<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 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

Type

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

Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

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

	Pit, Below-Grade Tank, or	
Proposed Alternative Method Permit or Closure Plan Application		
Type of action	n: Below grade tank registration	
	Permit of a pit or proposed alternative method	
	Closure of a pit, below-grade tank, or proposed alternative method	
BGT A	Modification to an existing permit/or registration OPERATING PERMIT Rescind Tank A Closure Permit	
	Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or	
	proposed alternative method	
Instructions: 1	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

nvironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinance			
Operator: SIMCOE LLC OGRID #: 329736			
Address: 1199 Main Ave., Suite 101, Durango, CO 81301			
Facility or well name: Wallace Gas Com 001			
API Number: 30-045-10150 OCD Permit Number:			
U/L or Qtr/Qtr H Section 35 Township 31N Range 11W County: San Juan County			
Center of Proposed Design: Latitude 36.857738° Longitude -107.953951° NAD: ☐1927 🗷 1983			
Surface Owner: ☐ Federal ☐ State 🗷 Private ☐ Tribal Trust or Indian Allotment			
2.    Pit: Subsection F, G or J of 19.15.17.11 NMAC  Temporary:   Drilling   Workover   Permanent   Emergency   Cavitation   P&A   Multi-Well Fluid Management   Low Chloride Drilling Fluid   yes   no   Lined   Unlined   Liner type: Thickness   mil   LLDPE   HDPE   PVC   Other			
String-Reinforced			
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D			
Subsection I of 19.15.17.11 NMAC   TANK ID: A			
Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.  5.			
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify			

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)	
5. Signs: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.16.8 NMAC	
8.  Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  □ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  □ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
<b>General siting</b>	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - ☒ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells  ☒ NMOOSE SJ 03560 Well File  Ground water is less than 25 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.	☐ Yes ☒ No ☐ NA ☐ Yes ☐ No ☐ 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 adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks)  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ■ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock	
watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search: Visual inspection (certification) of the proposed site.	☐ Yes ☐ No

<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	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	
- Topographic map; Visual inspection (certification) of the proposed site	Yes No
<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
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.	
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
<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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dattached.	ocuments are 9 NMAC 9.15.17.9 NMAC
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 datached.  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 1 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:	
THE REVIOUSLY ADDITIVED DESIGN (ANACH CODY OF DESIGN) APPENUMPER. OF PERMIT NUMBER.	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
attached.  Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC	
Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan	
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan  Emergency Response Plan	
<ul> <li>☐ Oil Field Waste Stream Characterization</li> <li>☐ Monitoring and Inspection Plan</li> <li>☐ Erosion Control Plan</li> </ul>	
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F Alternative  Proposed Closure Method: Waste Excavation and Removal	luid Management Pit
Waste Removal (Closed-loop systems only)  On-site Closure Method (Only for temporary pits and closed-loop systems)  In-place Burial On-site Trench Burial  Alternative Closure Method	
14.  Weste Everystian and Democral Cleaning Plan Checklists (10.15.17.12 NIMAC) Instructions. Each of the following items must be	attacked to the
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	
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. Fig. 15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approve	val obtained from the municipality	☐ Yes ☐ No	
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division			
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geolog	y & Mineral Resources; USGS; NM Geological		
Society; Topographic map Within a 100-year floodplain.		☐ Yes ☐ No	
- FEMA map		☐ Yes ☐ No	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Sito Re-vegetation Plan - 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			
17.  Operator Application Certification:  I hereby certify that the information submitted with this application is true, accura	te and complete to the best of my knowledge and bel	ief.	
Name (Print): Steve Moskal	Title: Environmental Coordinator		
Signature:	Date: 3/24/2021		
e-mail address: smoskal@ikavenergy.com	Telephone:(505) 330-9179		
18.  OCD Approval:   Permit Application (including closure plan)   Closure Plan  Control of the	an (only) OCD Conditions (see attachment)		
OCD Representative Signature:	Approval Date: July	19, 2021	
Title: Environmental Specialist	OCD Permit Number: BGT A		
19. Closure Report (required within 60 days of closure completion): 19.15.17.13 instructions: Operators are required to obtain an approved closure plan prior to The closure report is required to be submitted to the division within 60 days of th section of the form until an approved closure plan has been obtained and the clo	implementing any closure activities and submitting e completion of the closure activities. Please do no		
20.  Closure Method:  Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternat ☐ If different from approved plan, please explain.	ive Closure Method   Waste Removal (Closed-l	oop systems only)	
Closure Report Attachment Checklist: Instructions: Each of the following item 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	ms must be attached to the closure report. Please in	ndicate, by a check	

22.			
Operator Closure Certification:			
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.			
Name (Print):	Title:		
Signature:	Date:		
e-mail address:	Telephone:		

#### SITING AND HYDRO-GEOLOGICAL REPORT FOR WALLACE GAS COM 001

#### Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be greater 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 within 500 feet but 3 domestic freshwater wells 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 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 south of the Animas River near Knowlton Canyon. Topography is dominated by the main channel of the river, its floodplain and terrace deposits. Moving away from the Animas River, eroded surfaces of the Nacimiento Formation form slopes that rise away from the main channel.

Groundwater is estimated to be between 50 and 100 feet below ground surface (bgs) at this site. This is based on the depth to groundwater in domestic well # SJ 03650 of 32 feet bgs, located 943 feet west of the site.

#### 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

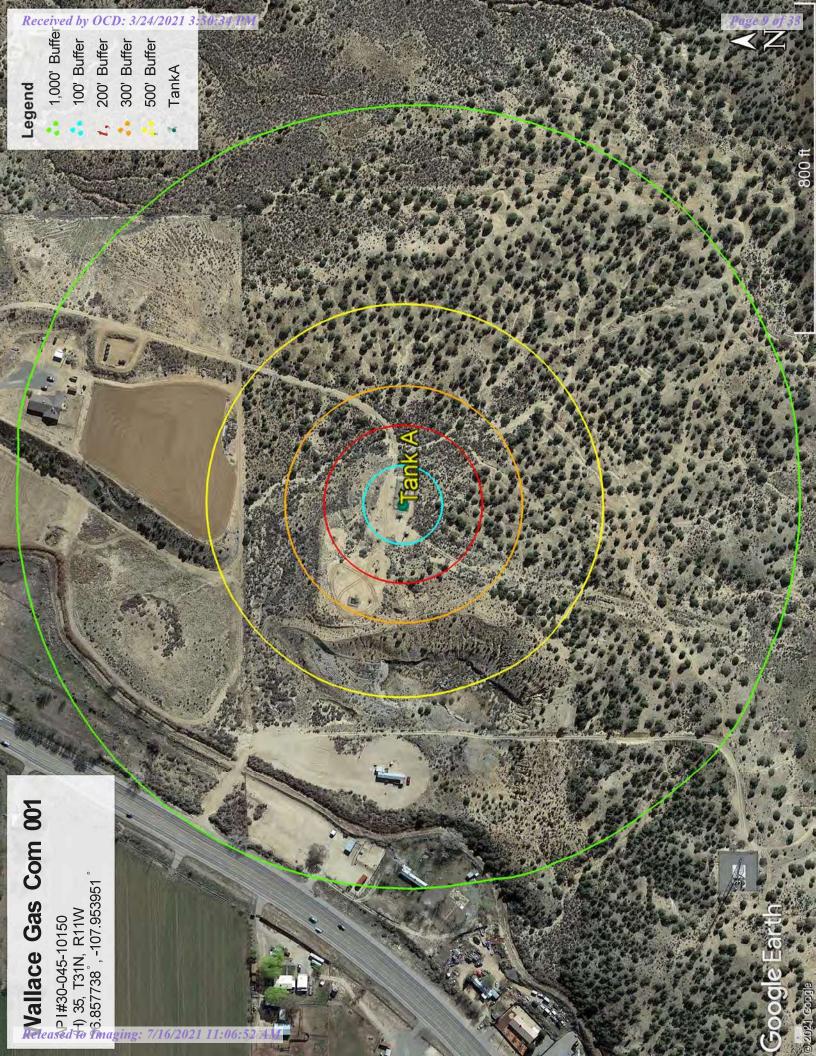
to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impacL

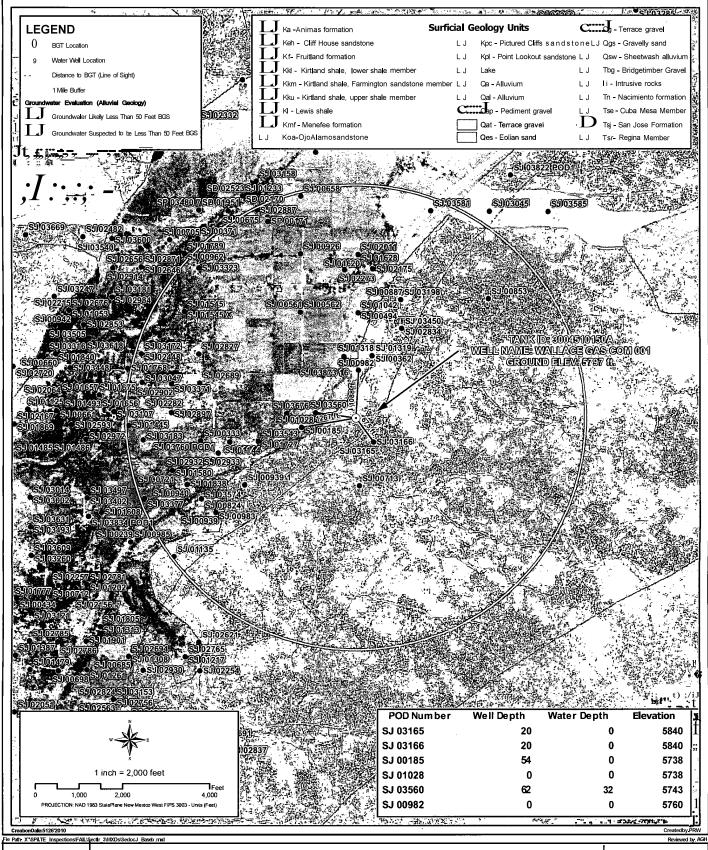
Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). The predominant geologic formation this close to the San Juan River is Quaternary alluvium. Alluvial valley fill consists of gravel, sand, silt and clay (Stone et al., 1983). In the valleys of the San Juan River and its tributaries, the alluvium does not exceed 100 feet in thickness. Terrace deposits consist of boulder gravel resting on benches cut into the Tertiary bedrock of the area. Numerous shallow wells produce water from valley fill for stock and domestic uses along the river and transmissivities are generally high. Much of the water in the valley fill of the Animas River comes from drainage of irrigated lands, as well as from underlying and adjacent bedrock units.

#### 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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### **GROUNDWATER LESS THAN 50 FT.**

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23



### New Mexico Office of the State Engineer

## **Point of Diversion Summary**

(quarters are != NW 2= NE 3= SW 4= SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** SJ 03560

Q64 Q16 Q4 Sec Tws Rng 35 31N 11W

X Y 4083210\* 236365

**Driller License:** 

717

**Driller Company:** 

WESTERN WATER WELLS

**Driller Name:** 

07/09/2005

**Drill Finish Date:** 

07/12/2005

Plug Date:

Log File Date:

**Drill Start Date:** 

07/20/2005

**PCW Rev Date:** 

Source:

Shallow

**Pump Type:** 

Pipe Discharge Size:

**Estimated Yield:** 

15 GPM

**Casing Size:** 

Depth Well: 6.00

62 feet

**Depth Water:** 

32 feet

Water Bearing Stratifications:

Top **Bottom Description** 

32

Sandstone/Gravel/Conglomerate

**Casing Perforations:** 

Top **Bottom** 

57

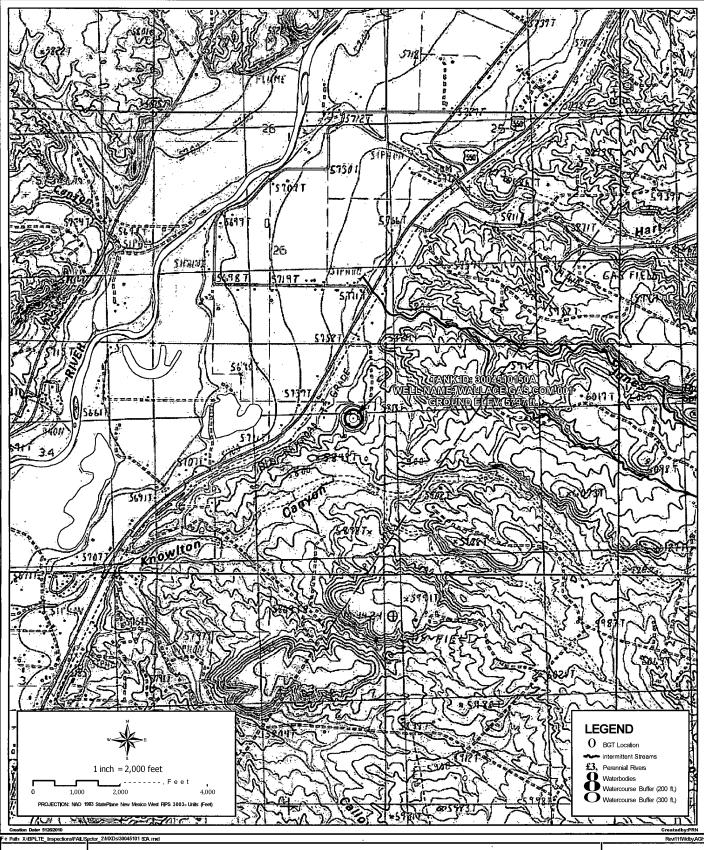
62

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.

3/24/21 12:18 PM

POINT OF DIVERSION SUMMARY

<sup>\*</sup>UTM location was derived from PLSS - see Help

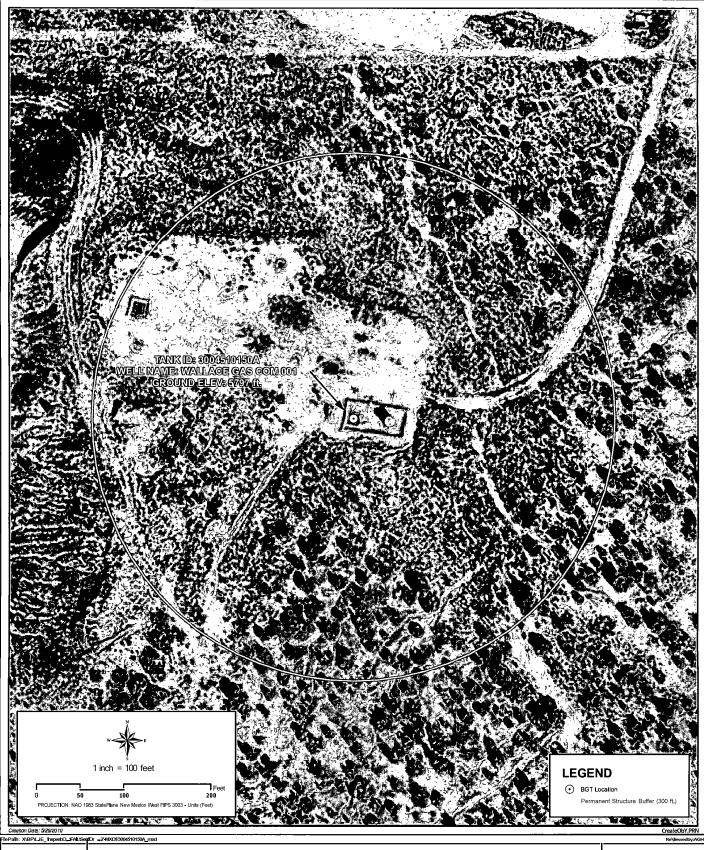


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### PROXIMITY TO WATERCOURSES

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23



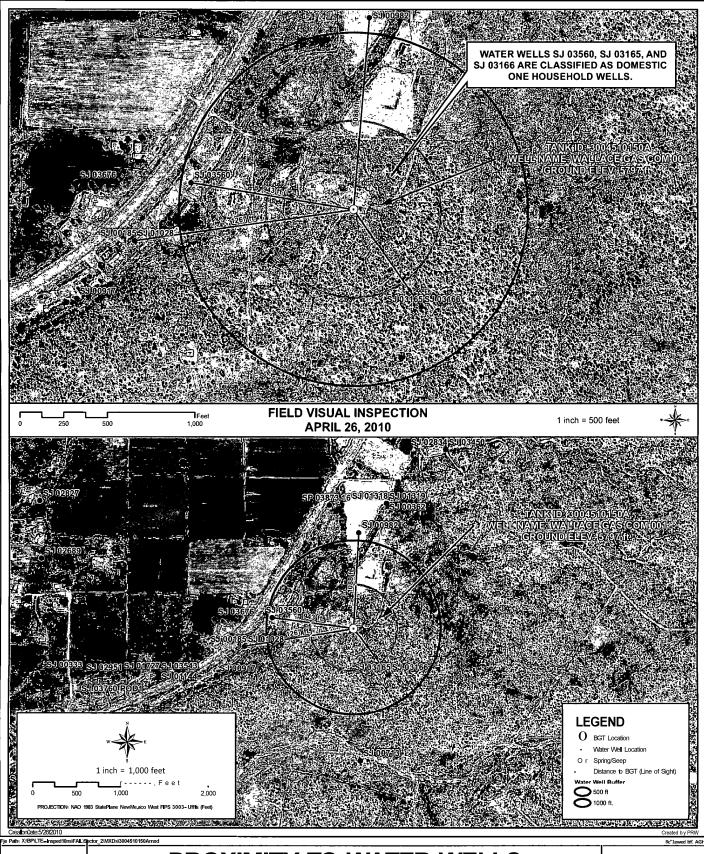
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### PROXIMITY TO PERMANENT STRUCTURE

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23



### **PROXIMITY TO WATER WELLS**

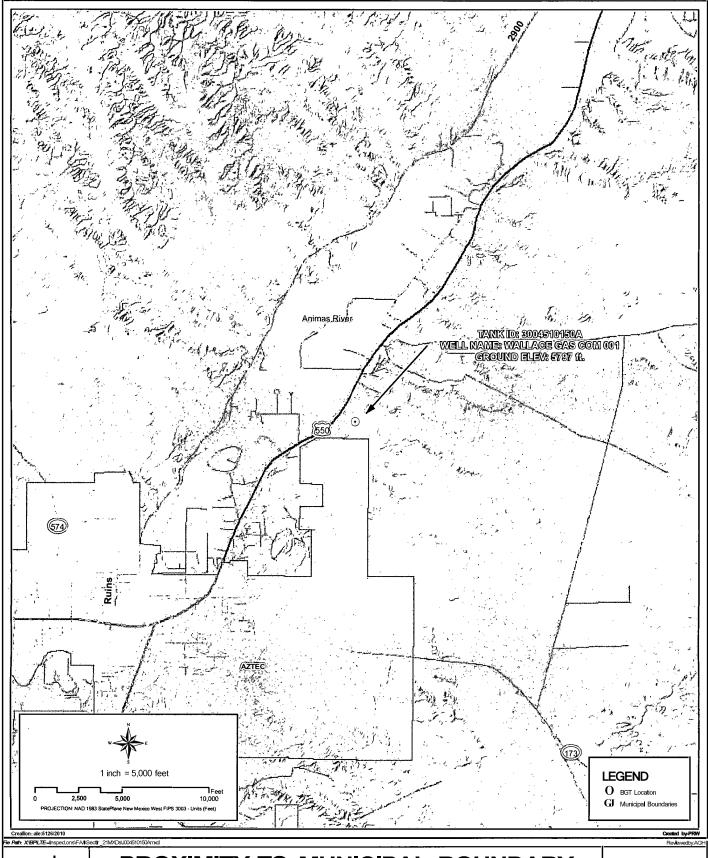
WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23

**FIGURE** 

4

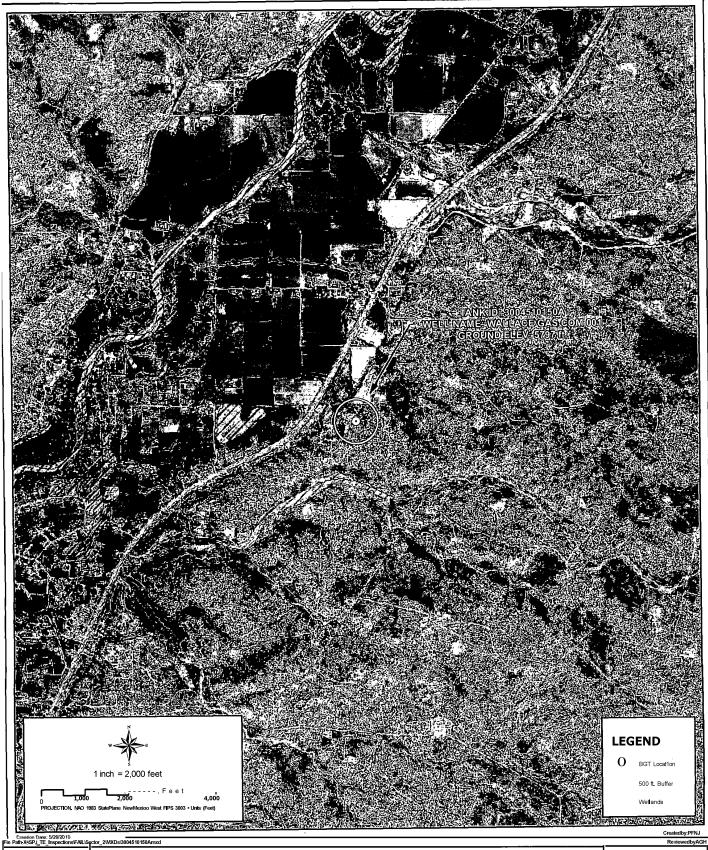


### PROXIMITY TO MUNICIPAL BOUNDARY

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

API NUMBER: 3004510150 TANKID:3004510150A SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23

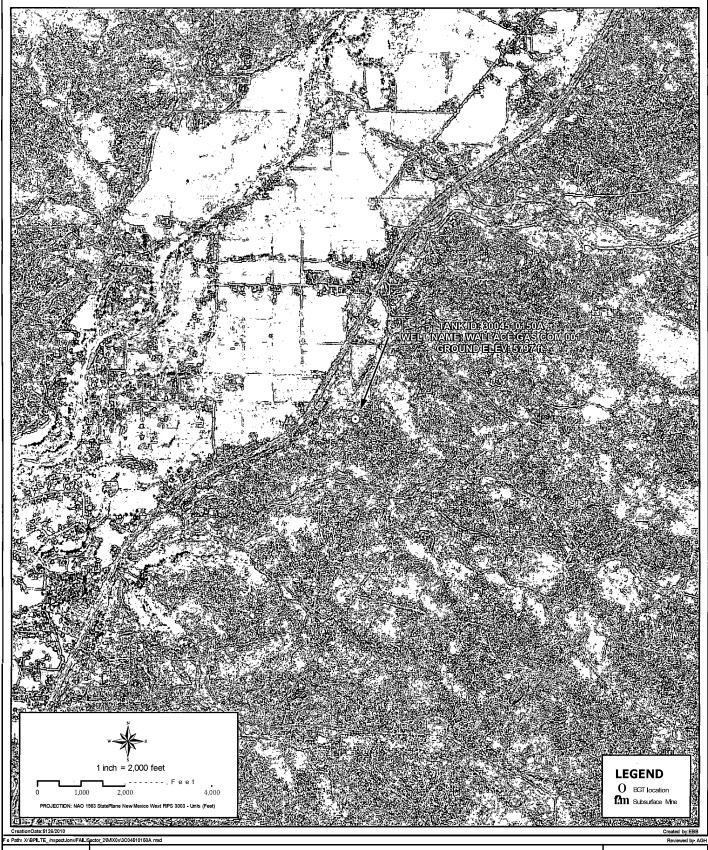


### **PROXIMITY TO WETLANDS**

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W," P.M. NM23

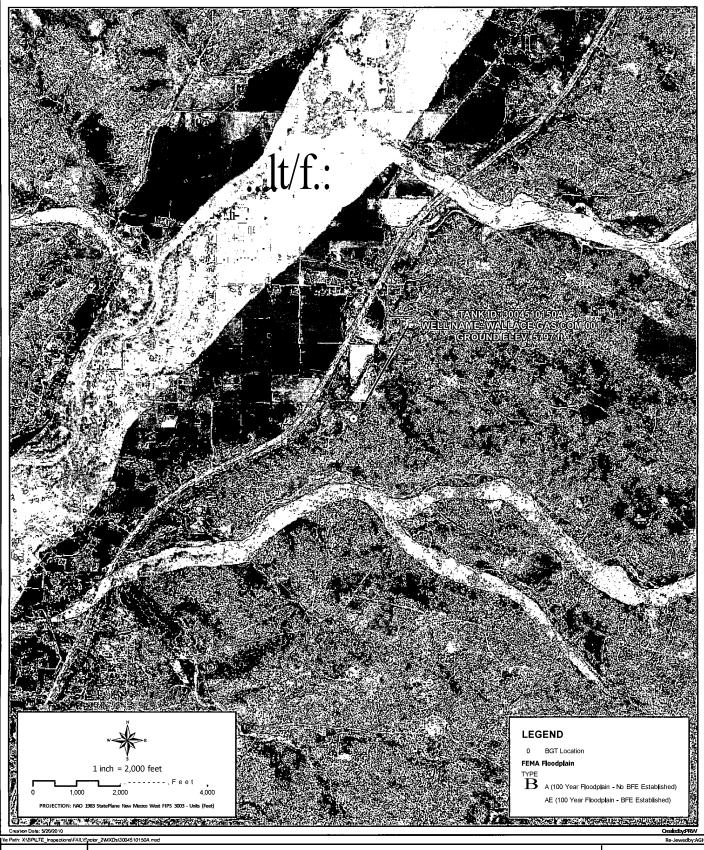


### PROXIMITY TO SUBSURFACE MINES

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M.NM23



**O**bp

### PROXIMITY TO FLOODPLAIN

WELL NAME: WALLACE GAS COM 001

API NUMBER: 3004510150 TANKID:3004510150A

SECTION 35, TOWNSHIP 31.0N, RANGE 11W, P.M. NM23

FIGURE **Q** 

#### 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: <a href="http://pubs.er.usgs.gov/">http://pubs.er.usgs.gov/</a>.

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 Citation List: Page I of 5

#### Figure 2: Proximity to Watercourses

#### Layers:

#### **Perennial Streams:**

#### 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: <a href="http://nhd.usgs.gov/">http://nhd.usgs.gov/</a>.

#### **Intermittent Streams:**

#### 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: <a href="http://nhd.usgs.gov/">http://nhd.usgs.gov/</a>.

#### **Water Bodies:**

#### 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: <a href="http://nhd.usgs.gov/">http://nhd.usgs.gov/</a>.

#### **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: <a href="http://store.usgs.gov.">http://store.usgs.gov.</a>

#### 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.

Figure Citation List: Page 2 of 5

#### 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: <a href="http://nhd.usgs.gov/">http://nhd.usgs.gov/</a>.

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: <a href="http://ned.usgs.gov/">http://ned.usgs.gov/</a>.

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 Citation List: Page:, of 5

#### 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: <a href="http://www.fws.gov/wetlands/">http://www.fws.gov/wetlands/</a>.

**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 K mat, 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 Citaiion List: Page 4 of 5

#### 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.

Figure Citation List: Page 5 of 5

#### SIMCOE LLC

#### SAN JUAN BASIN, NORTHWEST NEW MEXICO

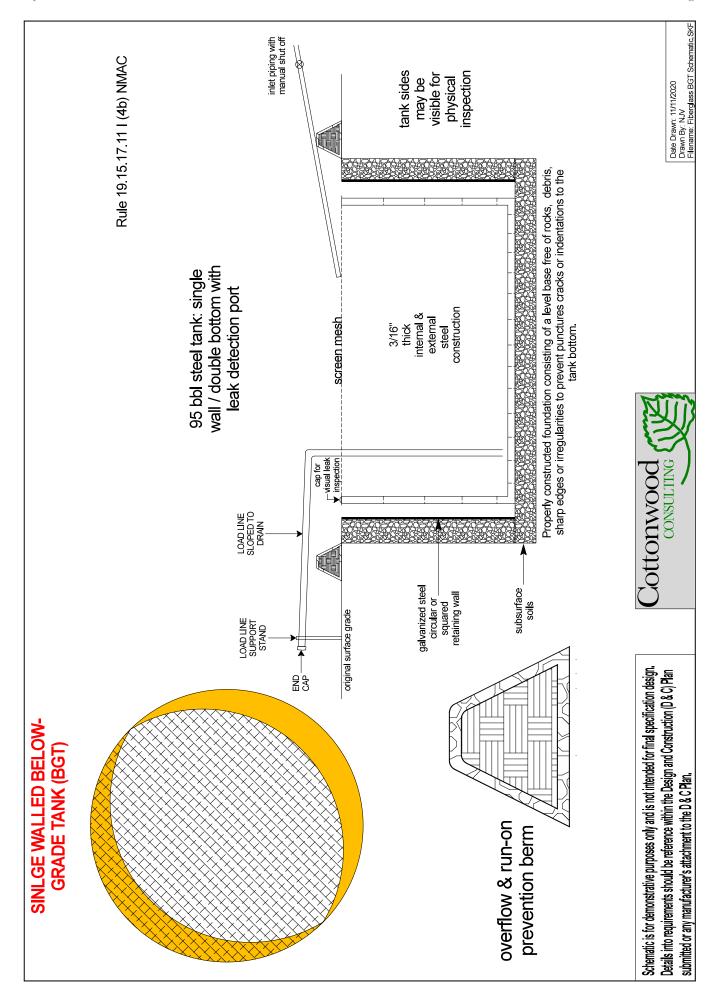
#### BELOW-GRADE TANK DESIGN AND CONSTRUCTION PLAN

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

#### **Design and Construction Plan**

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

- 11. SIMCOE will construct and install a double-walled tank design per Subparagraph (b) of Paragraph (4) of Subsection I of19.15.17.11 NMAC with a two (2) inch diameter leak detection port. The floor supports located in the annular space of the tank bottom will be channeled to allow outward movement of liquid between the walls. Leak detection will be monitored per SIMCOE's Operating and Maintenance Plan. The walls of the BGT will be constructed of fiberglass or carbon steel that meets the ASTM A36 standard. SIMCOE's BGT design will ensure containment of tank contents and protect underlying groundwater. The production equipment line drain is manual or automated drain that allows water level in production equipment (generally the separator) to be maintained within the equipment's operating parameters. The environmental drain is a manually operated drain that is used to drain liquids off of equipment. The tank drain is a manually operated drain, typically in the closed position that is used to rid the condensate tank of any water accumulation. The vent drain is a manually operated drain off the discharge of production equipment (usually the separator) and is used to blowdown the wellsite. The swab drain line is a manually operated drain originating between the wellhead and separator and is used during well workovers when large amounts of liquid are removed from the well and sent straight to the BGT.
- 12. SIMCOE owned and operated single walled BGTs constructed and installed prior to June 16, 2008 that has the side walls open for visual inspection and that does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT and remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
- 13. SIMCOE owned and operated single walled BGTs constructed and installed prior to June 16, 2008 and where any portion of the tank sidewall is below the ground surface and not visible shall equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, by June 16, 2013. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
- 14. SIMCOE owned and operated double walled BGTs constructed and installed prior to June 16, 2008 and which does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the BGT to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing BGT does not demonstrate integrity, SIMCOE shall promptly drain the BGT, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.
- 15. The general specifications for the design and construction of the BGT have been provided in the attached SIMCOE design and construction schematic.



#### SIMCOE LLC SAN JUAN BASIN. NORTHWEST NEW MEXICO

#### BELOW-GRADE TANK OPERATING AND MAINTENANCE PLAN

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

### **Operating and Maintenance Plan**

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

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

#### BELOW-GRADE TANK CLOSURE PLAN

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

#### **General Closure Plan**

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

Table 1         Closure Criteria for Soils Beneath Below-Grade Tanks			
Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
	Chloride	EPA 300.0	600 mg/kg
<50 feet	ТРН	EPA SW-846 Method 418.1	100 mg/kg
_30 1000	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
	TPH	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:

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

- \* 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.

# SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT 263 TANK ID: 3004520277A

#### Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be greater 100 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, but is within 100 feet of a significant watercourse, as measured from the ordinary high water mark. Figure 3 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are no freshwater wells or springs within 1,000 feet of the BGT. Figure 4 demonstrates that the BGT is within 500 feet of a wetland.

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 within the Nacimiento Formation on the south end of Crouch Mesa, close to the San Juan River. Although the BGT site is within the municipal boundaries ordinance, the BGT is safely isolated on a gentle slope thus, causing no imminent threat to local groundwater supplies, human health, safety and welfare.

#### 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). In most of the proposed area, the Nacimiento Formation lies at the surface and grades into the Animas Formation to the west. 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 (Stone et al., 1983). 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/d (Stone et al,1983). Groundwater within these aguifers 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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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

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

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

CONDITIONS

Action 21875

#### **CONDITIONS**

Operator:	OGRID:
SIMCOE LLC	329736
1199 Main Ave., Suite 101	Action Number:
Durango, CO 81301	21875
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

#### CONDITIONS

Created By	Condition	Condition Date
cwhitehead	None	7/16/2021