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

Page 1 of 29

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
E	3GT A Proposed Alternative Method Permit or Closure Plan Application
	<ul> <li>Type of action:</li> <li>Below grade tank registration</li> <li>Permit of a pit or proposed alternative method</li> <li>Closure of a pit, below-grade tank, or proposed alternative method</li> <li>Modification to an existing permit/or registration</li> <li>✓ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,</li> </ul>
	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.
	I.     Operator:     SIMCOE LLC     OGRID #:     329736       Address:     1199 Main Ave., Suite 101, Durango, CO 81301
	Address: 1199 Main Ave., Suite 101, Durango, CO 81301
	Facility or well name: Florance 125
	API Number:         30-045-24831         OCD Permit Number:
	API Number:         30-045-24831         OCD Permit Number:           U/L or Qtr/Qtr         E         Section         1         Township         29N         Range         09W         County:         San Juan County
	Center of Proposed Design: Latitude
	Surface Owner: 🗷 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment
	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       String       Welded       Factory       Other       Volume:       bbl       Dimensions: L x W x D
	3.
	► <u>Below-grade tank</u> : Subsection I of 19.15.17.11 NMAC <u>TANK ID</u> : A
	Volume: 21 bbl Type of fluid: Produced Water
	Tank Construction material: Steel
	<ul> <li>Secondary containment with leak detection</li> <li>Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off</li> <li>Visible sidewalls and liner</li> <li>Visible sidewalls only</li> <li>Other</li> <li>Single Walled</li> <li>Double Bottom</li> <li>Visible Sidewalls</li> </ul>
	Liner type: Thickness mil
	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)
	<ul> <li>Four foot height, four strands of barbed wire evenly spaced between one and four feet</li> <li>Alternate. Please specify</li> </ul>

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

Screen Netting Other

6

Monthly inspections (If netting or screening is not physically feasible)

#### Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.16.8 NMAC

#### Variances and Exceptions:

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

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

□ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

#### 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. Yes 🗙 No X NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 🗌 NA 🗌 Yes 🗌 No Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. 🗍 NA 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 ☐ Yes ☐ No 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) 🗌 Yes 🗌 No 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) 🗌 Yes 🗌 No 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 **Below Grade Tanks** Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured Yes 🗙 No 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

# <u>Temporary Pit using Low Chloride Drilling Fluid</u> (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	□ Yes □ No
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

Received by OCD: 1/28/2021 4:45:44 PM	Page 3 of 2						
<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No						
Temporary Pit Non-low chloride drilling fluid							
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No						
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>							
<ul> <li>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;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No						
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 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						
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No						
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No						
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No						
10.         Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:       Subsection B of 19.15.17.9 N         Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.         X       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         X       Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         X       Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC         X       Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC         Previously Approved Design (attach copy of design)       API Number: or Permit Number: or Permit Number:	vuments are 9 NMAC 15.17.9 NMAC						
Multi-Well Fluid Management Pit Checklist:       Subsection B of 19.15.17.9 NMAC         Instructions:       Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached. <ul> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>A List of wells with approved application for permit to drill associated with the pit.</li> <li>Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC</li> <li>Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	.15.17.9 NMAC						
Previously Approved Design (attach copy of design) API Number: or Permit Number:							

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<sup>12.</sup> <u>Permanent Pits Permit Application Checklist</u> : Subsection B of 19.15.17.9 NMAC <i>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the box is a structure of the following items must be attached to the application. Please indicate, by a check mark in the box, that the box is a structure of the following items must be attached to the application. Please indicate, by a check mark in the box, that the box is a structure of the following items must be attached to the application. Please indicate, by a check mark in the box, that the box is a structure of the following items must be attached to the application.</i>	e documents are
<ul> <li>attached.</li> <li>Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Climatological Factors Assessment</li> </ul>	
<ul> <li>Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> </ul>	
<ul> <li>Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> <li>Oil Field Waste Stream Characterization</li> </ul>	
<ul> <li>Monitoring and Inspection Plan</li> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC</li> </ul>	
<ul> <li>13.</li> <li><u>Proposed Closure</u>: 19.15.17.13 NMAC</li> <li><i>Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.</i></li> </ul>	
Type: Drilling DWorkover Emergency Cavitation P&A Permanent Pit 🗷 Below-grade Tank Multi-wel	Fluid Management Pit
Proposed Closure Method: 🗵 Waste Excavation and Removal	
<ul> <li>Waste Removal (Closed-loop systems only)</li> <li>On-site Closure Method (Only for temporary pits and closed-loop systems)</li> </ul>	
In-place Burial Don-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 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. String Calture (a condition on site decays models decayle): $10.15.17(10)$ D(AC)	
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 so provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. 19.15.17.10 NMAC for guidance.	
<ul> <li>Ground water is less than 25 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	☐ Yes ☐ No ☐ NA
<ul> <li>Ground water is between 25-50 feet below the bottom of the buried waste</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	☐ Yes ☐ No ☐ NA
<ul> <li>Ground water is more than 100 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	☐ Yes ☐ No ☐ NA
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existenc at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	e 🗌 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	
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<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	🗌 Yes 🗌 No					
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗌 Yes 🗌 No					
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	🗌 Yes 🗌 No					
Within a 100-year floodplain. - FEMA map	Yes No					
<ul> <li>16.</li> <li>On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure planes by a check mark in the box, that the documents are attached.</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC</li> <li>Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.13</li> <li>Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.1</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards canned Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>	11 NMAC 15.17.11 NMAC					
<ul> <li>17.</li> <li>Operator Application Certification:</li> <li>I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed and b</li></ul>	ef.					
Name (Print):         Steve Moskal         Title:         Environmental Coordinator						
Signature: Date: 1/28/2021						
e-mail address: smoskal@ikavenergy.com Telephone: (505) 330-9179						
18. <u>OCD Approva</u> l:  Permit Application (including closure plan) X Closure Plan (only)  OCD Conditions (see attachment)						
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       Output       Approval Date:       3/5/20	021					
Title:       Environmental Specialist       OCD Permit Number:       BGT A						
19. <u>Closure Report (required within 60 days of closure completion)</u> : 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         If different from approved plan, please explain.	op systems only)					
21.         Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please index 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)	dicate, by a check					

On-site Closure Location: Latitude	

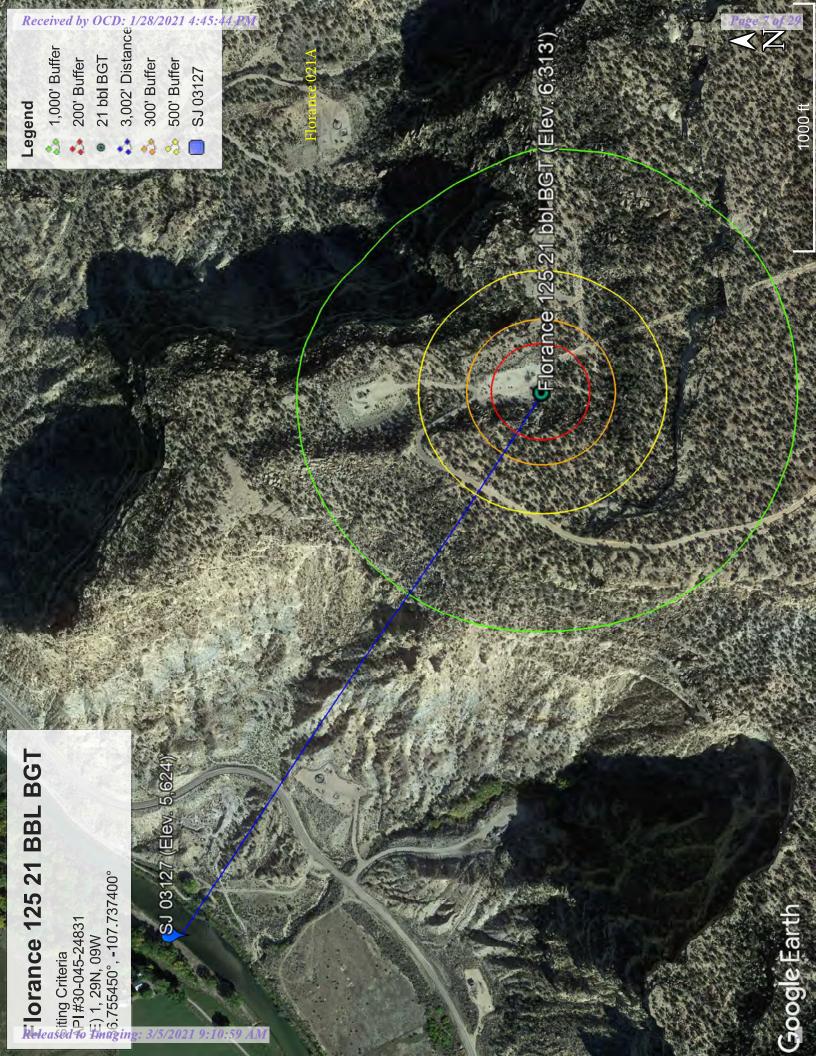
Longitude

NAD: 1927 1983

#### 22. Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure rebelief. I also certify that the closure complies with all applicable closure requirements	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

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# New Mexico Office of the State Engineer Point of Diversion Summary

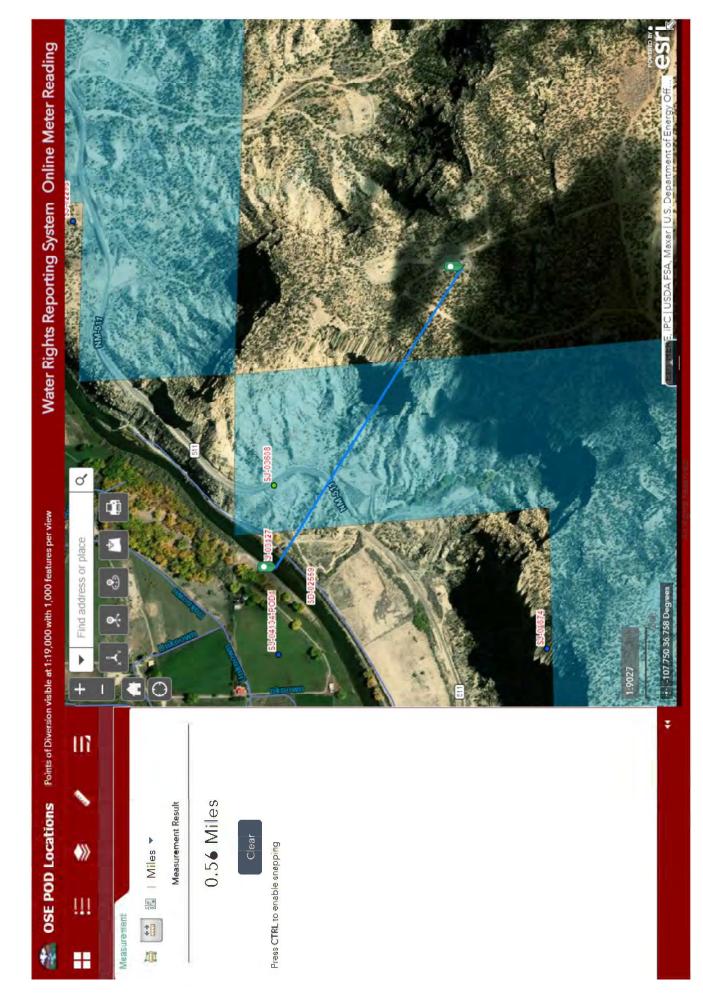
			<b>`</b> 1				NE 3=S o larges	W 4=SE) t)		UTM in meters)	
Well Tag	POD	Number	Q64	Q16	Q4	Sec	Tws	Rng	2	K Y	
_	SJ 0.	3127	2	1	2	02	29N	09W	25487	9 4071748*	>
Driller Lice	ense:	527	Drille	r Cor	npa	ny:	TH	OMPS	ON WELL	DRILLING	
Driller Nan	ne:	LEON THOMPSO	N								
Drill Start	Date:	09/26/2001	Drill H	inist	ı Da	te:	1	0/01/20	001 1	Plug Date:	
Log File Da	ate:	10/09/2001	PCW	Rcv ]	Date	:			5	Source:	Shallow
Ритр Туре	e:		Pipe D	lisch	arge	Size	:		J	Estimated Yield	l: 10 GPM
<b>Casing Size</b>		6.00	Depth	Well	:		1	7 feet	1	Depth Water:	10 feet

#### \*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.

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POINT OF DIVERSION SUMMARY



The following pages from the Florance 021A (30-045-22117) BGT-A permit are in use for reference to demonstrate and confirm depth to water and proximity to other sensitive receptors. Depth to water for the BGT being permitted for closure in this permit request has been demonstrated in the previous pages.

# SITING AND HYDRO-GEOLOGICAL REPORT FOR FLORANCE 021A

# Siting Criteria 19.15.17.10 NMAC

Groundwater is estimated to be between 50 and 100 feet below ground surface (bgs) at this site. This estimation is based on data from Stone and others (1983), and depth to groundwater data obtained from water wells permitted by the New Mexico State Engineer's Office (OSE, Figure 1). Local topography and proximity to adjacent water features is also considered. A topographic map of the site is provided as Figure 2 and demonstrates that the below grade tank (BGT) is not within 300 feet of any continuously flowing watercourse or within 200 feet of any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3 demonstrates that the BGT is not within 300 feet of a permanent residence, school, hospital, institution or church. Figure 4 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are no freshwater wells or springs within 1000 feet of a wetland. Figure 5 demonstrates that the BGT is not within a municipal boundary or a defined municipal freshwater well field. Figure 6 demonstrates that the BGT is not within 500 feet of a wetland. Figure 7 demonstrates that the BGT is not in an area overlying a subsurface mine. The BGT is not located in an unstable area. Figure 8 demonstrates that the BGT is not within the mapped FEMA 100-year floodplain.

## Local Geology and Hydrology

This particular site is located on Manzanares Mesa top south of the San Juan River. The mesa is composed of the Nacimiento Formation. Broad shaley hills are interspersed with occasional sandstone outcrops, and systems of canyons and drainages lead north to the San Juan River, which is approximately 1 mile away, and hundreds of feet lower in elevation. Groundwater is estimated to be between 50 and 100 feet below ground surface (bgs) at this site. This is based on the elevation difference between the site and well SJ02298 of 64 feet. Well SJ02298 is 2598 feet northeast of the site and has a depth to groundwater of 10 feet.

# **Regional Geology and Hydrology**

The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau. The San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

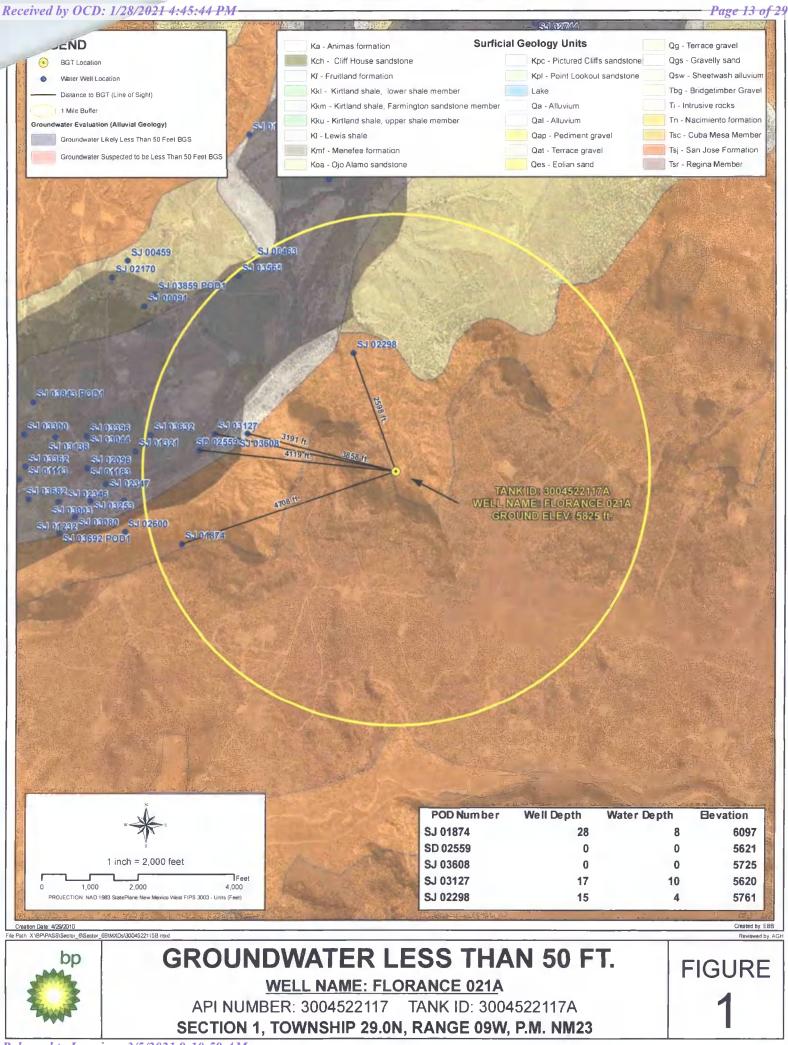
Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). The Nacimiento Formation of Paleocene age occurs at the surface in a broad belt at the western and southern edges of the central San Juan

Basin and dips beneath the San Jose Formation in the center. The lower part of the Nacimiento Formation is composed of interbedded black, carbonaceous mudstones and white coarse-grained sandstones. The upper part is comprised of mudstone and sandstone. It is generally slope-forming, even within the sandstone units. Thickness of the Nacimiento ranges from 418 to 2232 feet. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000 feet deep in this section of the basin. Wells within these bodies flow from 16 to 100 gallons per minute (gpm), and transmissivities are expected to be 100 ft<sup>2</sup>/d (Stone et al, 1983). Groundwater within these aquifers flows toward the San Juan River.

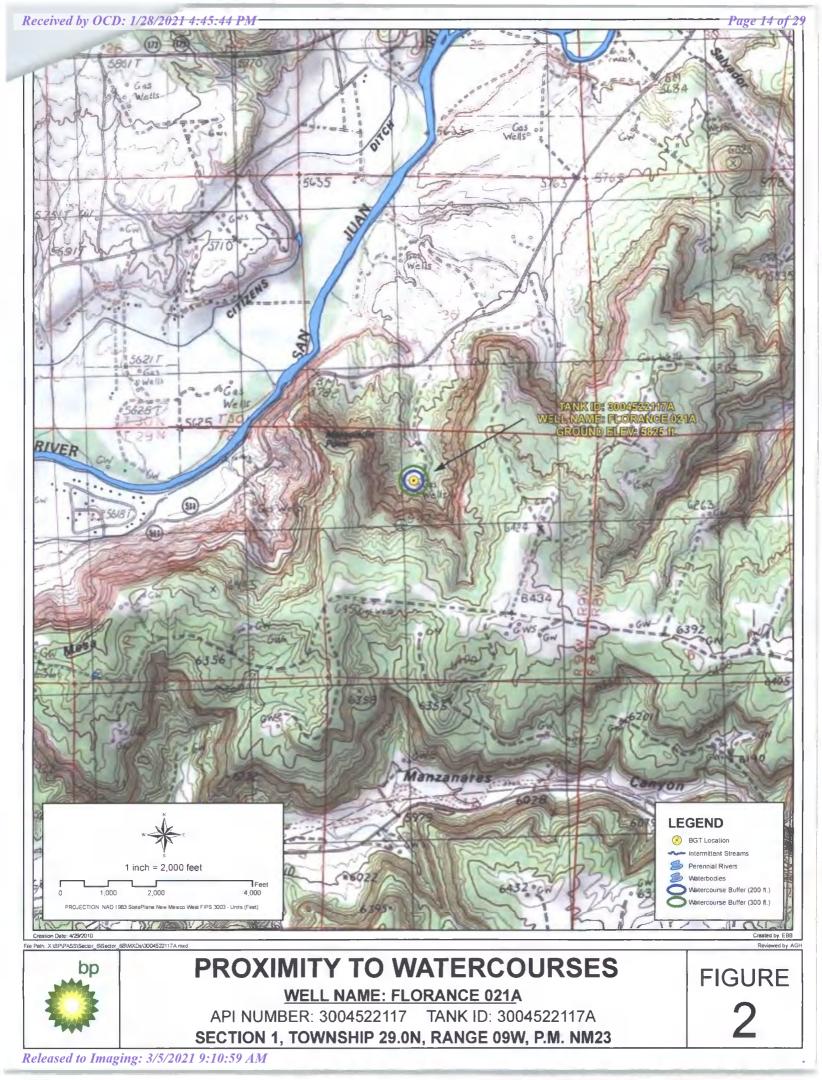
# **References**

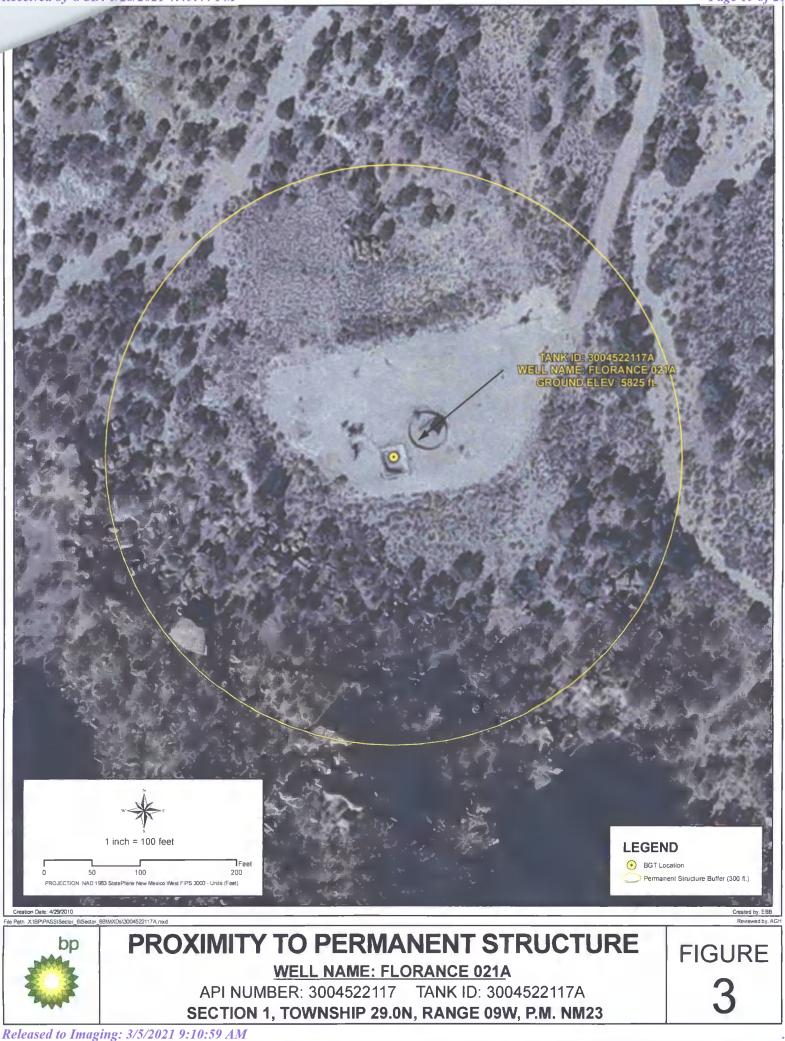
Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976

Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p

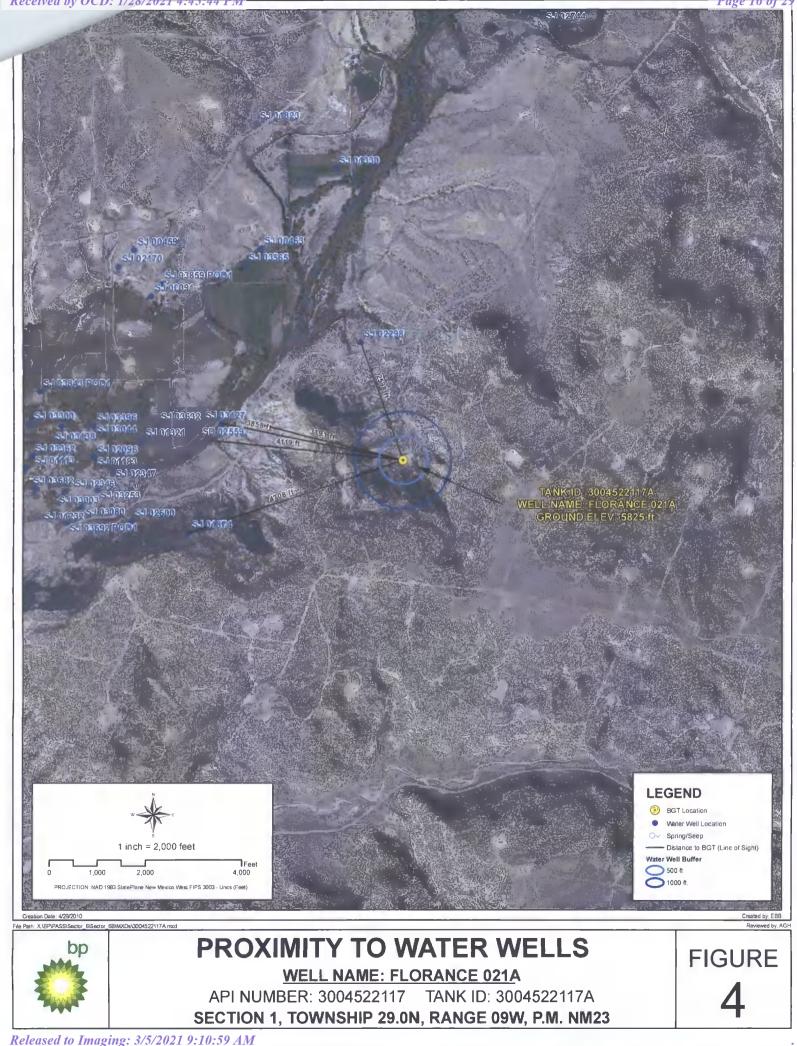


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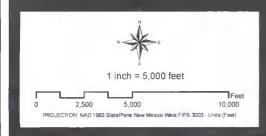




Received by OCD: 1/28/2021 4:45:44 PM-



TANK ID: 3004522117A WELL NAME: FLORANCE 021A GROUND ELEV: 5825 ft.





Created by EBB

FIGURE

5

Reviewed by AGI

# PROXIMITY TO MUNICIPAL BOUNDARY <u>WELL NAME: FLORANCE 021A</u> API NUMBER: 3004522117 TANK ID: 3004522117A SECTION 1, TOWNSHIP 29.0N, RANGE 09W, P.M. NM23

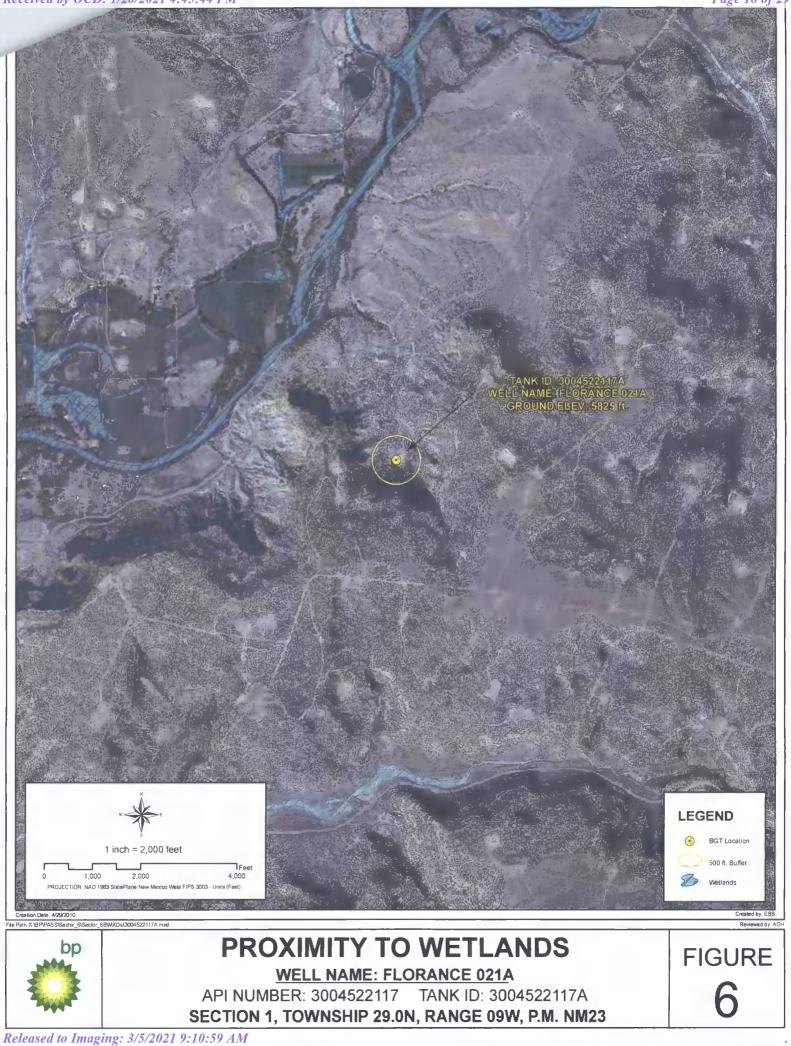
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bp







Released to Imaging: 3/5/2021 9:10:59 AM

# SOUTHERN SAN JUAN BASIN (SSJB)

# **Figure Citation List**

# **March 2010**

# Figure 1: Groundwater Less Than 50 ft.

Layers:

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters db index.html.

## **Cathodic Wells:**

## Tierra Corrosion Control, Inc. (Aug. 2008)

Tierra Corrosion Control, Inc. 1700 Schofield Ln. Farmington, NM 87401. Driller's Data Log. (Data collected: All data are associated with cathodic protection wells installed at BP facilities between 2008-2009. Data received: 05/06/2010).

## Hydrogeological Evaluation:

## Wright Water Engineers, Inc. (2008)

Evaluation completed by Wright Water Engineers, Inc. Durango Office. Data created using digital statewide geology at 1:500,000 from USGS in combination with 10m Digital Elevation Model (DEM) from NRCS. (Data compiled: 2008.)

Results: Spatial Polygons representing "Groundwater likely to be less than 50 ft." and "Groundwater suspected to be less than 50 ft.".

## **Surficial Geology:**

## USGS (1963/1987)

Data digitized and rectified by Geospatial Consultants. (Data digitized: 03/23/2010). Original hard copy maps sourced from United States Geological Survey (USGS). Data available from: http://pubs.er.usgs.gov/.

Geology, Structure and Uranium Deposits of the Shiprock Quadrangle, New Mexico and Arizonia. 1:250,000. I - 345. Compiled by Robert B. O'Sullivan and Helen M. Beikman. 1963.

Geologic Map of the Aztec 1 x 2 Quadrangle, Northwestern New Mexico and Southern Colorado. 1:250,000. I - 1730. Compiled by Kim Manley, Glenn R. Scott, and Reinhard A. Wobus. 1987.

## **Aerial Imagery:**

## Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:

NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

## Figure 2: Proximity to Watercourses

#### Layers:

## **Perennial Streams:**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/ 2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

#### **Intermittent Streams:**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/ 2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

#### Water Bodies:

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/ 2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: <u>http://nhd.usgs.gov/.</u>

#### **USGS Topographic Maps:**

USGS (2007)

USGS 24k Topographic map series. 1:24000. Maps are seamless, scanned images of USGS paper topographic maps. Data available from: <u>http://store.usgs.gov</u>.

## Figure 3: Proximity to Permanent Structure

#### Layers:

#### Aerial Imagery:

#### Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD 1983 StatePlane New Mexico West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

# NHD, USGS (2010)

NHD, USGS (2010)

NHD, USGS (2010)

# Figure 4: Proximity to Water Wells

# Layers:

# Water Wells:

# iWaters Database: NMOSE/ISC (Dec. 2009)

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters\_db\_index.html.

# **Springs/Seeps:**

# NHD, USGS (2010)

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/ 2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: <u>http://nhd.usgs.gov/.</u>

# Aerial Imagery:

# Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

# Figure 5: Proximity to Municipal Boundary

# Layers:

# Municipal Boundary: San Juan County, New Mexico (2010)

Data provided by San Juan County GIS Division. (Data received: 03/25/2010).

# **Shaded Relief:**

National Elevation Dataset (NED). U.S. Geological Survey, EROS Data Center. (Data created: 1999. Data downloaded: April, 2010). Resolution: 10 meter (1/3 arc-second). Data available from: <u>http://ned.usgs.gov/</u>.

**NED, USGS (1999)** 

# StreetMap North America:

# Tele Atlas North America, Inc., ESRI (2008)

Data derived from Tele Atlas Dynamap/Transportation North America, version 5.2. (Data updated: annually. Data series issue: 2008).

## Figure 6: Proximity to Wetlands

## Layers:

## Wetlands:

## NWI (2010)

National Wetlands Inventory (NWI). U.S Fish and Wildlife Service. (Data last updated: 09/25/2009. Data received: 03/21/2010). Data available from: <u>http://www.fws.gov/wetlands/.</u>

#### **Aerial Imagery:**

## Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD 1983 StatePlane New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

# Figure 7: Proximity to Subsurface Mine

## Layers:

## **Subsurface Mine:**

## NM Mining and Minerals Division (2010)

New Mexico Mining and Minerals Division. (Data received: 03/12/2010). Contact: Susan Lucas Kamat, Geologist. Provided PLSS NM locations (Sections) for the two subsurface mines located in San Juan and Rio Arriba counties.

#### **Aerial Imagery:**

## Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD 1983 StatePlane New Mexico West FIPS 3003 Feet.

Provided as tiled tiff images and indexed using polygon index layer.



# Figure 8: Proximity to FEMA Floodplain

## Layers:

# **FEMA Floodplain:**

# FEMA (varying years)

Data digitized and rectified by Wright Water Engineers, Inc. (Data digitized: August 2008). Digitized from hard copy Flood Insurance Rate Maps (FIRMs) (varying years) of San Juan County.

## **Aerial Imagery:**

# Conoco (Summer 2009)

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD\_1983\_StatePlane\_New\_Mexico\_West\_FIPS\_3003\_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

# 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**			
	Chloride	EPA 300.0	600 mg/kg			
<50 feet	ТРН	EPA SW-846 Method 418.1	100 mg/kg			
_50 1001	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg			
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg			
	Chloride	EPA 300.0	10,000 mg/kg			
51 feet-100 feet	ТРН	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			
	Chloride	EPA 300.0	20,000 mg/kg			
> 100 feet	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	<mark>(10 mg/kg</mark> )			

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

District II

District IV

Phone:(575) 393-6161 Fax:(575) 393-0720

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

Phone:(505) 334-6178 Fax:(505) 334-6170

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

District III 1000 Rio Brazos Rd., Aztec, NM 87410

CONDITIC	DNS

Action 16126

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

#### CONDITIONS OF APPROVAL

Operator:				OGRID:	Action Number:	Action Type:	
SIMCOE LLC	1199 Main Ave., Suite 101	Durango, CO81301		329736	16126	C-144B	
OCD Reviewer			Cond	Condition			
csmith			None				