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 *Page 1 of 33* Form C-144 Revised April 3, 2017

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

Pit, Below-Grade Tank, or					
Proposed Alternative Method Permit or Closure Plan Application					
Type of action: Below grade tank registration					
<ul> <li>Permit of a pit or proposed alternative method</li> <li>Closure of a pit, below-grade tank, or proposed alternative method</li> </ul>					
BGT1 Closure Plan Modification to an existing permit/or registration					
$\checkmark$ 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.					
<sup>1.</sup> Operator: SIMCOE, LLC OGRID #: 329736					
Operator:         SIMCOE, LLC         OGRID #: 329736           Address:         1199 Main Ave., Suite 101 Durango, CO 81301         OGRID #: 329736					
Facility or well name: Jacquez 004					
API Number: 30-045-26785 OCD Permit Number:					
API Number: 30-045-26785         U/L or Qtr/Qtr       D       Section       29       Township       31N       Range       09W       County:       San Juan County					
Center of Proposed Design: Latitude <u>36.873738</u> Longitude <u>-107.80931</u> NAD83					
Surface Owner: E Federal State Private Tribal Trust or Indian Allotment					
2.					
<b><u>Pit</u>:</b> Subsection F, G or J of 19.15.17.11 NMAC					
Temporary: Drilling Workover					
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no					
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other					
String-Reinforced					
Liner Seams: 🗌 Welded 🗋 Factory 🗋 Other Volume:bbl Dimensions: L x W x D					
3.					
Below-grade tank: Subsection I of 19.15.17.11 NMAC Tank ID: A					
Volume: 45bbl 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 Visible only Other Single wall double bottom side walls not visible					
Liner type: Thicknessmil					
4.					
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.					
5. <b>Fencing:</b> 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 ( <i>Required if located within 1000 feet of a permanent residence, school, hospital,</i>					
institution or church)					
Four foot height, four strands of barbed wire evenly spaced between one and four feet					
$\square$ Alternate. Please specify 4' hogwire with single barbed wire					

Netting:	Subsection E of 19.15.17.11	NMAC (Applies to	permanent pits and	<i>permanent open top tanks)</i>

Screen Netting Other\_

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
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
<ul> <li>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)</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. (Does not apply to below grade tanks)</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. (Does not apply to below grade tanks)</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. (Does not apply to below grade tanks) - FEMA map	🗌 Yes 🗌 No
Below Grade Tanks	
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland 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 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🔽 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
<ul> <li>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.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	🗌 Yes 🗌 No
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
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

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<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>	🗌 Yes 🗌 No			
<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			
<u>Permanent Pit or Multi-Well Fluid Management Pit</u>				
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 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 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.         Image: Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC         Image: Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC         Image: Sting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Image: Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC         Image: Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC         Image: Design Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC         Image: Design (attach copy of design)       API Number: or Permit Number:         Image: 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 dot 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 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:				

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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</i>	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> </ul>				
<ul> <li>Climatological Factors Assessment</li> <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 19.15.17.11 NMAC</li> <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> </ul>				
<ul> <li>Emergency Response Plan</li> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> </ul>				
<ul> <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>				
13.				
<u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.				
Type: □ Drilling □ Workover □ Emergency □ Cavitation □ P&A □ Permanent Pit ☑ Below-grade Tank □ Multi-well F	luid Management Pit			
Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only)				
<ul> <li>On-site Closure Method (Only for temporary pits and closed-loop systems)</li> <li>In-place Burial</li> <li>On-site Trench Burial</li> </ul>				
Alternative Closure Method				
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.				
15. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC				
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. 1 19.15.17.10 NMAC for guidance.				
Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA			
Ground water is more than 100 feet below the bottom of the buried waste NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells				
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				
<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			
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				
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				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance				
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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
<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>	
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No ☐ 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 plan 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</li> <li>Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC</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 campling 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
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 bel Name (Print): sabre.beebe@ikavenergy.com Sabre Beebe Title: Field Environmental Coordination of the second	
Signature:         Date:         03/07/2022           e-mail address:         sabre.beebe@ikavenergy.com         Telephone:         (970)         852-5172	
18.         OCD Approval:       Permit Application (including closure plan)         X       Closure Plan (only)         OCD Conditions (see attachment)	
OCD Representative Signature: <u>Jaclyn Burdine</u> Approval Date: <u>07/05</u>	/2022
Title:       Environmental Specialist-A       OCD Permit Number:       BGT1	
19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date:	
20.         Closure Method:         Waste Excavation and Removal       On-Site Closure Method         If different from approved plan, please explain.	oop systems only)
21.         Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please in 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	ndicate, by a check

Site Reclamation (Photo D	ocumentation)
On-site Closure Location:	Latitude

Longitude

NAD: 1927 1983

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22. <u>Operator Closure Certification</u> : I hereby certify that the information and attachments submitted with this closure repor- belief. I also certify that the closure complies with all applicable closure requirement	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

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# SITING AND HYDRO-GEOLOGICAL REPORT FOR JACQUEZ 004

# Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be less than 50 feet. 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 are 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 the BGT. 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 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.

The BGT subject to the attached application for a permit under 19.15.17 NMAC (New Mexico Administrative Code) was in existence prior to promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose an imminent threat to public health and the environment.

# Local Geology and Hydrology

This particular site is located near the main channel of Cabin Canyon, a tributary of Little Pump Canyon. Regional topography of Little Pump Canyon is composed of mesas dissected by deep, narrow canyons and arroyos. The more resistant cliff-forming sandstones of the San Jose Formation cap the interbedded siltstones, shales and sandstones of the Nacimiento Formation. Accumulations of talus and eroded sands at the base of canyon walls form steep to gentle slopes that transition into flat-bottomed arroyos within the canyons. Deposits of Quaternary alluvial and eolian sands occur prominently near the surface of Cabin and Little Pump Canyons, especially near streams and washes.

Groundwater is estimated to be 24 feet below ground surface (bgs) at this site. This is based on the depth to the bottom of Cabin Canyon of approximately 10 feet below the site elevation. Cabin Canyon is located approximately 200 feet north of the site. The water table elevation at Cabin Canyon, assuming groundwater is approximately 10 feet below the bottom of the canyon, is approximately 6305 feet above mean sea level (amsl). As the BGT site elevation is 6324 feet amsl, groundwater elevation at the site is likely to be approximately 6295 to 6305 feet amsl, or 19 to 29 feet bgs.

However, there appears to be no imminent threat to human health, safety, and welfare from either a surficial or subsurface release at this site due to the soil type. According to the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS), soils are primarily the Blancot-Fruitland association, a sandy loam from 0 to 60 inches in depth. These soils are classified as well drained, meaning that water moves through the soil readily but not rapidly. Internal free water commonly is very rare or very deep. A surficial or subsurface release appears unlikely to migrate horizontally to a wash, arroyo, or domestic well. What appears to be a stock tank created by damming the wash in Cabin Canyon and that has been designated as a wetland is located approximately 450 feet east of the site. It is unlikely that contaminated water released from the BGT would flow overland as far as this wetland.

The only potential impact from a release at the BGT would be to ground water. In this case, a release would have to travel more than 24 vertical feet through the unsaturated zone to reach the water table. There is the potential for sorption or biodegradation of hydrocarbons within the unsaturated zone, and, in the case of extremely mobile pollutants, the unsaturated zone will, at a minimum, introduce a time-lag before arrival at the groundwater. Should this occur, dissolved-or liquid-phase migration of contaminants would be limited to the immediate area and appears unlikely to reach any public or private water source before remedial actions could be initiated.

A site visit has been conducted to confirm that no fresh water sources exist in the nearby vicinity.

### **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 San Jose Formation of Eocene age occurs in both New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico border and overlies the Animas Formation in the general area north of the State Line. The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and shale. Thickness of the San Jose Formation increases from west to east. Groundwater is associated with alluvial and fluvial sandstone aquifers. The occurrence of groundwater is mainly controlled by distribution of sandstone in the formation. The reported or measured discharge from numerous water wells completed in the formation range from 0.15 to 61 gallons per minute (gpm) and with a median of 5 gpm. Most of the wells provide water for livestock and domestic purposes. The formation is suitable for recharge from precipitation due to overlying soils being

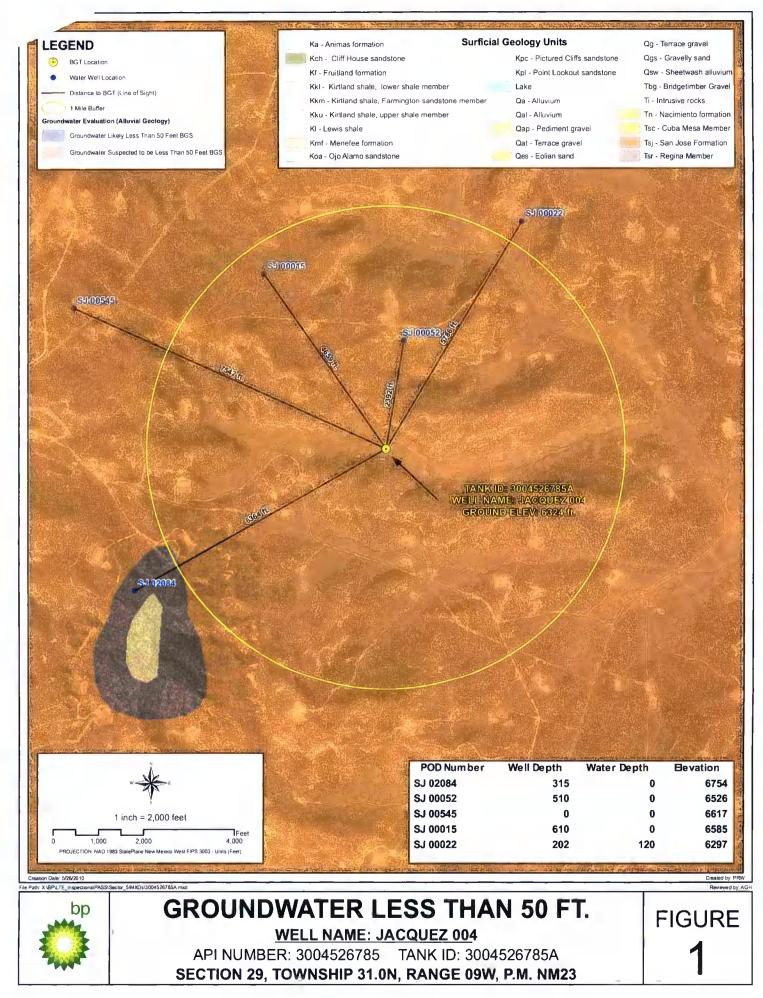
sandy, highly permeable and absorbent. Low annual precipitation, relatively high transpiration and evaporation rates and deep dissection of the formation by the San Juan River and its main tributaries all tend to reduce the effective recharge to the formation. Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation of Paleocene age are between 0 and 1000 feet deep in the majority of the basin as well (Stone et al., 1983).

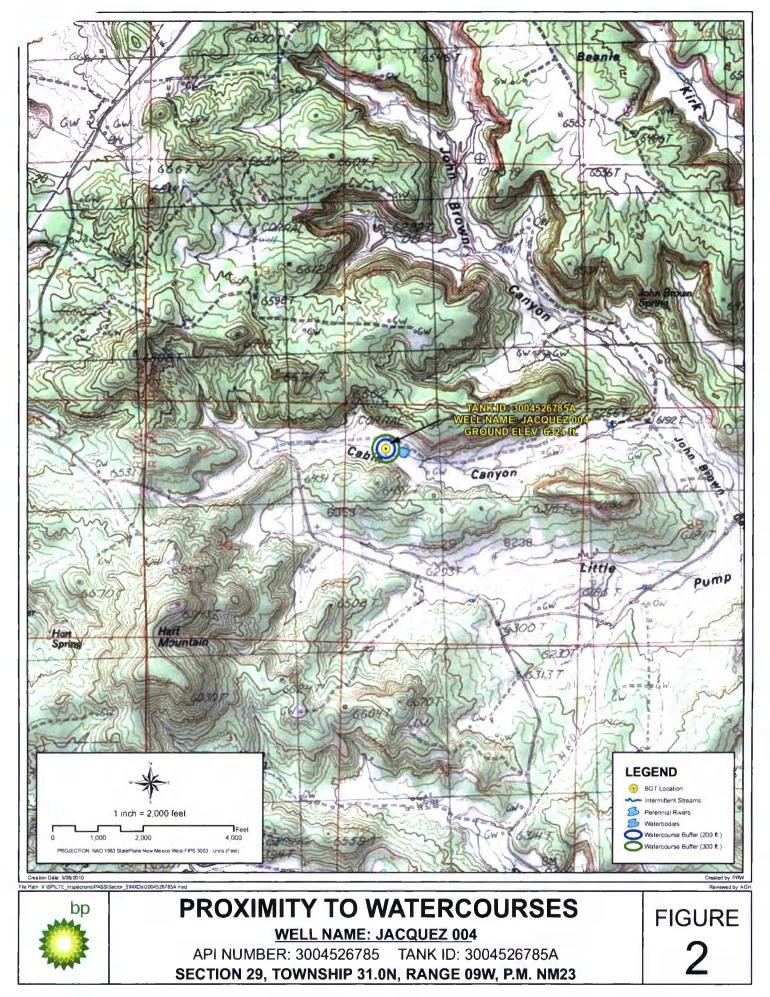
### **References**

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

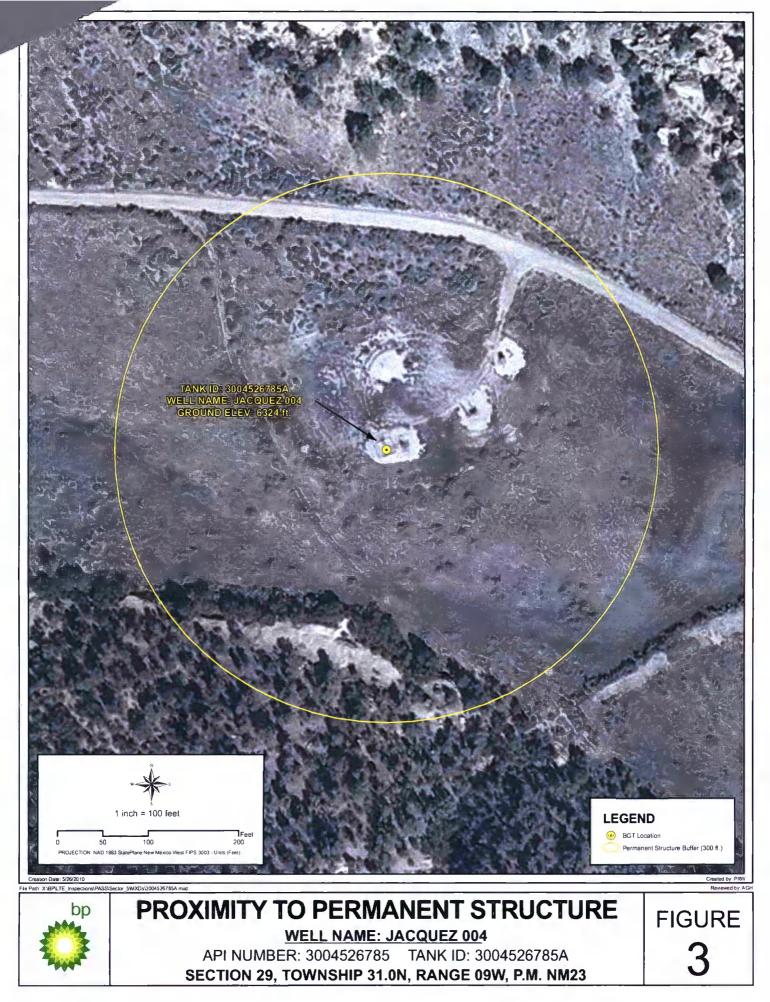
Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p

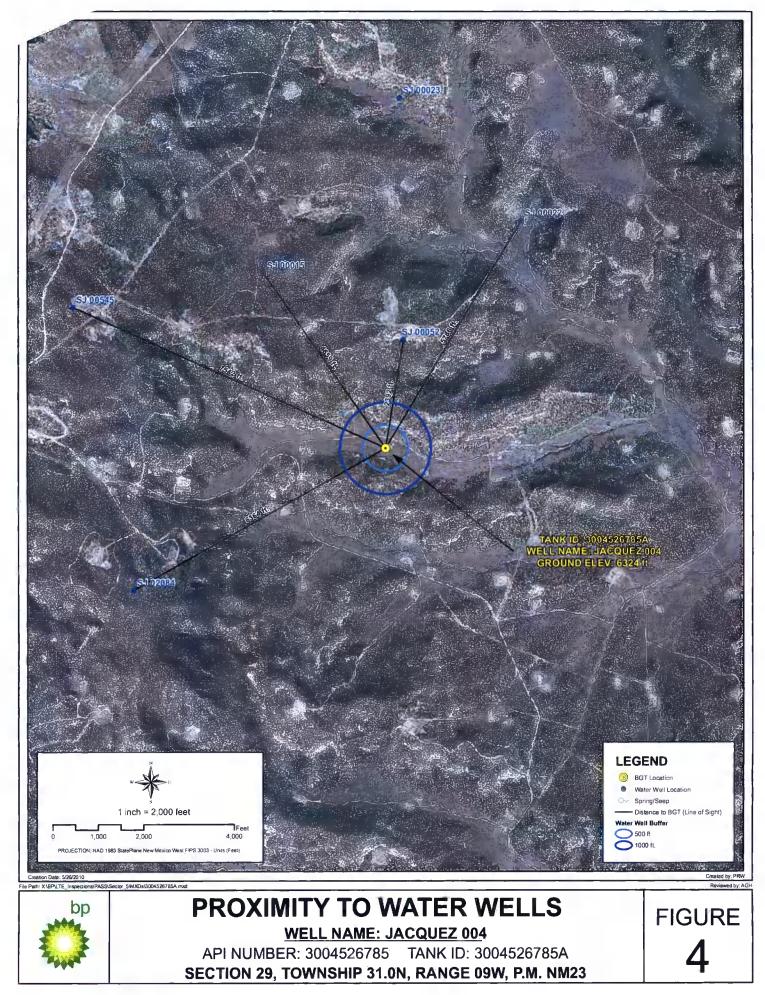
United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>

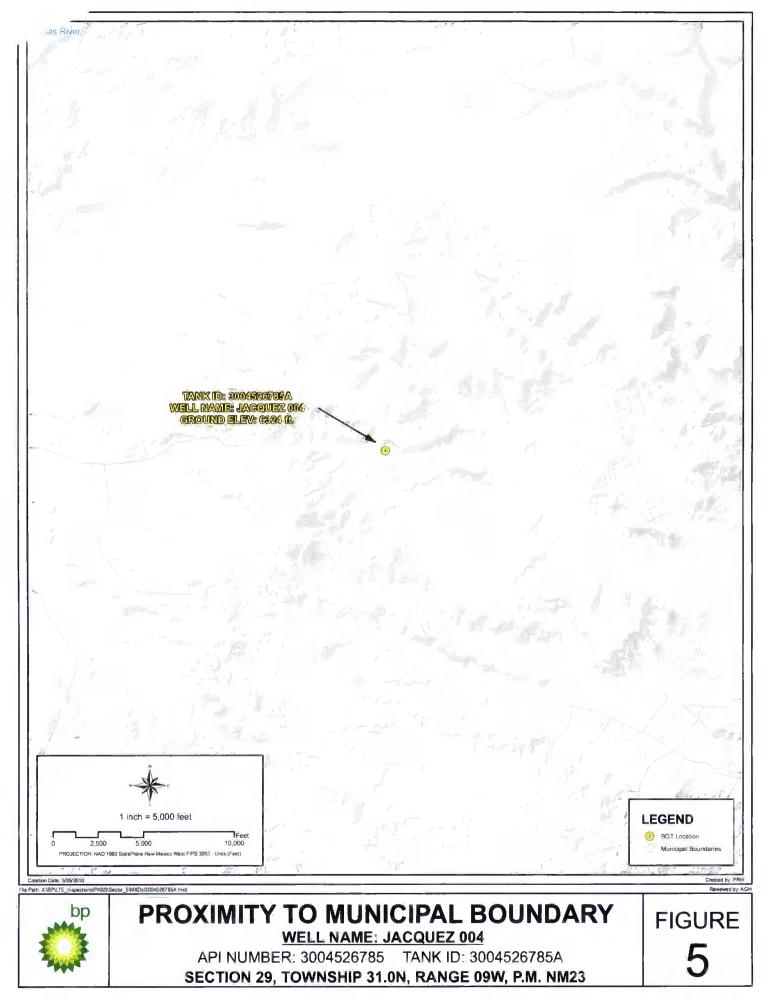


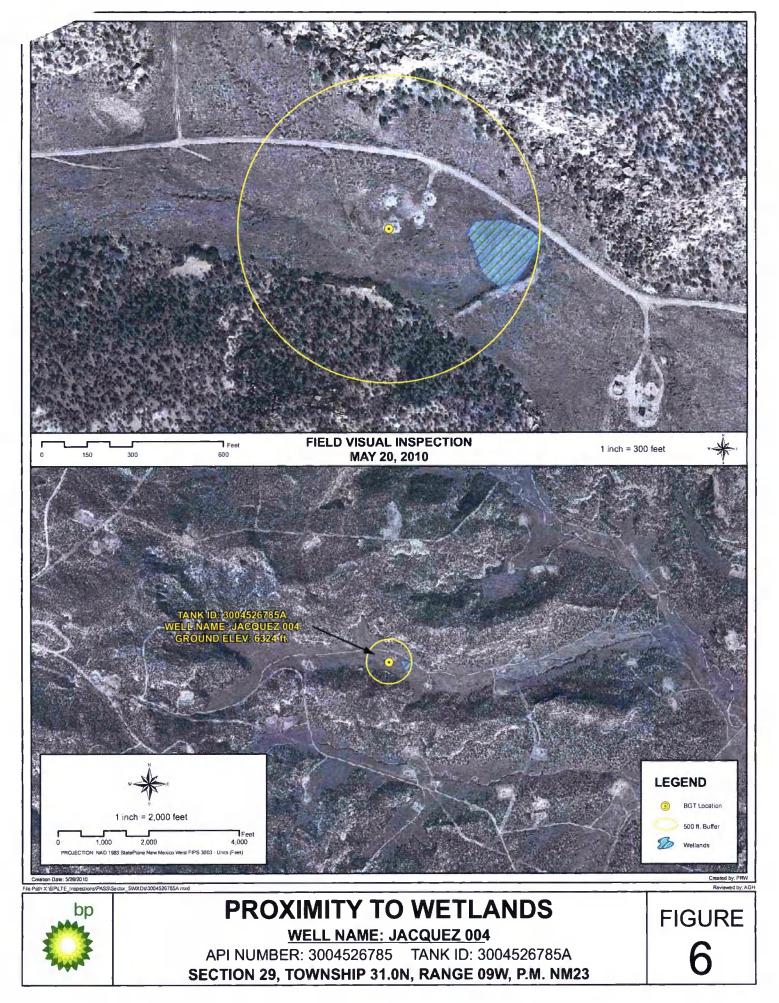


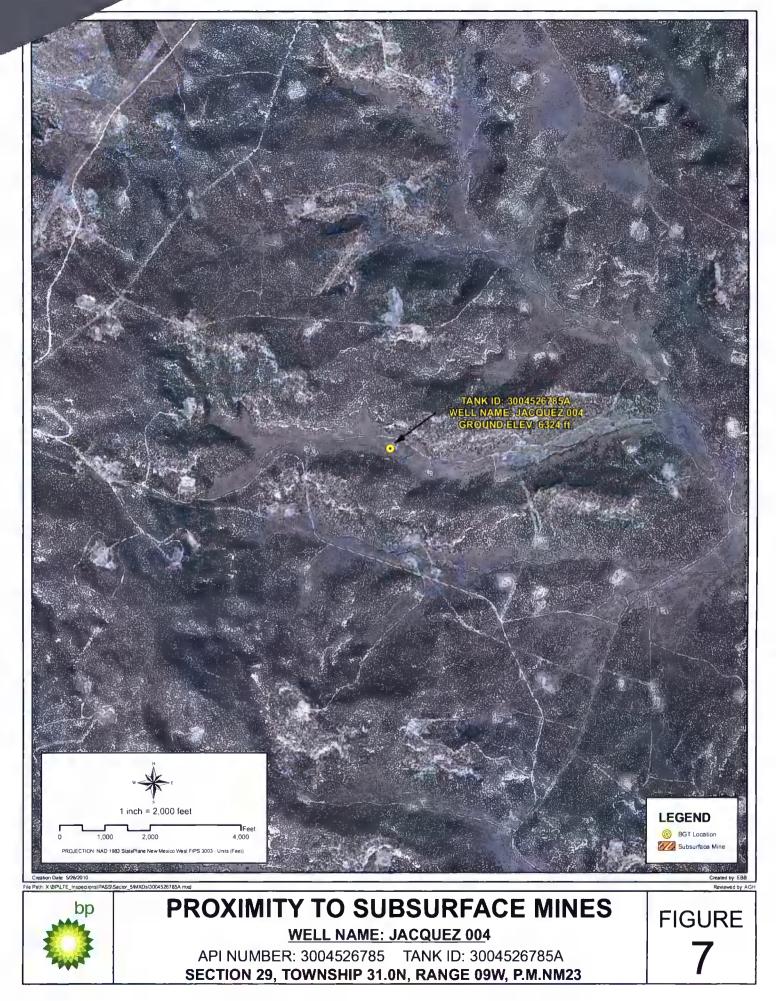
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# SOUTHERN SAN JUAN BASIN (SSJB)

# **Figure Citation List**

# March 2010

# Figure 1: Groundwater Less Than 50 ft.

### 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.

### **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: <u>http://nhd.usgs.gov/.</u>

### 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: <u>http://nhd.usgs.gov/.</u>

# 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:**

# NED, USGS (1999)

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>.

# 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:

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>

NWI (2010)

Conoco (Summer 2009)

#### Aerial Imagery:

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.

San Juan Basin in Northwest New Mexico Below-Grade Tank Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) 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 (NMCOD) form C-144 at the time of submittal.

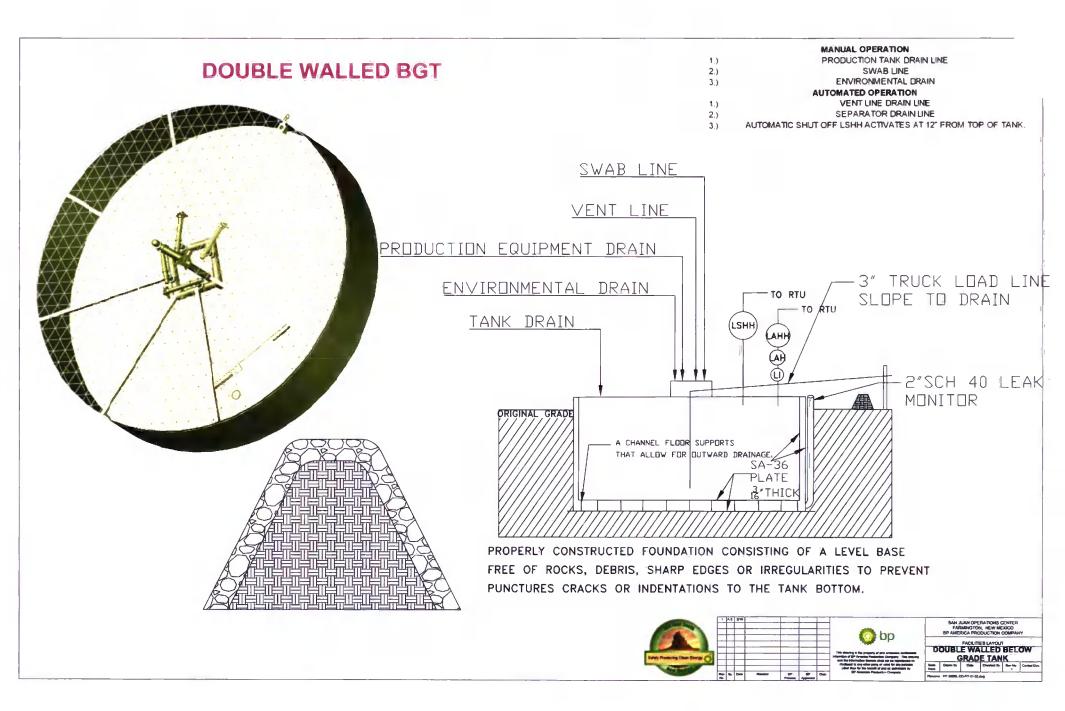
# **Design and Construction Plan**

- 1. BP 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. BP is the well operator and shall install and maintain a well sign that is in compliance with 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. BP will fence or enclose its BGTs in a manner that prevents unauthorized access and shall maintain its fence in good repair.
- 4. BP 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. BP will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
- 5. BP 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. BP's proposed design for its BGTs will utilize 48" steel mesh field-fence (hogwire) with a metal or steel top rail. Perimeter T-post will be installed roughly every 10 feet.
- 6. BP 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. BP shall construct the BGT of materials that are resistant to produced water, any contained liquids, and damage from sunlight. BP's BGTs will be constructed of carbon steel that meets the requirements of ASTM A36.
- 8. BP'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. BP will construct and operate the BGT to prevent surface water run-on by using both earthen BP Design Construction Plan-BGT\_04012010.doc

berms and leaving a portion of the BGT above the original grade as demonstrated on the design drawing.

- 10. BP will construct and operate the BGT to prevent overflow and overfilling of the BGT. Overflow will be prevented by use of an electronic high fluid level detector that will automatically engage an electronic shut-off valve when a 1 foot freeboard is reached. The Hi-level automatic alarm notifies well optimizers when liquid level has reached within a preset distance to the top of the BGT. The Hi Hi alarm will trigger the Hi-level automatic shutdown valve which will close in the well until the liquid level can be lowered.
- 11. BP 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 BP's Operating and Maintenance Plan. The walls of the BGT will be constructed of carbon steel that meets the ASTM A36 standard. BP's BGT design will insure containment of tank contents and protect underlying groundwater. The production equipment line drain is an 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. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that do not meet all the requirements of Paragraphs (1) through (4) of Subsection 1 of 19.15.17.11 NMAC and are not included in Paragraph (6) of Subsection I of 19.15.17.11 NMAC are not required to equip or be retrofit to comply with Paragraphs (1) through (4) of Subsection 1 of 19.15.17.11 NMAC so long as the BGT demonstrates integrity. If the existing BP BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.
- 13. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that are single walled and where any portion of the tank side wall is below ground surface and not visible shall be retrofit or replaced to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or shall be closed within 5 years of June 16, 2008. If the existing BP owned and operated BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.
- 14. The general specifications for the design and construction of the BGT have been provided in the attached BP design and construction schematic.

BP Design Construction Plan-BGT\_04012010.doc



# BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico Below-Grade Tank Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, BP America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following requirements. Deviations from this plan will be addressed with a submittal to the New Mexico Oil Conservation Division's (NMOCD) using form C-144 at the time of the BGT permit or modification to an existing permitted BGT application.

### **Operating and Maintenance Plan**

- 1. BP's BGTs will be operated and maintained to contain liquids and solids and promptly identify a release or potential release. BP's BGTs will be operated and maintained to prevent contamination to freshwater and protect public health and the environment. BP will use automated high fluid level alarms and automated shut-off valves to insure 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. BP will perform and document inspections of the BGTs on a monthly basis to confirm the integrity of the vessel.
- 2. BP will not knowingly discharge or store any hazardous waste into a BGT
- 3. If a BGT develops a leak, or a release occurs due to mechanical failure or vandalism, or if a penetration of the BGT occurs below the liquid's surface, BP shall: 1) evacuate liquids from the BGT to a level below the damage or leak line within 48 hours; and 2) notify the NMOCD's District III office within 48 hours of the discovery. BP will review #4 of the BP Operating and Maintenance plan prior to any repair or replacement to determine if the BGT and location will require closure. If appropriate BP shall repair or replace the BGT with the BP NMOCD approved design. If a release from the BGT occurs BP shall follow the release reporting procedures of 19.15.29 NMAC. If closure of the BGT is required, BP shall implement the approved closure plan for the BGT.
- 4. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC does not demonstrate integrity or if the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, BP shall close the existing BGT pursuant to the closure requirements of 19.15.17.13 NMAC and will install a BGT that complies with BP NMOCD approved BGT design attached to the Design and Construction Plan.
- 5. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is equipped or retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, BP shall visually inspect the area beneath the BGT during the retrofit and shall document any areas that are wet, discolored or showing other evidence of a release on Form C-141. BP shall demonstrate to the division whether evidence of contamination indicates that an imminent threat to fresh water, public health, safety or the environment exists. If the division

BP Operating and Maintenance Plan 04-01-2010

- 6. BP will install and construct the BGT following the BP NMOCD approved Design and Construction Plan, and will control surface water run on by the use of a berm or leaving a portion of the tank wall exposed. BP will use high level shot-off devices to insure that the BGT does not overflow.
- 7. The following requirements adhere to Subsection D of 19.15.17.12 NMAC.
  - a. BP will remove any visible or measurable layer of oil from the fluid surface of the BGT.
  - b. BP will inspect the BGT monthly. The monthly inspection will consist of the following:
    - i. Personnel will conduct a walk-around of the BGT to observe any abnormalities or signs of corrosion on the vessel. Personnel will inspect the surface run-on berm. Where applicable, inspection of the BGT's double wall double bottom inspection port, tank flanges and valves for signs of leakage or spills will be conducted. Personnel will record any BGT deficiencies, repair as necessary and report to BP Dispatch Office immediately if an imminent danger to fresh water, public heath, or to the environment is observed. BP will maintain a written record of the monthly inspections on the BP inspection from referred to as the San Juan Lease Inspection Form. BP will maintain these written records for at least five (5) years. A copy of the San Juan Lease Inspection Form is attached.
- 8. BP will maintain sufficient freeboard of one foot in the BGT to prevent overtopping.

			Location: Name of Inspector:
S	Action	N/A	Required Signs
			Does location have Well Sign and emergency phone number?
			Do compressor engines have Hearing Protection signs?
_			Hydrogen Sulfide Signs (where applicable)
 S	Action	N/A	Chemical containers and tanks have proper Hazcom label or BP Multi-Product Hazcom numbers? Location- General
3	Action	IN/PA	Housekeeping satisfactory?
			Tripping or falling hazards are absent? If NO, identify and report to FSC.
			Rig anchors/Deadmen adequately marked and visible if they present a hazard to drivers?
_			Driving hazards such as risers are marked or flagged?
_			Painting meets safety standards?
			Cattleguards/gates properly maintained?
			Tarps in good repair?
	-	-	Seeps, drips, or leaks are absent?
		3	Is weed control adequate?
		<u></u>	Stains on ground are absent? If NO, remediate immediately, identify and report to FEC.
_			Are there any open ended valves that are not plugged?
s	Action	N/A	Vessel/Tank
3	Action		Adequate fencing around below grade tank?
			Are the dike/berm walkover in place, used and stable?
_			Are dikes/berms in good condition?
			Is there adequate and safe access to pit for gauging?
			Does the pit have a high level alarm?
			Are stairways and catwalks properly maintained and in good condition?
			Toprail, midrail/and toeboard in place?
			Are thief hatches in good condition, seal properly, and in the closed position?
_			Is tank vent line equipped with a PV valve? (Enardo)
			Does the tank have a high level alarm?
_			Are open ended load lines and pipes capped?
			Is soil around load lines clean of oil stains?
			Is tank area free of any evidence of seeps or leaks (including manway cover)?
			Are there proper seals on sales and drain valves?
			Are all suspected dump lines well supported?
			Are above ground dump lines marked with t-posts and plastic covers?
			Have all fiberglass drip pits been removed?
s	Action	N/A	Treaters/Separators/Compressors/Pump Jacks
-			If there is a block valve upstream of the relief valve, is the block valve secured in the open position?
			Are relief valve discharge and blow downs piped to a safe area and secured against movement?
			Has flame arrestor been inspected within the last 5 years?
			Is flame port closed?
			Do all lines pass through a super muffler or swirl pot to the pit/tank? If not, are all lines secured?
			Is starting gas vented to a safe area, at least 10' vertically?
			No excessive vibration, knocking or unusual noises anywhere on unit or piping?
			Are site glasses in operating condition?
			Are environmental rails piped to a pit in a dedicated line?
			Do all blow downs, relief valve discharges, and risers have rain caps?
			Stuffing box leaks are absent?
-			Are the weight guards and belt guard in place?
			Are skids in good condition?
_			Are concrete bases / foundations in good condition?
			Are concrete bases free from erosion or settlement problems?
			Ale concrete pases nee nom erosion of serfiement bronens;

#### Signature of Inspector:

My signature assures that this location is SAFE, is in compliance with the LAW, and exhibits high standards of Pride, Ownership and Excellence.

SIMCOE LLC (Previously BP America) SAN JUAN BASIN, NORTHWEST NEW MEXICO

### **Below-Grade Tank Closure Plan**

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on this SIMCOE, LLC well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, SIMCOE, LLC shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety, or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. SIMCOE, LLC shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofit with a BGT that complies with the SIMCOE, LLC NMOCD approved BGT design attached to the SIMCOE, LLC Design and Construction Plan. SIMCOE, LLC shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the SIMCOE, LLC NMOCD approve BGT Design attached to the SIMCOE, LLC Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. SIMCOE, LLC shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

#### **General Closure Plan**

- 1. SIMCOE, LLC shall notify the surface owner by certified mail that it plans to close a BGT. 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, LLC shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location 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. SIMCOE, LLC shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be utilized are:
  - a. JFJ Land farm, Permit NM-01-010(B) (Solids and Sludge)
  - b. Basin Disposal, Permit NM-01-0005 (Liquids)
  - c. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
  - d. Simcoe, LLC Operated 13 GCU SWD # 1, API 30-045-28601 (Liquids)
  - e. Simcoe, LLC Operated GCU 259 SWD, API 30-045-20006(Liquids)
  - f. Simcoe, LLC Operated GCU 306 SWD, API30-045-24286 (Liquids)
  - g. Simcoe, LLC Operated GCU 307 SWD, API30-045-24248 (Liquids)
  - h. Simcoe, LLC Operated GCU 328 SWD, API 30-045-24735(Liquids)
  - i. Simcoe, LLC Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

- 4. Simcoe, LLC shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.
- 5. Simcoe, LLC shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.
- 6. Simcoe, LLC shall sample the soils beneath the BGT to determine whether a release has occurred. Simcoe, LLC shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows.

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	
	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	
	ТРН	EPA SW-846 Method 418.1	2,500 mg/kg	
51 feet-100 feet	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	
	ТРН	EPA SW-846 Method 418.1	2,500 mg/kg	
> 100 feet	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 = totalpetroleum hydrocarbons** 

TDS = total dissolved solids.

\* - Or other test methods approved by the division

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

- 7. Simcoe, LLC shall notify the division District III office of its results on form C-141.
- 8. If it is found that a release has occurred, then Simcoe, LLC will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
- 9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and revegetate the location. The location will be reclaimed if it is not with in the active process area.
- 10. Simcoe, LLC 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, LLC 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 Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and revegetate according to Subsection I of 19.15.17.13 NMAC. 11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
- 12. Simcoe, LLC shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be conducted by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-affected by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
- 13. Simcoe, LLC shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
- 14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, Simcoe, LLC shall notify the NMOCD when it has seeded or planted and when it successfully achieves revegetation.
- 15. Within 60 days of closure completion, Simcoe, LLC shall submit a closure report on NMOCD's form C-144, and will include the following:
  - a. proof of closure notification (surface owner and NMOCD)
  - b. sampling analytical reports: information required by 19.15.17 NMAC.
  - c. disposal facility name and permit number
  - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
  - e. site reclamation, photo documentation. Disposal Facility Name and Permit Number

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16. Simcoe, LLC 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

Operator:	OGRID:
SIMCOE LLC	329736
1199 Main Ave., Suite 101	Action Number:
Durango, CO 81301	87790
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

#### CONDITIONS

Created By		Condition Date
jburdine	Please follow all requirements for closure requirements for below ground tanks per 19.15.17.13 NMAC and as noted in the closure plan for tanks that are located less then 50 ft below groundwater.	7/5/2022

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