavation with compacted, non-waste containing soil, and shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

8. Re-contouring of location will match fill, shape, line, form, and texture of the surrounding area. Reshaping will include grading to control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and variable contour fill slopes will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surfaces, fitting the natural landscape.

9. Notification will be sent to the OCD when the reclaimed area is seeded.

10. Dugan shall seed the disturbed areas the first growing season after the operator closes the pit. Re-vegetation efforts shall comply with Subsection G, H, and I of 19.15.17.13 NMAC. Seeding will be accomplished via drill seeding or other approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (non-invasive), consisting of at least three native plant species, including at least one grass, and will be maintained through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Appendix C: Below Grade Tank Design and Construction Plan

Below Grade Tank and Containment Specifications:

Dugan Production Corp.

Below Grade Tank Design and Construction Plan

In accordance with Rule 19.15.17 NMAC, the following information describes the design and construction for below-grade tanks on Dugan Production Corp. locations. This is Dugan's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

General Plan

1. Dugan will design and construct a below-grade tank to contain liquids and solids and prevent contamination of fresh water and protect public health and the environment.

2. Prior to constructing the below-grade tank, topsoil will be stockpiled in the construction zone for later use in reclamation.

3. Dugan will post a well sign, not less than 12" by 24", on the well site prior to construction of the below-grade tank. The sign will list the operator or record as the operator, the location of the well by unit letter, section, township, range, and emergency telephone numbers.

4. Dugan shall construct all new fences utilizing 48" steel meshed field-fence (hog-wire) on the bottom with 1½" pipe on corners which will be welded to the 48" T-posts. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Below-grade tanks will be fenced at all times.

5. Dugan shall construct the below-grade tank pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.

6. Dugan shall place a 6- to 8-mil HDPE geomembrane liner on the bottom of the pit for leak detection. The liner will be resistant to petroleum hydrocarbons, salts, and acidic and alkaline solutions. The liner will be installed to manufacturer's specifications and comply with EPA SW-846 method 9090A requirements.

7. The geomembrane liner will be covered by at least 6 inches of ¾" gravel.

8. A single wall steel tank with expanded metal top will be placed in the pit and on top of the gravel so that the sides of the steel tank are exposed for visual inspection.

9. An automatic high-level shutoff device will be installed as well as the manual shutoff valve.

Appendix C: Below Grade Tank Design and Construction Plan

10. The pit shall be protected from run-on by constructing and maintaining berms around the perimeter of the pit.

Appendix D: Photo Documentation

Photo 1: Below Grade Tank Replacement

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: DUGAN PRODUCTION CORP PO Box 420 Farmington, NM 87499	OGRID: 6515
	Action Number: 487533
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By	Condition	Condition Date
joel.stone	None	7/25/2025