

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 NMOC District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOC District Office.

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

Type of action: ☒ Below grade tank registration
☐ Permit of a pit or proposed alternative method
BGT2 Closure ☐ Closure of a pit, below-grade tank, or proposed alternative method
Modification ☐ 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: SIMCOE LLC OGRID #: 329736
Address: 1199 Main Ave., Suite 101, Durango, CO 81301
Facility or well name: NORTHEAST BLANCO UNIT 010
API Number: 30-039-07830 OCD Permit Number: _____
U/L or Qtr/Qtr M Section 16 Township 30N Range 07W County: Rio Arriba County
Center of Proposed Design: Latitude 36.807856° Longitude -107.582064° 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 **TANK ID: A**
Volume: 80.0 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 Double Walled Double Bottom Visible Sidewalls
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 _____

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.

Variations 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
- ☒ **NMOCD well file - Deep Ground Bed Cathodic Protection Well**

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

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

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

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

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

- FEMA map

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

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

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

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

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

☐ NA

☐ Yes ☐ No

☐ NA

☐ Yes ☐ No

☐ Yes ☐ No

☐ Yes ☐ No

☐ Yes ☐ No

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☐ No

☐ Yes ☐ No

☐ 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 H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13. **Proposed Closure:** 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

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

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

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

15. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

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

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

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

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

☐ 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): Steve Moskal Title: Environmental Coordinator

Signature:  Date: 1/15/2021

e-mail address: smoskal@ikavenergy.com Telephone: (505) 330-9179

18.

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

OCD Representative Signature: Jaclyn Burdine Approval Date: 07/20/2022

Title: Environmental Specialist-A OCD Permit Number: BGT2

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: _____

Hydrogeological Report for the NEBU 10

Geology:

The stratigraphic sequence of Paleocene and Eocene rocks in the eastern part of the San Juan basin is the Nacimiento and Animas formation overlain by the San Jose Formation. The San Jose Formation of Eocene age was defined by Simpson (1948a, b). It occurs in New Mexico and Colorado and its outcrop forms the land surface over much of the central basin area. It overlies the Nacimiento Formation in the area generally south of the State line (Fassett, 1974. P229). The Basal contact of the San Jose varies with location in the basin. This contact is a disconformity along the basin margins, and it is an angular unconformity along the Nacimiento uplift; the contact is conformable in the central basin. The Nacimiento is a sequence of varicolored beds of sandstone and mudrock that attains a thickness of as much as 120 m thick (Baltz, 1967).

The Animas Formation occupies a stratigraphic position similar to that of the OJO Alamo and Nacimiento Formations. The Animas strata comprise a general fining upward sequence of volcanoclastic conglomerates and sandstones, with arkosic conglomerates and sandstones near the top. The upper member of the Animas has been shown to interfinger with the Nacimiento in its eastern (Dane, 1946) and western (Barnes et al., 1954) outcrop belts. Subsurface correlation of these formations has not been carried out in any detail because of the difficulty of recognizing their contact on Electric logs (Fassett and Hinds, 1971:33).

The nature of the contact between the lower Eocene San Jose Formation and the Nacimiento formation north of latitude 36 degrees 45'N has been described as conformable (Barnes et al., 1954, Stone et al., 1983 25-26), Whereas at latitude 36 it has been shown to be unconformable (Baltz, 1967; Lucas et al., 1981) Contact relationships between the San Jose and Animas Formations in the northernmost San Juan Basin have been shown to be intertonguing (Smith, 1988). The San Jose formation was deposited in various fluvial type environments. In general the unit consists of an interbedded sequence of sandstone siltstone and variegated shale, the sandstones are buff to yellow and rusty-colored crossbedded very fine to coarse grained arkose, which are locally conglomeratic and contain abundant silicified wood. The thickness of the San Jose Nacimiento and Animas Formations is ranges from zero to more than 3,500 feet in the east central part of the structural basin. The bottom of the Nacimiento and Animas Formations decreases from a maximum altitude of more than 8 000 feet above sea level along the northeastern basin rim to less than 4,000 feet above sea level in the east central part of the basin.

Hydraulic Properties:

The San Jose, Nacimiento, and Animas Formations are a source of water for public-supply, commercial, private-domestic, and livestock use in areas where drilling depths and pumping levels are economically feasible and where water quality is suitable. Water in the San Jose Nacimiento and Animas Formations occurs under both water table and

artesian conditions. Recharge to the aquifer is from infiltration of precipitation and stream flow on outcrops and from vertical upward leakage of water from underlying units. Transmissivity data for the San Jose Nacimiento and Animas Formations are minimal-Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone and others 1983 table 5). The reported or measured discharge from 79 water wells completed in the San Jose, Nacimiento, and Animas Formations ranges from 1 to 61 gallons per minute and the median is 6 gallons per minute. The specific capacity of 12 of these wells ranges from 0.03 to 2.30 gallons per minute per foot of drawdown and the median is 0.23 gallon per minute per foot of drawdown. Water quality data described in this section are from the NWIS data base and were collected during 1938. 84 Well records were checked to assure to the extent possible that a particular sample represents water only from the San Jose Nacimiento and Animas Formations and not a mixture of water from other aquifers. Locally however these formations may have substantial differences in the concentration of some water quality constituents due in part to differences in rock characteristics as described in the Geology section.

Reference:

USGS Hydrologic investigations atlas HA-720-A plate 1,2
Lucas, Spencer G and Smith, Larry N. 1991, Stratigraphy, Sedimentology and Paleontology of the Lower Eocene San Jose Formation in the central portion of the San Juan basin, Northwestern New Mexico, New Mexico Bureau of Mines & Mineral Resources Bulletin 126. 6-7p.

Sitting Requirements for NEBU 10

The NEBU 10 is not located in an unstable area per topographic map attached.

There is no continuously flowing watercourse near the proposed location.

The proposed well location is neither near any private and/or public buildings nor any private and/or public water sources.

The proposed well location is not located within any incorporated municipal boundaries or municipal fresh water well field.

There are no wetlands located near the proposed well location as per the wetlands map attached.

Per the NM Bureau of Geology and Mineral Resources map attached there are no locations of any mines, mills or quarries near the proposed well location.

The FEMA floodplain map attached indicates the proposed well location is defined as outside of the 500 Year Flood Plain.

There will be no excavated material placed within 300 feet of a flowing watercourse or within 200 feet of any other defined water course.

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: 30N Range: 07W Sections: 16,9,8,17,20,21

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

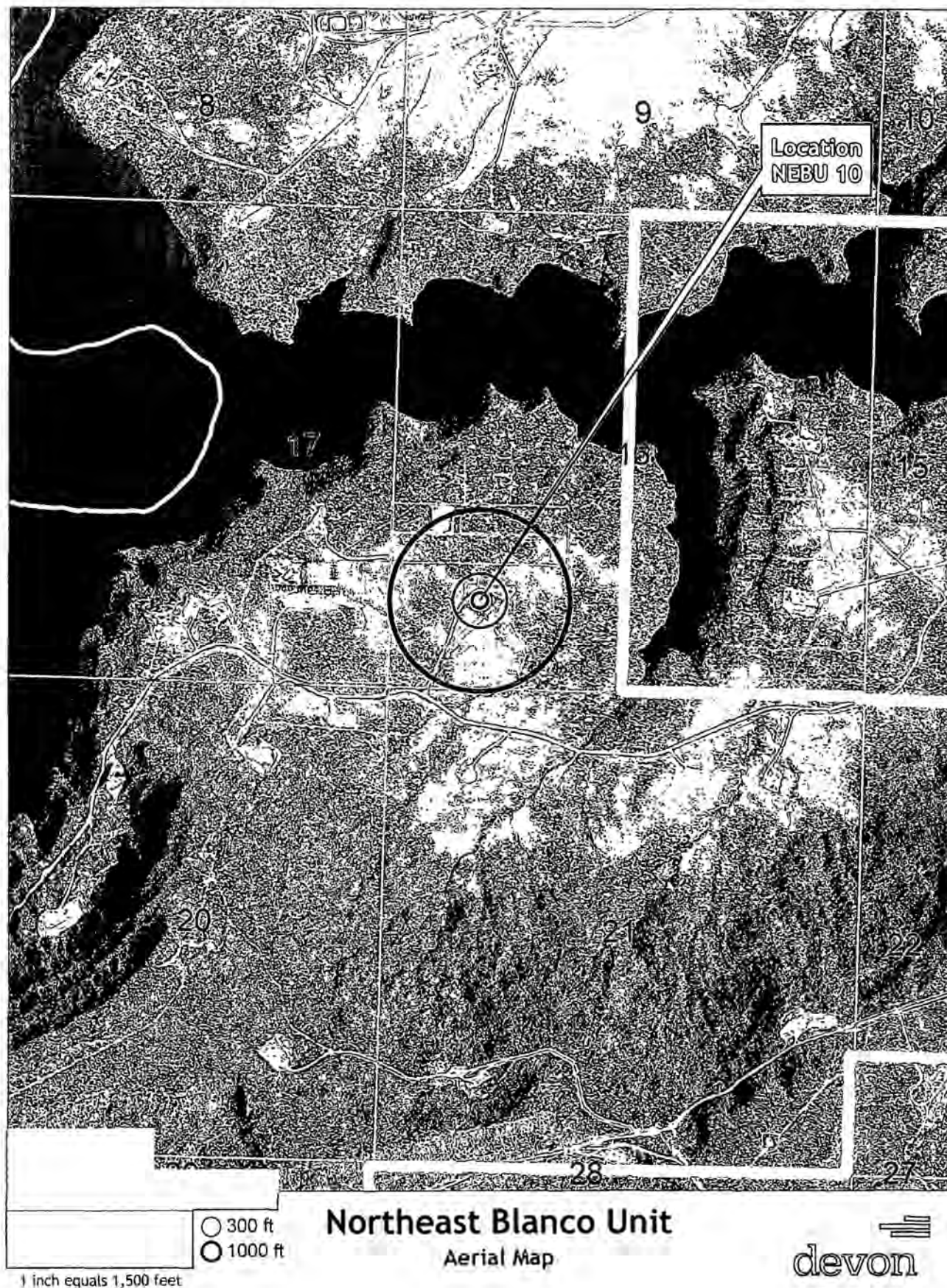
iWATERS Menu

Help

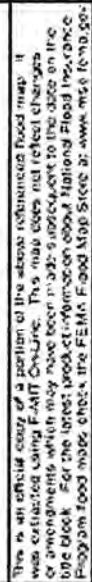
AVERAGE DEPTH OF WATER REPORT 09/08/2008

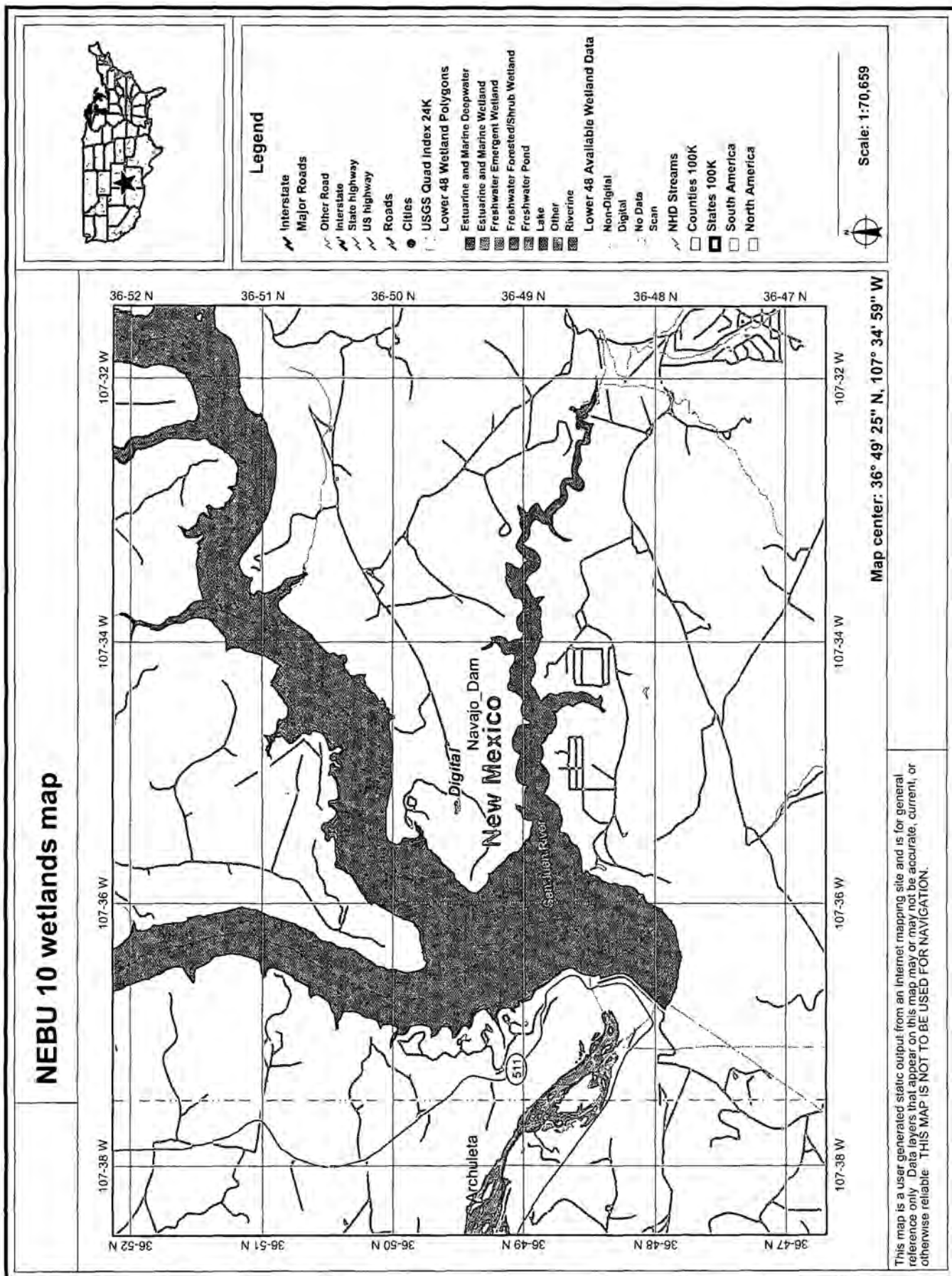
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	30N	07W	17				1	460	460	460

Record Count: 1







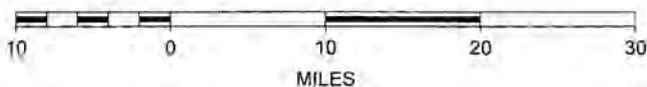


MMQonline Public Version

Mines, Mills & Quarries Commodity Groups	
△	Aggregate & Stone Mines
◆	Coal Mines
★	Industrial Minerals Mines
▼	Industrial Minerals Mills
☐	Metal Mines and Mill Concentrate
■	Potash Mines & Refineries
☐	Smelters & Refinery Ops.
✦	Uranium Mines

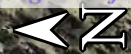


SCALE 1 : 751,601



Legend

- 1,000' Buffer
- 200' Buffer
- 300' Buffer
- 500' Buffer



1000 ft


Northeast Blanco Unit 010

ank A - 80 bbl BGT
PI #30-039-07830
16-30N-7W
6.807856°, -107.582064°



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(NAD83 UTM in meters)	
		(quarters are smallest to largest)				X	Y
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng
	SJ 03385	4	4	4	17	30N	07W
						269251	4076513* 
<hr/>							
Driller License:		1508		Driller Company:		HARGIS CONSULTING WATER WELL	
Driller Name:							
Drill Start Date:		02/15/2004		Drill Finish Date:		02/18/2004	Plug Date:
Log File Date:		02/25/2004		PCW Rcv Date:			Source: Shallow
Pump Type:				Pipe Discharge Size:			Estimated Yield: 10 GPM
Casing Size:		7.00		Depth Well:		520 feet	Depth Water: 460 feet
<hr/>							
Water Bearing Stratifications:				Top	Bottom	Description	
				460	470	Sandstone/Gravel/Conglomerate	
<hr/>							
Casing Perforations:				Top	Bottom		
				400	500		

*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.

1/15/21 11:10 AM

POINT OF DIVERSION SUMMARY

Water Rights Reporting System Online Meter Reading

Points of Diversion visible at 1:19,000 with 1,000 features per view

OSE POD Locations



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Find address or place

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Measurement

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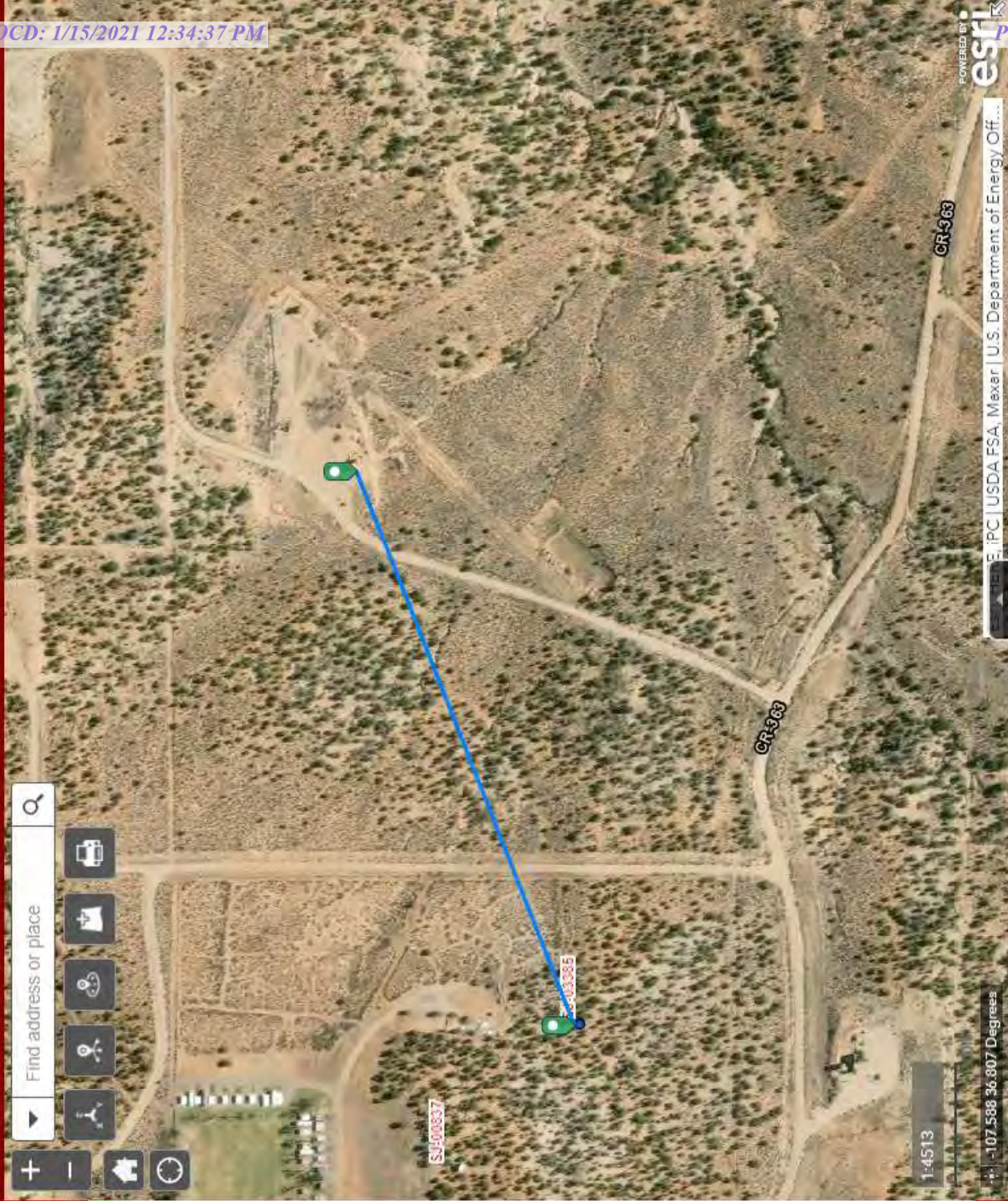
Feet

Measurement Result

1,423.6 Feet

Clear

Press CTRL to enable snapping



SIMCOE LLC
SAN JUAN BASIN, NORTHWEST NEW MEXICO

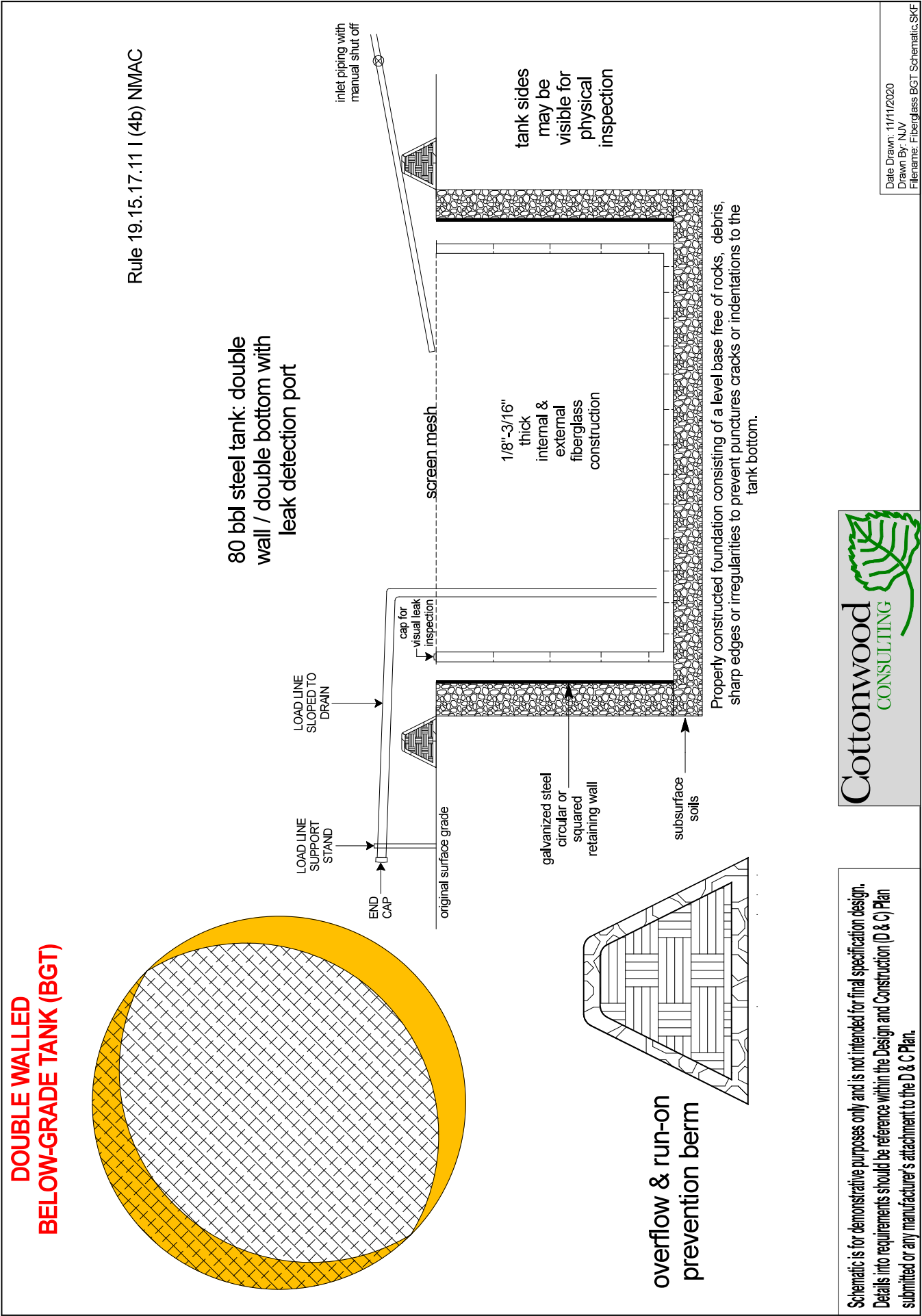
BELOW-GRADE TANK DESIGN AND CONSTRUCTION PLAN

Pursuant to Rule 19.15.17.11 NMAC, SIMCOE LLC (SIMCOE) shall construct a below-grade tank (BGT) or modify an existing permitted BGT according to the following plan. Any deviations from this plan will be addressed on the New Mexico Oil Conservation Division's (NMOCD) form C-144 at the time of submittal.

Design and Construction Plan

1. SIMCOE will design and construct a BGT which will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.
2. SIMCOE as the well operator shall install and maintain a well sign that adheres to 19.15.16.8 NMAC. The sign will be posted at the well site to address, at a minimum;
 - a. Well Number
 - b. Property name
 - c. Operators name
 - d. Location by footage, quarter-quarter section, township and range (or unit letter)
 - e. API number
 - f. Emergency contact information
3. SIMCOE will fence or enclose its BGTs in a manner that prevents unauthorized access and shall maintain its fence in good repair.
4. SIMCOE will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church with, at a minimum a chain link security fence at least six (6) feet in height with at least two (2) strands of barbed wire at the top. SIMCOE will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
5. SIMCOE is requesting NMOCD's approval for an alternative fence design that provides, at a minimum, equivalent protection to the design specified in Paragraph 3 of Subsection D of 19.15.17.11 NMAC for BGTs beyond the stated distance in paragraph 4 of this document. SIMCOE's proposed design for its BGTs will utilize 48" steel mesh field-fence (hog wire) with a metal or steel top rail. Perimeter T-post will be installed roughly every 10 feet.
6. SIMCOE will construct an expanded metal covering that completely covers the top of the BGT. The covering will be constructed such that it will prevent hazardous conditions to wildlife, including migratory birds
7. SIMCOE shall construct the BGT of materials that are resistant to produced water, any contained liquids, and damage from sunlight. SIMCOE's BGTs will be constructed of fiberglass or carbon steel that meets the requirements of ASTM A36.
8. SIMCOE's BGTs shall have a properly constructed earthen foundation consisting of a level base free of rocks, debris, sharp edges, or irregularities as to prevent punctures, cracks or indentations to the tank bottom as demonstrated on the design drawing.
9. SIMCOE will construct and operate the BGT to prevent surface water run-on by using both earthen berms and leaving a portion of the BGT above the original grade as demonstrated on the design drawing.
10. SIMCOE will construct and operate the BGT to prevent overflow and overfilling of the BGT. Overflow will be prevented by use of either a manual shut off valve or an electronic high fluid level detector that will automatically engage an electronic shut-off valve when a one (1) foot freeboard is reached. The high-level automatic alarm notifies well optimizers when liquid level has reached within a pre-set distance to the top of the BGT. The high-level alarm will trigger the automatic shutdown valve which will close in the well until the liquid level can be lowered.

11. SIMCOE will construct and install a double-walled tank design per Subparagraph (b) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC with a two (2) inch diameter leak detection port. The floor supports located in the annular space of the tank bottom will be channeled to allow outward movement of liquid between the walls. Leak detection will be monitored per SIMCOE's Operating and Maintenance Plan. The walls of the BGT will be constructed of fiberglass or carbon steel that meets the ASTM A36 standard. SIMCOE's BGT design will ensure containment of tank contents and protect underlying groundwater. The production equipment line drain is manual or automated drain that allows water level in production equipment (generally the separator) to be maintained within the equipment's operating parameters. The environmental drain is a manually operated drain that is used to drain liquids off of equipment. The tank drain is a manually operated drain, typically in the closed position that is used to rid the condensate tank of any water accumulation. The vent drain is a manually operated drain off the discharge of production equipment (usually the separator) and is used to blowdown the wellsite. The swab drain line is a manually operated drain originating between the wellhead and separator and is used during well workovers when large amounts of liquid are removed from the well and sent straight to the BGT.
12. SIMCOE owned and operated single walled BGTs constructed and installed prior to June 16, 2008 that has the side walls open for visual inspection and that does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT and remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
13. SIMCOE owned and operated single walled BGTs constructed and installed prior to June 16, 2008 and where any portion of the tank sidewall is below the ground surface and not visible shall equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, by June 16, 2013. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
14. SIMCOE owned and operated double walled BGTs constructed and installed prior to June 16, 2008 and which does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
15. The general specifications for the design and construction of the BGT have been provided in the attached SIMCOE design and construction schematic.



SIMCOE LLC
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK OPERATING AND MAINTENANCE PLAN

Pursuant to Rule 19.15.17.12 NMAC, SIMCOE LLC (SIMCOE) shall maintain and operate a below-grade tank (BGT) by following the plan shown below. Deviations from this plan will be addressed with a submittal to the New Mexico Oil Conservation Division (NMOCD) using form C-144 at the time of the BGT registration or modification to an existing BGT registration.

Operating and Maintenance Plan

1. SIMCOE's BGTs will be operated to contain liquids and solids. SIMCOE will maintain the integrity of the BGT and secondary containment system as to prevent impacts to fresh water and to protect public health and the environment. SIMCOE will use automated high fluid level alarms and automated shut-off valves to ensure that liquids are contained within the vessel and that the vessel does not overflow. These alarms and shut-off valves will be consistent with those demonstrated in the design plan.
2. SIMCOE will not knowingly discharge to or store any hazardous waste in a BGT.
3. If a BGT develops a leak below the liquid surface, SIMCOE shall remove all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office pursuant to 19.15.29 NMAC and repair the damage or replace the BGT as applicable.
4. SIMCOE will adhere to Subsection D of 19.15.17.12 NMAC. The requirements are as follows;
 - a. SIMCOE shall not allow a below-grade tank to overflow or allow surface water run-on to enter the BGT.
 - b. SIMCOE shall remove any measurable layer of oil from the fluid surface of a BGT.
 - c. SIMCOE shall inspect the BGT for leakage and damage at least monthly and will document the integrity of each tank at least annually and maintain record of the integrity for five years.
 - d. SIMCOE shall maintain adequate freeboard to prevent overtopping of the below-grade tank.
 - e. If SIMCOE discovers that the BGT tank does not demonstrate integrity or that the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, SIMCOE shall repair the damage or close the existing BGT pursuant to the closure requirements of 19.15.17.13 NMAC.
 - f. If any of SIMCOE's BGTs are equipped or retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, then SIMCOE shall visually inspect the area beneath the BGT during the retrofit and document any areas that are wet, discolored or showing other evidence of a release on form C-141. SIMCOE will attempt to measure and report to the division the concentration of contaminants in the wet or discolored soil with respect to the standards set forth in Table I of 19.15.17.13 NMAC. If there is no wet or discolored soil or if the concentration of contaminants in the wet or discolored soil is less than the standard set forth in Table I of 19.15.17.13 NMAC, then SIMCOE shall proceed with the closure requirements of 19.15.17.13 NMAC prior to initiating the retrofit or replacement.

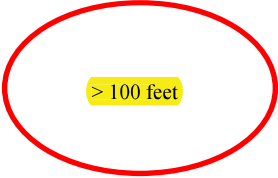
SIMCOE LLC (formerly BPX Energy Inc.)
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

This plan will address the method, procedures, and protocols for closure of below-grade tanks (BGTs) on SIMCOE LLC (SIMCOE) well sites pursuant to Subsection A of 19.15.17.13 NMAC. As stipulated in Paragraph (1) of Subsection C of 19.15.17.13 NMAC, SIMCOE will not commence closure without first obtaining approval of the closure plan submitted pursuant to Paragraph (3) of Subsection B of 19.15.17.9 NMAC. If deviations from this plan are necessary, SIMCOE will request preapproval from the Division District III office of any specific changes and will be included on form C-144. SIMCOE shall close its BGTs within 60 days of cessation of the operation as required by Paragraph (4) of Subsection G of 19.15.17.13 NMAC.

General Closure Plan

1. SIMCOE shall notify the surface owner by certified mail; return receipt requested that it plans to close a BGT. Notice given will be at least 72 hours in advanced, but not more than one week prior to any closure operation. The notice shall include the well name, API number, and legal description of the location. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
2. SIMCOE shall notify the Division District III 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 Operator's name, and the location of the BGT to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
3. Within 60 days of cessation of operations, SIMCOE shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD approved facility. The facilities to be used are:
 - a. SIMCOE LLC Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
 - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
 - c. Basin Disposal, Permit NM-01-0005 (Liquids)
 - d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
 - e. SIMCOE LLC Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
 - f. SIMCOE LLC Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
 - g. SIMCOE LLC Operated GCU 259 SWD, API 30-045-20006 (Liquids)
 - h. SIMCOE LLC Operated GCU 306 SWD, API 30-045-24286 (Liquids)
 - i. SIMCOE LLC Operated GCU 307 SWD, API 30-045-24248 (Liquids)
 - j. SIMCOE LLC Operated GCU 328 SWD, API 30-045-24735 (Liquids)
 - k. SIMCOE LLC Operated Pritchard SWD #1, API 30-045-28351 (Liquids)
4. SIMCOE shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the Division District III office approves. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.
5. Within six months of cessation of operations, SIMCOE shall remove any on-site equipment associated with a BGT unless the equipment is required for some other purpose.
6. SIMCOE shall test the soils beneath the BGT to determine whether a release has occurred. SIMCOE shall collect at a minimum: a five (5) point composite sample to include any obvious stained or wet soils, or other evidence of a release under the BGT. The composite sample shall be collected and analyzed as required for the constituents listed in Table I within Subparagraph (a) of Paragraph (3) of Subsection C of 19.15.17.13 NMAC (see Table 1 on following page).

Table 1 Closure Criteria for Soils Beneath Below-Grade Tanks			
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

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons, TDS = total dissolved solids.

* - Or other test methods approved by the division

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

7. If any contaminant concentration exceeds those standards set in Table I, SIMCOE will acknowledge NMOCD's position to require additional delineation upon review of the results. SIMCOE will not proceed with any further closure activities until approval is first granted by NMOCD.
8. If the sampling demonstrates that all contaminant constituents do not exceed the concentrations specified in Table I, then SIMCOE shall backfill the excavation, with non-waste containing, uncontaminated, earthen material.
9. SIMCOE shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. SIMCOE shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Paragraph (2) of Subsection H of 19.15.17.13 NMAC, re-contour the BGT location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Paragraph (5) of Subsection H of 19.15.17.13 NMAC.
10. SIMCOE may propose an alternative to the re-vegetation or recontouring requirement if it can demonstrate to the NMOCD's District III office that the proposed alternative provides equal or greater prevention of erosion, and protection of fresh water, public health and the environment. SIMCOE will seek surface owner approval of the proposed alternative and provide written documentation of the surface owner's approval to NMOCD for its approval.
11. Areas reasonably needed for production operations or for subsequent drilling operations shall be compacted, covered, paved, or otherwise stabilized and maintained in such a way as to minimize dust and erosion to the extent practicable.

12. The soil cover for closures after site contouring, where the BGT has been removed and if necessary remediated beneath the BGT 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 or suitable material, whichever is greater.
13. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.
14. All areas disturbed by the closure of the BGT, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.
15. Topsoils and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of the BGT.
16. Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.
17. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of SIMCOE subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.
18. Pursuant to Subparagraph (e) of Paragraph (5) of Subsection H of 19.15.17.13 NMAC, SIMCOE shall notify the NMOCD when reclamation and re-vegetation has been successfully achieved.
19. Within 60 days of closure completion, SIMCOE shall submit a closure report on NMOCD's form C-144, and will include the following;
 - a. necessary attachments to document all closure activities
 - b. sampling results
 - c. information required by 19.15.17 NMAC
 - d. details on back-filling, capping and covering, where applicable.
20. SIMCOE shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

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

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

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

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

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

CONDITIONS

Action 14803

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 14803
	Action Type: [C-144] PIT Generic Plan (C-144)

CONDITIONS

Created By	Condition	Condition Date
jburdine	None	7/20/2022