

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144  
July 21, 2001

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.  
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

2009 JAN 20 PM 1 54

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

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  
**Existing BGT** ☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  
☒ Modification to an existing permit  
**BGT1** ☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

**Instructions:** Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances

1.  
Operator: XTO Energy, Inc. OGRID #: 5380  
Address: #382 County Road 3100, Aztec, NM 87410  
Facility or well name: Gerk Gas Com #1  
API Number: 30-045-07911 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr B Section 30 Township 29N Range 09W County: San Juan  
Center of Proposed Design: Latitude 36.701020 Longitude 107.815520 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.  
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_

4.  
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 95 bbl Type of fluid: Produced Water  
Tank Construction material: Steel  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☒ Other Visible sidewalls, vaulted, automatic high-level shut off, no liner  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

5.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.
**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 Four foot height, steel mesh field fence (hogwire) with pipe top railing

7.
**Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

☐ Screen
☐ Netting
☒ Other Expanded metal or solid vaulted top
☐ Monthly inspections (If netting or screening is not physically feasible)

8.
**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 19.15.3.103 NMAC

9.
**Administrative Approvals 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:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.
**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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. ( <i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i> ) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. ( <i>Applies to permanent pits</i> ) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

11. **Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC  
**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  
☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

12. **Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  
☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_  
☐ Previously Approved Operating and Maintenance Plan API Number: \_\_\_\_\_ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13. **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  
☐ Oil Field Waste Stream Characterization  
☐ Monitoring and Inspection Plan  
☐ Erosion Control Plan  
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14. **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 ☐ Closed-loop System  
☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal  
☐ Waste Removal (Closed-loop systems only)  
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)  
☐ In-place Burial ☐ On-site Trench Burial  
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC  
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)  
*Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?  
☐ Yes (If yes, please provide the information below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

- ☐ 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 I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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

*Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.*

- |   |   |
|---|---|
| Ground water is less than 50 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| 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).<br>- Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |

18. **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 F of 19.15.17.13 NMAC  
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC



19.

**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Kim Champlin Title: Environmental Representative  
Signature: Kim Champlin Date: 01/12/2009  
e-mail address: kim\_champlin@xtoenergy.com Telephone: (505) 333-3100

20.

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

OCD Representative Signature: Jaclyn Burdine Approval Date: 08/10/2022  
Title: Environmental Specialist-A OCD Permit Number: BGT1

21.

**Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

☐ Closure Completion Date: \_\_\_\_\_

22.

**Closure Method:**

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)  
☐ If different from approved plan, please explain.

23.

**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

*Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

- ☐ Site Reclamation (Photo Documentation)  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique

24.

**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice (surface owner and division)  
☐ Proof of Deed Notice (required for on-site closure)  
☐ Plot Plan (for on-site closures and temporary pits)  
☐ Confirmation Sampling Analytical Results (if applicable)  
☐ Waste Material Sampling Analytical Results (required for on-site closure)  
☐ Disposal Facility Name and Permit Number  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique  
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983

25.

**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: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION COMMISSION

November 7, 1958

PAN AMERICAN PETROLEUM CORPORATION  
1 Section B 30  
990 Feet From the NORTH 1650  
SAN JUAN \*  
Mesaverde

Gerk Gas Unit

29 NORTH 9 WEST,  
the EAST  
407.56  
Blanco Mesaverde

☒ \*To be reported later

Communitized Acreage

Note: See attached plat for unit outline. Approval of non-standard gas proration unit granted by N.M.O.C.C. Order No. R-1098 dated December 18, 1957.

PAN AMERICAN PETROLEUM CORPORATION

R. M. Bauer, Jr.

Box 487, Farmington, New Mexico

1/4 Cor. B.C.

Sec. Cor. B.C.

Fee Land  
D.J. McDaniel

990'

1650'

30



Ref: GLO plat dated 2 July 1952



4 OCTOBER 1957

James P. Leese

JAMES P. LEESE NEW MEX. REG. No. 11463



### Pit Permit Siting Criteria Information

Client:	XTO Energy
Project:	tank permitting
Revised:	5-Jan-09
Prepared by:	Trevor Ycas

API#: 30-045-07911

USPLSS: 29N 9W 30 B

Name: GERK GAS COM No. 001

Lat/Long: 36.701020°, -107.815520°

Depth to groundwater: depth &lt; 50'

Geologic formation: Nacimiento Formation (Tn)

Distance to closest continuously flowing watercourse: 5500 feet NW to 'San Juan River'

site elevation: 1738m/5702'

Distance to closest significant watercourse, lakebed, playa lake, or sinkhole: 2520' NW to 'Hammond Ditch'; 820 feet SW to 'San Juan River'

Permanent residence, school, hospital, institution or church within 300' NO

Soil Type: Alfisol / Entisol

Domestic fresh water well or spring within 500' NO

Annual Precipitation: Navajo Reservoir: 11.90", Aztec: 9.77", Farmington (FAA): 8.21", Bloomfield: 8.71"

Any other fresh water well or spring within 1000' NO

Precipitation Notes: Historical daily max. precip.: 4.0" (Bloomfield)

Within incorporated municipal boundaries NO

## Attached Documents:

29N09W\_iWaters.pdf, 29N10W\_iWaters.pdf, 29N11W\_iWaters.pdf, 30N09W\_iWaters.pdf, 30N10W\_iwaters.pdf, 30N11W\_iwaters.pdf, 31N09W\_iWaters.pdf, 31N10W\_iWaters.pdf, 31N11W\_iWaters.pdf

Within defined municipal fresh water well field NO

FM35006405508\_30-045-07911.jpg

30-045-07911\_gEarth-iWaters.jpg, 30-045-07911\_gEarth-PLS.jpg, 30-045-07911\_topo-PLS.jpg, 30-045-07911\_gEarth-iWaters-zoom.jpg

Wetland within 500' NO

Mining Activity: None Near

Within unstable area NO

NM\_NRD-MMD\_MinesMillQuarries\_30-045-07911.jpg

Within 100 year flood plain NO

## Additional Notes:

drains to 'San Juan River'

atop bluff overlooking, and N of, SJ river

S of 'Blanco'

**GERKGAS COM No. 001  
API 30-045-07911  
Below Ground Tank  
Hydrogeologic Report for Siting Criteria**

### **General Geology and Hydrology**

The San Juan Basin is a typical Rocky Mountain basin with a gently dipping southern flank and a steeply dipping northern flank. Asymmetrically layered Tertiary sandstones and shales, along with Quaternary alluvial deposits, dominate surficial geology (Dane and Bachman, 1965). The proposed pit location will be situated immediately north of the San Juan River, near Blanco, NM.

The predominant geologic formation this close to the San Juan River is Quaternary alluvium. Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). Alluvial valley fill consists of gravel, sand, silt and clay, but coarse sand and gravel dominate near the San Juan River (Stone et al., 1983). Numerous shallow wells produce water from valley fill for stock and domestic uses along the river and transmissivities are generally high.

The prominent soil type at the proposed site is entisols, which are defined as soils that exhibit little to no profile development ([www.emnrd.state.nm.us](http://www.emnrd.state.nm.us)). Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the San Juan River. These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes the soils that cover the area and prohibits effective recharge to the underlying aquifers.

Dry and arid weather further prohibit active recharge. The climate of the region is arid, averaging just over 8 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center [www.wrcc.dri.edu](http://www.wrcc.dri.edu)).

The predominant vegetation is sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

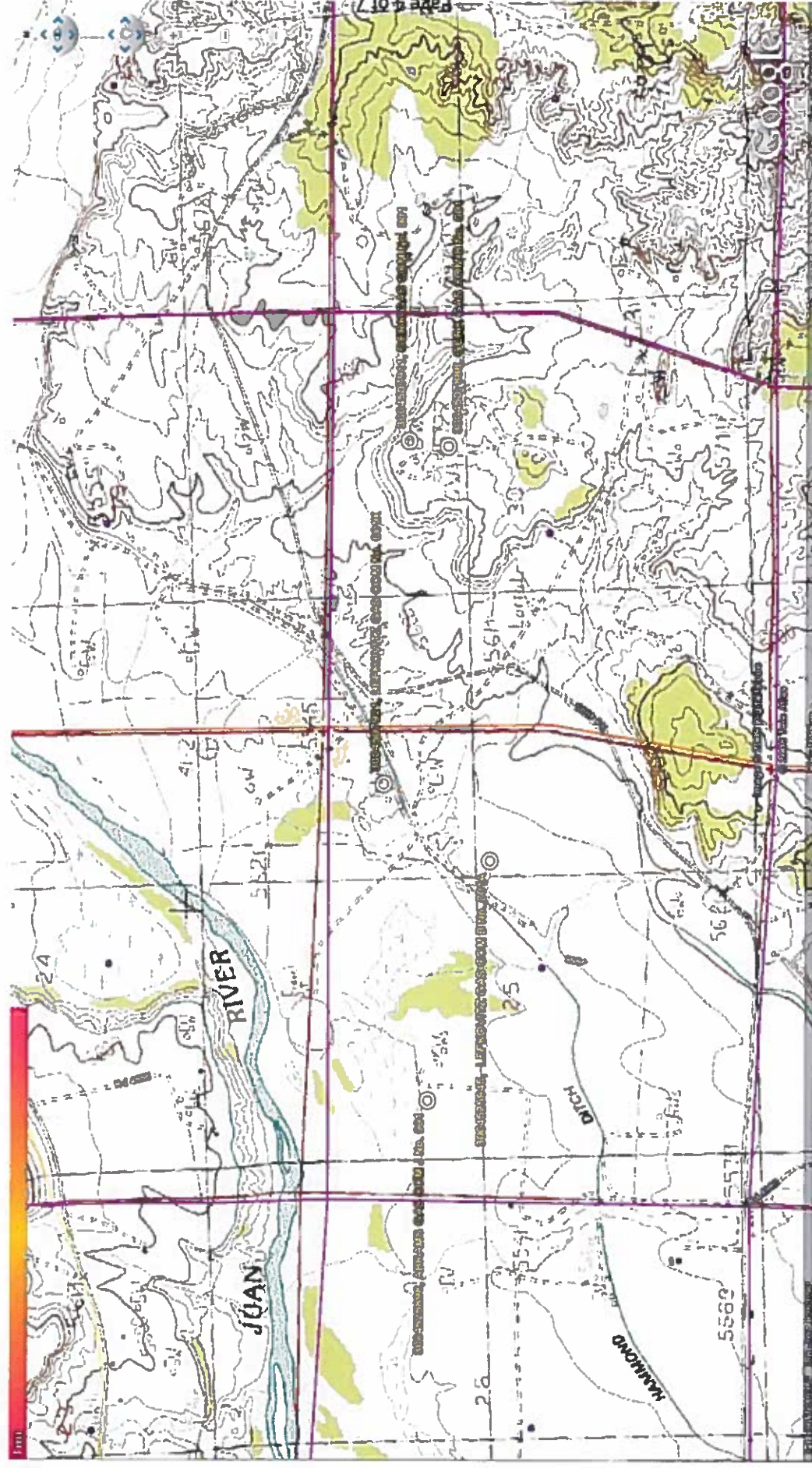
### **Site Specific Hydrogeology**

Depth to groundwater is estimated to be less than 50 feet. This estimation is based on data from Stone and others (1983), the USGS Groundwater Atlas of the United States and depth to groundwater data published on the New Mexico State Engineer's iWaters

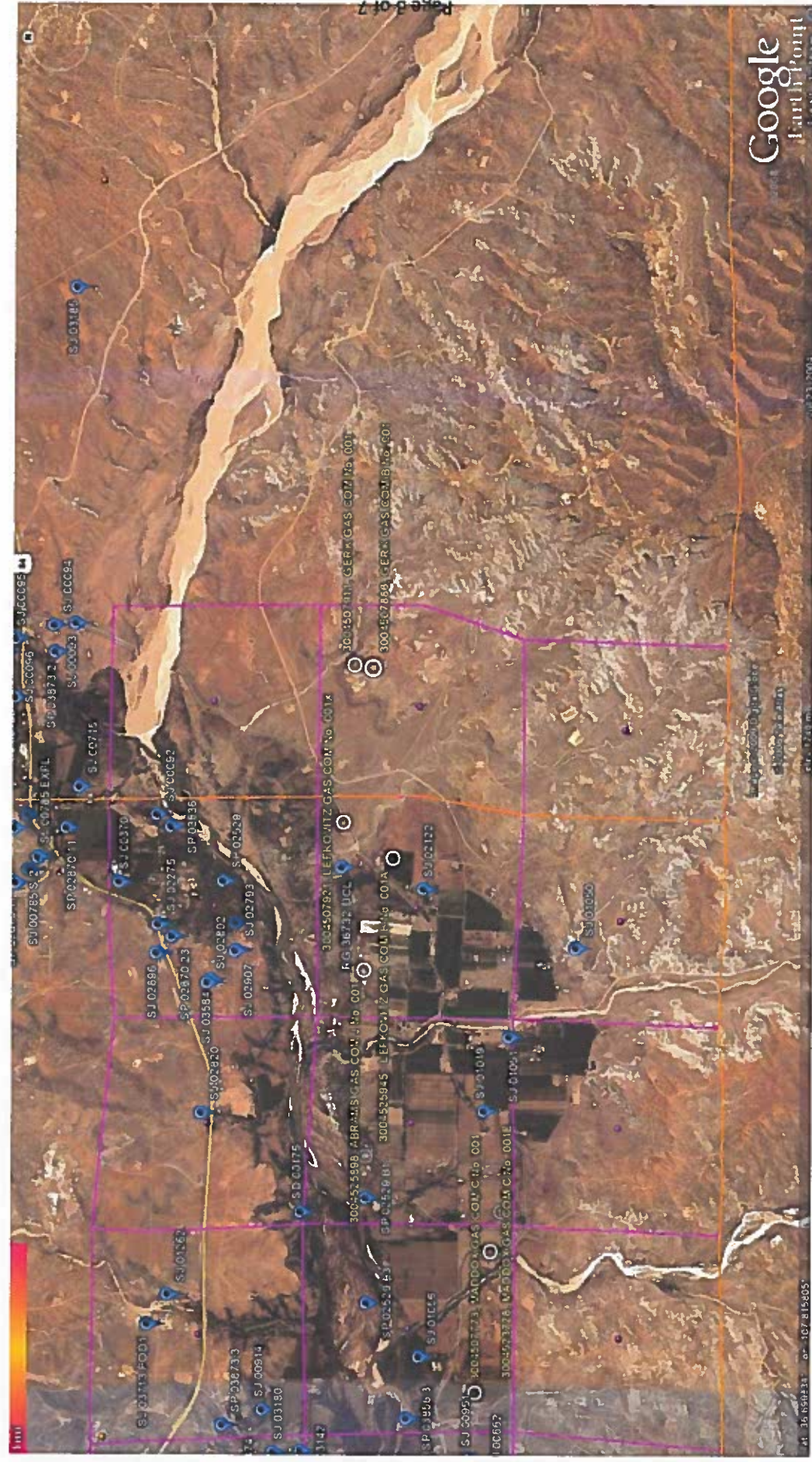


Database website. Local topography and proximity to surface hydrologic features are also taken into consideration.

Aquifers within the valley fill are generally extremely shallow and surrounding groundwater well information confirms this fact. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. Wells located at similar distances from the San Juan River contain groundwater at depths ranging from 4 to 50 feet.







New Mexico Office of the State Engineer  
POD Reports and Downloads

Township:  Range:  Sections:   
NAD27 X:  Y:  Zone:  Search Radius:   
County:  Basin:  Number:  Suffix:   
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

POD / SURFACE DATA REPORT 12/20/2008

DB File Nbr	Use	(acre ft per annum)	Diversion	Owner	POD Number
8J 00009	IHD	0	U.S. GOVERNMENT		8J 00009
8J 00091	DOM	6	DULCENIA I. ALCOH		8J 00091
8J 00140	FUB	3	N.M. STATE HWY DEPT		8J 00140
8J 00205	OFM	2	BURLINGTON RESOURCES OIL & GAS		8J 00205
8J 00459	DOM	0	GERALD ULIBARRI		8J 00459
8J 00463	DOM	0	GILBERT GURULE		8J 00463
8J 01330	IRR	24	AMADOR GONZALES		8J 01330
8J 01823	DOM	3	RAY HOBLEY		8J 01823
8J 02092	MUL	3	WILLIAM H. SCHOFIELD		8J 02092
8J 02170	DOM	3	FRANKLIN A. HANCOCK		8J 02170
8J 02298	DOM	3	SAN JUAN SHRINE CLUB		8J 02298
8J 02744	DOM	3	TED GRZYBONSKI		8J 02744
8J 03165	DOM	0	CRISTOBAL S. GURULE		8J 03165
8P 04305	NRT	0	SOUTHWEST WATER DISPOSAL		8P 04305

Record Count: 14

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

Source	Tws	Eng	Sec	q	q	q	q	X	Y	Zone
Shallow	30N	09W	06	3	2	2	2			
Shallow	30N	09W	05	3	2	2	2			
Shallow	30N	09W	05	1	3	3	3			
Shallow	30N	09W	12	3	3	3	3			
Shallow	30N	09W	35	1	4	4	4			
Shallow	30N	09W	35	2	4	4	4			
Shallow	30N	09W	36	1	2	2	2			
Shallow	30N	09W	36	4	4	4	4			
Shallow	30N	09W	35	1	4	4	4			
Shallow	30N	09W	36	3	4	4	4			
Shallow	30N	09W	25	2	4	4	4			
Shallow	30N	09W	35	2	4	4	4			
Shallow	30N	09W	32	3	4	4	4			

UTM Zone	Easting	Northing	Start Date	Finish Date	Depth Well
13	248261	4080567	03/30/1953	04/05/1953	396
13	254455	4072563		12/31/1960	34
13	255769	4074625			10
13	255893	4078627			
13	254358	4072853			
13	255161	4072836			
13	255654	4073722			
13	255157	4073621	10/27/1986	10/28/1986	20
13	255048	4072066			
13	254257	4072752	04/25/1988	04/28/1988	32
13	255777	4072235	09/27/1990	09/28/1990	20
13	256992	4074273	08/20/1996	08/22/1996	15
13	255060	4072735			21
13	249536	4072253			20

New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 29N Range: 10W Sections: \_\_\_\_\_  
NAD27 X: \_\_\_\_\_ Y: \_\_\_\_\_ Zone: \_\_\_\_\_ Search Radius: \_\_\_\_\_  
County: \_\_\_\_\_ Basin: \_\_\_\_\_ Number: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_ ☐ Non-Domestic ☐ Domestic ☒ All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form IWATERS Menu Help

## WATER COLUMN REPORT 08/08/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column	Water (in feet)
RG 36732 DCL	29N	10W	25	2							500	450	50	
SJ 00785 S	29N	10W	04	2	4	2					20			
SJ 00680	29N	10W	13	2	2						40	10	30	
SJ 00785 NEW	29N	10W	13	4							60	20	40	
SJ 00785 S-2	29N	10W	13	4							60	20	40	
SJ 03023	29N	10W	18	1	3	1					90	65	25	
SJ 03502	29N	10W	18	1	3	1					150			
SJ 03081	29N	10W	18	3	1	4					20			
SJ 02078	29N	10W	19	3	1	1					40	9	31	
SJ 00303	29N	10W	19	3	3						20	5	15	
SJ 02860	29N	10W	19	4	4	4					21	2	19	
SJ 02900	29N	10W	20	3	1	2					70			
SJ 01140	29N	10W	20	3	2	2					25	6	19	
SJ 01990	29N	10W	20	4	1						40	12	28	
SJ 02548	29N	10W	20	4	4						12	2	10	
SJ 02547	29N	10W	20	4	4						12	2	10	
SJ 03535	29N	10W	21	3	2	3					15			
SJ 03455	29N	10W	21	3	3	1					20	17	3	
SJ 03456	29N	10W	21	3	3	2					20	17	3	
SJ 03441	29N	10W	21	4	3	3					40	30	10	
SJ 03470	29N	10W	21	4	3	4					20	7	13	



[illegible]

Record Count: 49

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

Township: 29N Range: 09W Section:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

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

POD / Surface Data Report      Avg Depth to Water Report      Water Column Report

Clear Form iWATERS Menu Help

## POD / SURFACE DATA REPORT 12/20/2008

(28-7 NSOC ZH=2 MH=1 are 930127rb)

DB File Nbr	Use	Divergence	Owner	POD Number	UTM are in Meters)				Start Date	Finish Date	Depth Well
					UTM Zone	Easting	Northing	Y			
80 31033	DOH	0	RICK SCHOFIELD	80 31033	29N	09M 08	1	13	252818	4069734	
80 00079	IRR	0	HAMMOND DITCH	80 00079	29N	09M 08	1	13	249182	4070274	08/09/1962
80 00339	IRR	0	HAMMOND-CREAMER DITCH COMPANY	80 00339	29N	09M 08	1	13	249182	4070274	08/09/1962
80 01746	IRR	0	U.S. DEPT. OF THE INTERIOR	80 01746	29N	09M 08	1	13	249182	4070274	
80 01962	IRR	0	ALCARIO H. LOBATO	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559	IRR	0	TURLEY (MANZANARES) DITCH	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1	IRR	44.244	A.D. LOBATO	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 10	IRR	36.3	EMILIO CHAVEZ	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 10A	IRR	0	IRVIN PABLO	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 11	IRR	52.83	CHARLES R. GOTT, ET UX	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 11A	IRR	0	BLANCO MUTUAL DOMESTIC CO-OP	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 11B	IRR	0.35	JANIS TAPOVA	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 13	IRR	105.4	BENJAMIN GUTIERREZ	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 13	IRR	2.3	CATHOLIC CHURCH	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1A	IRR	1.857	SAN JUAN COUNTY	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1B	IRR	3.088	JANE M. YEARRA	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1BA	IRR	1.287	FRANK A. EDMONSON, III	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1C	IRR	1.43	LEON L. SUDAH	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1D	IRR	4.575	KIRK PALMER	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1E	IRR	1.5	MILLIAM C. BAILEY	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1F	IRR	1.258	WALTER G. BUSH	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1FA	IRR	1.487	HAROLD B. BUSH	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1G	IRR	1.716	PATRICIA D. JOHNSTON	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1H	IRR	2.288	DONNIE H. MCCLURE	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1I	IRR	1.4	MILLIAM MORRIS	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1J	IRR	1.43	OWA LEE SHINDLECKER	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1K	IRR	1.43	JOHN A. SHINDLECKER	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1L	IRR	1.43	RICHARD & BONNIE SIMMONS TRUST	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1M	IRR	1.3	DALE PLUMB	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1N	IRR	2.86	PICK M. ROBERTS	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1O	IRR	1.2	EMILY G. NORMAN	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1P	IRR	1.4	ROBERT D. BARACKER	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1Q	IRR	1.716	CARL T. ARCHER	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1R	IRR	1.144	CARL F. AVERILL	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 1S	IRR	1.43	BILLY W. SULLIVAN	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 2	IRR	131	JOSE E. CHAVEZ	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 3	IRR	45.7	H.L. KENDRICK	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 4	IRR	36.6	H.L. KENDRICK	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 5	IRR	13.1	TERESA CHAVEZ	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 6	IRR	28.6	BENITO ARCHULETA	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 6A	IRR	0	TRUETT C. JAMES	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 7	IRR	28.6	JOSE ARCHULETA	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 7A	IRR	0	TRUETT C. JAMES	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 8	IRR	93	GILBERTO LOBATO	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 9	IRR	61.485	A.P. LOBATO	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 9A	IRR	42.815	HAZEL BURRELL	80 02559	29N	09M 02	2	13	254780	4071649	
80 02559 9B	IRR	0	MARCIA K. ARNOLD	80 02559	29N	09M 02	2	13	254780	4071649	
80 02666	IRR	0	HARTIN-VALENCIA DITCH	80 02666	29N	09M 08	3	13	254780	4071649	
80 02666 1	IRR	17.3	ISABEL RODRIGUEZ	80 02666	29N	09M 08	3	13	249202	4069481	
80 02666 2	IRR	49.2	JOHN MARTIN	80 02666	29N	09M 08	3	13	249202	4069481	
80 02666 3	IRR	53.6	PASQUAL VALENCIA	80 02666	29N	09M 08	3	13	249202	4069481	
80 06527	IRR	266.1	ANW SULLIVAN	80 02675 A	29N	09M 08	1	13	249182	4070274	08/09/1962
80 00093	DOH	3	ROBERT & PATRICIA BACA	80 00093	29N	09M 08	4	13	248836	4067397	08/29/1975

18	ROBERT L. PATRICIA BACA	18	00094	Shallow	29N 09W 18 4 4 2	248836	4067592	03/31/1974	15
560	ERNEST D. VALENCIA	18	00095	Shallow	29N 09W 18 4 2	248743	4067896	05/31/1975	15
0	ERNEST D. VALENCIA	18	00096	Shallow	29N 09W 18 4 2	248743	4067896	05/31/1975	16
0	ERNEST D. VALENCIA	18	00097	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	16
0	ERNEST D. VALENCIA	18	00098	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	16
0	ERNEST D. VALENCIA	18	00100	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	16
0	ERNEST D. VALENCIA	18	00101	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	16
13	ROBERT BAIRD	18	00102	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	16
0	FILIBERTO VALENCIA	18	00106	Shallow	29N 09W 18 2 4	248749	4068299	05/31/1975	20
0	CHRIS S. GURULE	18	00436	Shallow	29N 09W 18 1 1	249101	4069380	09/26/1977	150
0	GILBERT A. MONTAÑA	18	00584	Shallow	29N 09W 18 1 1	249101	4069380	03/14/1978	143
0	ELDON D. RODRIGUEZ	18	00715	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MAURICE E. RICHARDS	18	00752	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
115.912	BLANCO HUMCA	18	00785	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	LAURENCE D. MILLER	18	00785	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ELINEOR ROBERTS	18	01067	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JESS DEAN	18	01093	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	U. J. LOBATO	18	01113	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	RICHARD VALENCIA	18	01176	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	G. R. WILLIAMS	18	01183	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	R. L. HOSTETLER	18	01203	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JAMES W. VESTAL	18	01210	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MAURICE RICHARDS	18	01232	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	WILLIAM R. CALDWELL	18	01321	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JAMES C. HALL	18	01392	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	TONY VALLEJOS	18	01430	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	FOROTHEE DURY	18	01460	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	DON & LISA MORTON	18	01460	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	RICHARD M. SIMMONS	18	01579	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	U. J. LOBATO	18	01611	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	LEE H. VALENCIA	18	01772	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ELDON D. RODRIGUEZ	18	01813	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ORLANDO A. RODRIGUEZ	18	01829	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ORLANDO A. RODRIGUEZ	18	01839	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	LOUGLAS P. SHORT	18	01830	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	C. B. BOWEN	18	01867	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	EMILY NORAN	18	01874	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ODIS STIKES	18	01983	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ROBERT WILEY	18	02039	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	IRVIN PABLO	18	02103	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MICHAEL A. HARRIS	18	02104	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	EVA JO KYLE	18	02108	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ISAAC LOBATO	18	02155	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	CHRIS GURULE	18	02279	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JACK L. MOORE	18	02284	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	STEVE SHOUSE	18	02285	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	DALE PLUMIE	18	02303	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JOHN R. & JANICE I. ECKLEY	18	02324	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MAGALENA C. DURAN	18	02346	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	OLIVER & ONA SHINDLEDECKER	18	02347	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
4	TURLEY MONCA	18	02369	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	TURLEY MONCA	18	02376	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	HAROLD B. BUSH	18	02469	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	WALTER G. BUSH	18	02470	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	STONAH A. BERGAUER	18	02478	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	DONALD E. HARRY	18	02492	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MIKE AND COSETTE CLARK	18	02534	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	DAN L. & HELEN L. TAYLOR	18	02567	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ROBERT G. OLSEN	18	02600	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	LYNN DOHNER	18	02671	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	GARY DEUEL	18	02677	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ERROL WOODBURY	18	02822	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	KENNETH W. JOHNER	18	02883	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ERNEST D. VALENCIA	18	02910	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	RONALD REHEN	18	02946	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	RICHARD H. SIMMONS	18	03003	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	LEONARD J. LOPEZ	18	03044	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	ROBERT BARACKER	18	03060	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	BILLY HANGUIN	18	03092	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	PAUL A. GLOVER	18	03118	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MARIO ULIBARRI	18	03127	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	RACHEL A. WARGO	18	03138	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	HOLLY BOHNO	18	03182	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	MARCIA HAGEE	18	03185	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143
0	JOHN BECKSTEDT	18	03200	Shallow	29N 09W 18 3 3	249101	4069380	03/14/1978	143

SJ 03253	DOM	3	BILLY SULLIVAN	Shallow	29N	09W	02	1	3	2	254078	4071351	04/09/2003	04/09/2003	16
SJ 03300	DOM	3	ALLEH AOKINS	Shallow	29N	09W	03	2	2	2	253670	4071780	11/25/2002	11/25/2002	21
SJ 03362	DOM	3	CHARLES WHITE	Shallow	29N	09W	03	2	2	4	253670	4071580	11/28/2003	12/28/2003	38
SJ 03389	DOM	3	ERIC HIRCOCK	Shallow	29N	09W	03	2	4	2	253670	4071580	08/08/2005	08/08/2005	21
SJ 03396	DOM	3	LEONARD J. LOPEZ	Shallow	29N	09W	07	4	2	2	248860	4069194	07/21/2003	07/21/2003	20
SJ 03428	DOM	3	ROCKY DE HERRERA	Shallow	29N	09W	18	2	2	4	254065	4071758	10/17/2003	10/17/2003	10
SJ 03430	DOM	3	SHARON DOUGLAS	Shallow	29N	09W	18	2	2	1	248854	4068596	03/08/2004	03/08/2004	21
SJ 03466	DOM	3	LONNIE TRUJILLO	Shallow	29N	09W	04	2	1	3	248654	4068736	03/08/2004	03/08/2004	21
SJ 03490	STK	0	JAMES CLARK	Shallow	29N	09W	04	2	1	3	251464	4071674	05/28/2004	05/31/2004	40
SJ 03491	DOM	0	MARY WILLIAMS	Shallow	29N	09W	04	1	1	3	250658	4071702	02/10/2005	02/10/2005	42
SJ 03530	DOM	0	JOHN DOESLER	Shallow	29N	09W	04	1	1	3	250658	4071702	02/10/2005	02/10/2005	42
SJ 03531	STK	0	JOHN DOESLER	Shallow	29N	09W	04	1	1	1	251079	4071482	09/20/2005	09/20/2005	30
SJ 03534	DOM	3	JACKIE VALENCIA	Shallow	29N	09W	04	1	1	3	251079	4071482	05/10/2005	05/10/2005	41
SJ 03536	DOM	3	MILLIAM HOLCOHB	Shallow	29N	09W	07	4	2	2	248860	4069194	05/10/2005	05/10/2005	19
SJ 03566	DOM	0	CARLOTA GURULE	Shallow	29N	09W	04	1	3	4	250876	4071297	04/22/2005	04/22/2005	30
SJ 03589	DOM	3	DANA AVERILL	Shallow	29N	09W	05	4	1	1	249075	4071132	05/25/2005	05/25/2005	42
SJ 03608	DOM	3	AUDETTE F. GROSS	Shallow	29N	09W	02	2	2	1	255088	4071745	05/25/2005	05/25/2005	27
SJ 03632	DOM	3	ANITA MARTINEZ	Shallow	29N	09W	02	2	2	2	254472	4071753	01/23/2006	01/23/2006	18
SJ 03642	DOM	3	DAVID ARNOLD	Shallow	29N	09W	03	2	2	2	254472	4071753	10/14/2008	10/15/2008	290
SJ 03647	DOM	3	JULIE CLUFF	Shallow	29N	09W	02	1	3	2	253670	4071498	10/14/2008	10/15/2008	60
SJ 03692	DOM	3	LINDA A. CARMICHAEL	Shallow	29N	09W	02	1	3	2	254292	4071149	01/01/1931	07/02/1938	
SJ 03707	DOM	1	HARILYN WHITE	Shallow	29N	09W	02	1	3	2	253670	4071151	01/01/1931	07/02/1938	
SJ 03851	DOM	3	BILLY JACK MURRAY	Shallow	29N	09W	03	2	2	4	253670	4071151	08/09/1962	08/09/1962	
SJ 03856	DOM	3	MICHAEL GUSTAFSON	Shallow	29N	09W	09	1	2	2	251324	4070310	08/09/1962	08/09/1962	
SP 00924	NOT	0	JAY TURLEY	Shallow	29N	09W	03	4	2	2	253670	4070310	08/09/1962	08/09/1962	
SP 02121	IRR	0	RICHARD H. HANNA	Shallow	29N	09W	02	2	1	2	253670	4071649	08/09/1962	08/09/1962	
SP 02121 A	IRR	0	PASCUAL VALENCIA	Shallow	29N	09W	02	2	1	2	253670	4071649	08/09/1962	08/09/1962	
SP 02373	IRR	0	PASCUAL VALENCIA	Shallow	29N	09W	08	2	3	2	250001	4069841	07/02/1938	07/02/1938	
SP 02475 A	IRR	515.7	HAMMOND INCORPORATED	Shallow	29N	09W	08	1	1	3	250001	4069841	07/02/1938	07/02/1938	
SP 02593 B	HWY	4.92	HAMMOND CONSERVANCY DISTRICT	Shallow	29N	09W	08	1	1	3	249182	4070274	08/09/1962	08/09/1962	
SP 02593 A	IRR	3405.6	SAN JUAN COUNTY	Shallow	29N	09W	02	2	1	1	249182	4070274	08/09/1962	08/09/1962	
SP 02648	IRR	16.1	HAMMOND CONSERVANCY DISTRICT	Shallow	29N	09W	08	1	1	1	249182	4070274	08/09/1962	08/09/1962	
SP 02720	IRR	16.1	SOUTHERN UNION PROCESSING CO.	Shallow	29N	09W	08	1	1	1	249182	4070274	08/09/1962	08/09/1962	
SP 02720 A	IRR	2	JOHN D. NEVES	Shallow	29N	09W	18	2	2	2	248755	4068697	08/09/1962	08/09/1962	
SP 02720 AA	IRR	2.4	ERNEST D. VALENCIA	Shallow	29N	09W	18	2	2	2	248755	4068697	08/09/1962	08/09/1962	
SP 02720 BA	IRR	4.8	ERNEST D. VALENCIA	Shallow	29N	09W	18	2	2	2	248755	4068697	08/09/1962	08/09/1962	
SP 02720 C	IRR	16.16	CHRISTINA L. BRAUN	Shallow	29N	09W	18	2	2	2	248755	4068697	08/09/1962	08/09/1962	
SP 02870	IND	23000	EL PASO NATURAL GAS COMPANY	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 02870 2	IRR	16.17	U.S. DEPT. OF THE INTERIOR	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 02870 2A	IRR	5.76	VICTOR LOBATO	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 02870 2B	IRR	23.1	SHARON E. DOUGLAS	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 02870 2C	IRR	170.64	VIRGIE BAWER	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 02870 4	IRR	50	ROCKY DEHERRERA	Shallow	29N	09W	18	1	1	1	248755	4068697	08/09/1962	08/09/1962	
SP 03024	IND	0	MILTON ARCHULETA	Shallow	29N	09W	04	3	1	1	250792	4070999	08/09/1962	08/09/1962	
SP 03185	OIL	0	SOUTHERN UNION PROCESSING CO.	Shallow	29N	09W	05	4	1	1	249976	4071033	08/09/1962	08/09/1962	
SP 03453	IND	0	SAN JUAN REFINING COMPANY	Shallow	29N	09W	08	1	1	1	249182	4070274	08/09/1962	08/09/1962	
SP 03556	OFH	0	SAN JUAN BASIN WATER HAULERS	Shallow	29N	09W	08	1	1	1	249182	4070274	08/09/1962	08/09/1962	
SP 03573	OIL	0	AL'S TANKERS, INC.	Shallow	29N	09W	18	4	2	1	248636	4057592	08/09/1962	08/09/1962	
SP 03573	OIL	0	AMOCO PRODUCTION COMPANY	Shallow	29N	09W	18	4	2	3	248642	4057595	08/09/1962	08/09/1962	
SP 03573 2	OIL	0	AMOCO PRODUCTION COMPANY	Shallow	29N	09W	18	4	2	3	251868	4071660	08/09/1962	08/09/1962	
SP 03573 2	OIL	0	AMOCO PRODUCTION COMPANY	Shallow	29N	09W	18	4	2	3	248636	4067592	08/09/1962	08/09/1962	

Record Count: 185

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

Township: 29N Range: 08W Sections:           

NAD27 X:            Y:            Zone:            Search Radius:           

County:            Basin:            Number:            Suffix:           

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

POD / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form iWATERS Menu Help

## WATER COLUMN REPORT 08/11/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column	Water (in feet)
SJ 00028	29N	08W	01	2	1	4				606	300	306	
SJ 00196	29N	08W	09	3						1624	500	1124	
SJ 00003	29N	08W	18	1						525			
SJ 00004	29N	08W	18	1						591	70	521	
SJ 03050	29N	08W	18	2	3	2				600			
SJ 00019	29N	08W	21	2						502			
SJ 00005	29N	08W	21	3						606	406	200	
SJ 00025	29N	08W	21	3						606	406	200	
SJ 00006	29N	08W	26	2									

Record Count: 9



New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 28N Range: 10W Sections: \_\_\_\_\_  
NAD27 X: \_\_\_\_\_ Y: \_\_\_\_\_ Zone: \_\_\_\_\_ Search Radius: \_\_\_\_\_  
County: \_\_\_\_\_ Basin: \_\_\_\_\_ Number: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_ ☐ Non-Domestic ☐ Domestic ☒ All

POD / Surface Data Report Avg Depth to Water Report Water Column Report  
Clear Form iWATERS Menu Help

WATER COLUMN REPORT 08/08/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth	Well	Depth	Water	(in feet)	Water	Column
------------	-----	-----	-----	---	---	---	------	---	---	-------	------	-------	-------	-----------	-------	--------

No Records found, try again

New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 28N Range: 09W Sections: \_\_\_\_\_  
NAD27 X: \_\_\_\_\_ Y: \_\_\_\_\_ Zone: \_\_\_\_\_ Search Radius: \_\_\_\_\_  
County: \_\_\_\_\_ Basin: \_\_\_\_\_ Number: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_ ☐ Non-Domestic ☒ All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form iWATERS Menu Help

WATER COLUMN REPORT 08/06/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column	Water (in feet)
SJ 03746 POD1	28N	09W	20	1	2	3				190	40	150	
SJ 00018	28N	09W	20	3	1	4				135	71	64	
SJ 02800	28N	09W	24	4	2	3				200			

Record Count: 3

New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 28N Range: 08W Sections: \_\_\_\_\_  
NAD27 X: \_\_\_\_\_ Y: \_\_\_\_\_ Zone: \_\_\_\_\_ Search Radius: \_\_\_\_\_  
County: \_\_\_\_\_ Basin: \_\_\_\_\_ Number: \_\_\_\_\_ Suffix: \_\_\_\_\_  
Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_ ☐ Non-Domestic ☒ Domestic ☐ All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form IWATERS Menu Help

WATER COLUMN REPORT 08/04/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column	Water (in feet)
SJ 02283	28N	08W	14	4	2	1				540	480	60	
SJ 00209	28N	08W	17	3	2	1				15			
SJ 00209 -AMENDED-S	28N	08W	17	4	1	1				15			
SJ 00209 S	28N	08W	17	4	1	1				15		15	
SJ 00163 S	28N	08W	18	4	4	2				1450	800	650	

Record Count: 5

New Mexico Office of the State Engineer  
POB Reports and Downloads

Township:  Range:  Section:   
NAD27 X:  Y:  Zone:  Search Radius:   
County:  Basin:  Number:  Suffix:   
Owner Name: (First)  (Last)  ☐ Non-Domestic ☐ Domestic ☒ All

POB / Surface Data Report Avg Depth to Water Report Water Column Report

Clear Form IWATERS Menu Help

POB / SURFACE DATA REPORT 12/20/2008

(quarters are 1-4Q 2-4Q 3-4Q 4-4Q)									
(quarters are biggest to smallest)									
DB File Nbr	Use	Area ft per annum	Owner	POB Number	Source	Tw	Ang	Sec	q
8J 00010	IND	48	BURLINGTON RESOURCES OIL & GAS	8J 00010	Shallow	30N	10W	24	2
8J 00024	IND	0	BURLINGTON RESOURCES OIL & GAS	8J 00024	Shallow	30N	10W	23	2
8J 00050	IND	52	BURLINGTON RESOURCES OIL & GAS	8J 00050	Shallow	30N	10W	02	1
8J 00051	NOT	0	U.S. GOVERNMENT	8J 00051	Shallow	30N	10W	23	2
8J 00197	OFH	60	BURLINGTON RESOURCES OIL & GAS	8J 00197	Artesian	30N	10W	23	2
8J 00123	DOH	3	IMAH D. MYERS	8J 00123	Shallow	30N	10W	08	4
8J 00189	DOH	3	WILLIAM C. PACE	8J 00189	Shallow	30N	10W	08	1
8J 00174	DOH	3	TED RUSSELL	8J 00174	Shallow	30N	10W	08	1
8J 01048	DOH	3	LARRY L. SANDERS	8J 01048	Shallow	30N	10W	04	2
8J 01059	DOH	3	E. SHUHANY & L. LOSH	8J 01059	Shallow	30N	10W	34	1
8J 01096	EXP	0	FIRST DIVIDE INVESTMENT CORP.	8J 01096	Shallow	30N	10W	17	2
8J 01102	DOH	3	ROBERT JACQUEZ	8J 01102	Shallow	30N	10W	08	2
8J 01116	DOH	3	JOSE N. ARELLANO	8J 01116	Shallow	30N	10W	33	2
8J 01160	DOH	3	GEORGE W. HEATH	8J 01160	Shallow	30N	10W	08	3
8J 01182	DOH	3	C. J. HITCHELL	8J 01182	Shallow	30N	10W	34	1
8J 01193	DOH	3	F. W. CORNELL	8J 01193	Shallow	30N	10W	08	2
8J 01293	DOH	3	JAMES H. & JOE A. DICKIE	8J 01293	Shallow	30N	10W	08	2
8J 01362	DOH	3	AL LARSON	8J 01362	Shallow	30N	10W	20	1
8J 01527	DOH	3	JEFFREY J. ALBERS	8J 01527	Shallow	30N	10W	08	2
8J 01651	DOH	0	CARL L. FOUST	8J 01651	Shallow	30N	10W	08	2
8J 02102	DOH	3	RUSSELL D. MOYT	8J 02102	Shallow	30N	10W	03	2
8J 02316	DOH	3	ERIC MARTIN	8J 02316	Shallow	30N	10W	08	1
8J 02648	DOH	3	HINE COUCH	8J 02648	Shallow	30N	10W	08	1
8J 02772	DOH	3	CHARLES M., JR. BAEZ	8J 02772	Shallow	30N	10W	08	2
8J 02782	DOH	3	RUSSELL L. CLELLAND II	8J 02782	Shallow	30N	10W	08	2
8J 02797	DOH	3	LOH B. & KAREN JUDG	8J 02797	Shallow	30N	10W	20	1
8J 02808	DOH	3	TRAVIS & DONIA COLTON	8J 02808	Shallow	30N	10W	20	1
8J 02898	DOH	3	FRANK E. DART	8J 02898	Shallow	30N	10W	08	2
8J 03113	DOH	3	BILL & DARCI MOSS	8J 03113	Shallow	30N	10W	08	3
8J 03230	DOH	3	TONIA GOELZ	8J 03230	Shallow	30N	10W	05	4
8J 03442	DOH	3	JOAQUIN TALAMANTE	8J 03442	Shallow	30N	10W	03	1
8J 03460	STK	3	HOUSTON LASATER	8J 03460	Shallow	30N	10W	20	1

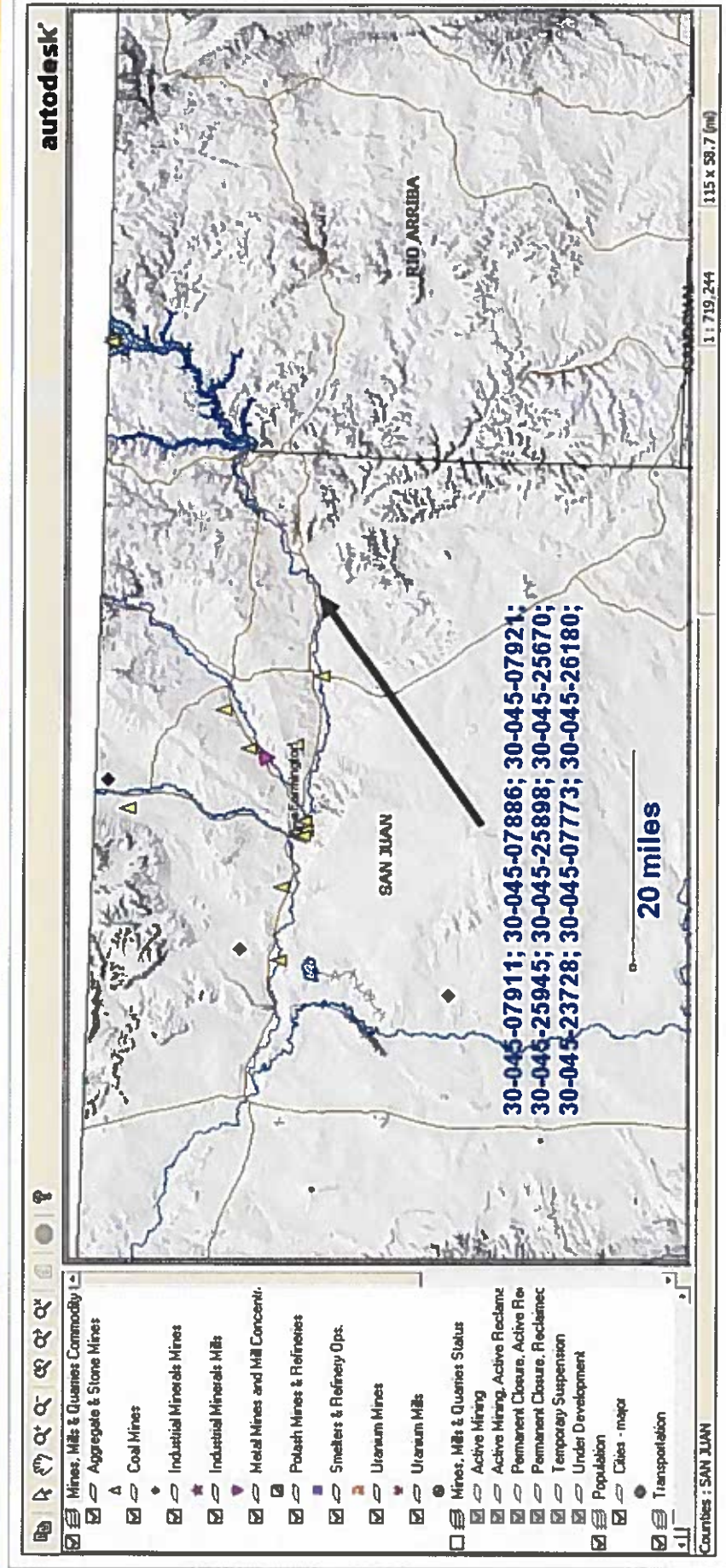
Record Count: 32







## Mines, Mills and Quarries Web Map





**XTO Energy Inc.**  
**San Juan Basin (Northwest New Mexico)**  
**General Design and Construction Plan**  
**For Below-Grade Tanks**

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade tank is located. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
3. XTO is requesting approval of an alternative fencing to be used on below-grade tank locations. Below-grade tank locations will be fenced utilizing 48" steel mesh field-fence (hogwire) with pipe railing along the top. A 6' chain link fence will be utilized around the well pad if the well site is within a city limits or ¼ mile of a permanent residence, school, hospital, institution or church. Below-grade tanks located within 1000' of a permanent residence, school, hospital, institution or church will be fenced by 6' chain link fence with at least two strands of barbed wire at the top. All gates associated with below-grade tanks will remain closed and locked when responsible individuals are not on site.
4. XTO shall construct below-grade tanks with an expanded metal covering or solid vaulted top on the top of the below-grade tank.
5. XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and ¼" bottom. (See attached drawing).
6. The below-grade tank system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom. Sand bedding (4") will be placed on top of a level foundation to ensure prevention of punctures, cracks or indentations of the liner or tank bottom.
7. XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on. Below-grade tanks will be equipped with automatic high level shut-off devices as well as manually operated shut-off valves. (See attached drawing).
8. XTO will construct and use below-grade tanks that do not have double walls. The below-grade tank sidewalls will be open for visual inspection for leaks. The sidewalls of the cellar will be constructed with 2" X 12" pine sidewalls and 4" X 4" pine brace posts. The below-grade tank

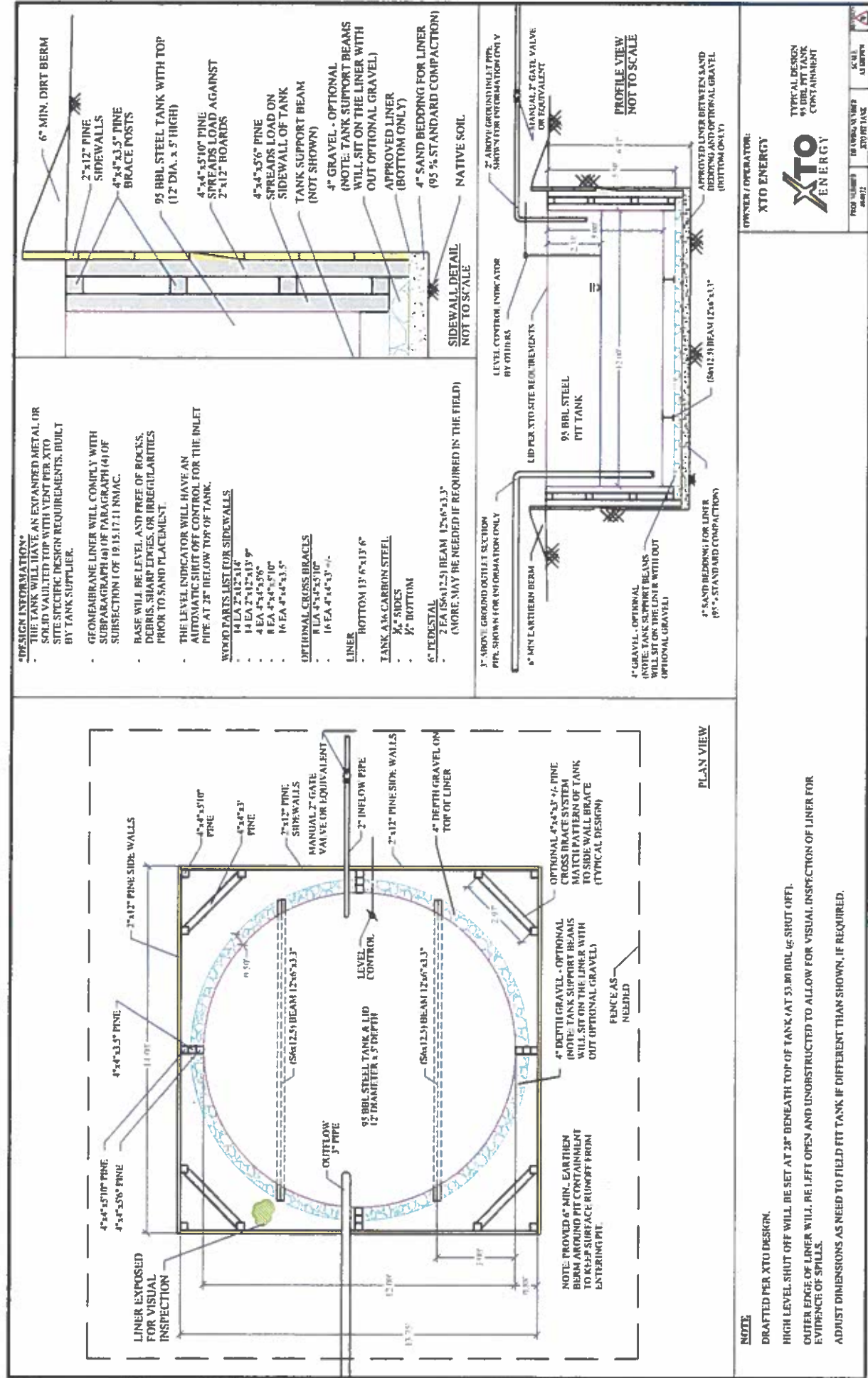


XTO Energy Inc.  
San Juan Basin (Northwest New Mexico)  
General Design and Construction Plan  
For Below-Grade Tanks  
Page 2

bottom will be elevated a minimum of 6" above the underlying ground surface and the below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected. (See attached drawing).

9. XTO will equip below-grade tanks designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows. (See attached drawing).
10. XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. The geomembrane liner shall have a hydraulic conductivity no greater than  $1 \times 10^{-9}$  cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidics and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
11. The general specifications for design and construction are attached.





**XTO Energy Inc.  
San Juan Basin (Northwest New Mexico)  
General Maintenance and Operating Plan  
For Below-Grade Tanks**

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will operate and maintain below-grade tanks to contain liquids and solids, maintain the integrity of the liner and secondary containment system, prevent contamination of fresh water and protect public health and the environment. Fluid levels will be monitored weekly and high levels will be removed as necessary. Monthly inspections will be conducted to monitor integrity of below-grade tank systems and below-grade tanks will be equipped with automatic high-level shut-off devices.
2. XTO will not allow below-grade tanks to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the below-grade tank. Below-grade tanks will be equipped with automatic high-level shut-off control devices as well as manually operated shut-off valves. See attached drawing for vault design and placement of diversion berms and shut-off devices.
3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of below-grade tanks in order to prevent significant accumulation of oil.
4. XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template),
  - Well Name
  - API #
  - Sec., Twn., Rng.
  - XTO Inspector's name
  - Inspection date and time
  - Visible tears in liner
  - Visible signs of tank overflow
  - Collection of surface run on
  - Visible layer of oil
  - Visible signs of tank leak
  - Estimated freeboard
5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
6. XTO will not discharge into or store any hazardous waste in any below-grade tank.
7. If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,

XTO Energy Inc.  
San Juan Basin (Northwest New Mexico)  
General Maintenance and Operating Plan  
For Below-Grade Tanks  
Page 2

notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the below-grade tank. If an existing below-grade tank does not meet current requirements of Paragraphs 1-4 of Subsection I of 19.15.17.11 NMAC the tank will be modified or retrofitted to comply. If compliance can not be achieved XTO will implement the approved closure plan.





**XTO Energy Inc.**  
**San Juan Basin (Northwest New Mexico)**  
**General Closure Plan**  
**For Below-Grade Tanks**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

**General Plan**

1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
2. XTO will close a below-grade tank 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 retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:
  - Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B
  - Soil contaminated by exempt petroleum hydrocarbons
  - Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes
  - Basin Disposal Permit No. NM01-005
  - Produced water
5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be

XTO Energy Inc.  
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analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. XTO will notify the division of its results on form C-141.

8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
9. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
10. Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally.  
 The notification will include the following:
  - i. Operator's name
  - ii. Well Name and API Number
  - iii. Location by Unit Letter, Section, Township, and Range

The surface owner shall also be notified prior to the implementation of any closure operations of below-grade tanks as per the approved closure plan using certified mail, return receipt requested.

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

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14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
- i. Proof of closure notice to division and surface owner;
  - ii. Details on capping and covering, where applicable;
  - iii. Inspection reports;
  - iv. Confirmation sampling analytical results;
  - v. Disposal facility name(s) and permit number(s);
  - vi. Soil backfilling and cover installation;
  - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
  - viii. Photo documentation of the site reclamation.

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**District III**

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**District IV**

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

QUESTIONS

Action 98045

**QUESTIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 98045
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

**QUESTIONS**

<b>Facility and Ground Water</b>	
<i>Please answer as many of these questions as possible in this group. More information will help us identify the appropriate associations in the system.</i>	
Facility or Site Name	GERK GAS COM 1
Facility ID (##), if known	Not answered.
Facility Type	Below Grade Tank - (BGT)
Well Name, include well number	GERK GAS COM 1
Well API, if associated with a well	30-045-07911
Pit / Tank Type	Not answered.
Pit / Tank Name or Identifier	Not answered.
Pit / Tank Opened Date, if known	Not answered.
Pit / Tank Dimensions, Length (ft)	Not answered.
Pit / Tank Dimensions, Width or Diameter (ft)	Not answered.
Pit / Tank Dimensions, Depth (ft)	Not answered.
Ground Water Depth (ft)	Not answered.
Ground Water Impact	Not answered.
Ground Water Quality (TDS)	Not answered.

**Below-Grade Tank**

Subsection I of 19.15.17.11 NMAC

Volume / Capacity (bbls)	95
Type of Fluid	Produced Water
Pit / Tank Construction Material	Steel
Secondary containment with leak detection	Not answered.
Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Not answered.
Visible sidewalls and liner	Not answered.
Visible sidewalls only	Not answered.
Tank installed prior to June 18, 2008	True
Other, Visible Notation. Please specify	Not answered.
Liner Thickness (mil)	Not answered.
HDPE (Liner Type)	Not answered.
PVC (Liner Type)	Not answered.
Other, Liner Type. Please specify (Variance Required)	Not answered.



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QUESTIONS, Page 2

Action 98045

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:	372171
	Action Number:	98045
	Action Type:	[C-144] Legacy Below Grade Tank Plan (C-144LB)

**QUESTIONS**

<b>Fencing</b>	
<i>Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)</i>	
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, institution or church)</i>	Not answered.
Four foot height, four strands of barbed wire evenly spaced between one and four feet	Not answered.
Alternate, Fencing. Please specify (Variance Required)	4' steel mesh

<b>Netting</b>	
<i>Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)</i>	
Screen	Not answered.
Netting	Not answered.
Other, Netting. Please specify (Variance May Be Needed)	expanded metal or solid vaulted top

<b>Signs</b>	
<i>Subsection C of 19.15.17.11 NMAC (If there are multiple operators at a site, each operator must have their own sign in compliance with Subsection C of 19.15.17.11 NMAC.)</i>	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	Not answered.
Signed in compliance with 19.15.16.8 NMAC	True

<b>Variances and Exceptions</b>	
<i>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</i>	
<b>Please check a box if one or more of the following is requested, if not leave blank:</b>	
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	Not answered.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	Not answered.

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QUESTIONS, Page 3

Action 98045

**QUESTIONS (continued)**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 98045
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

**QUESTIONS**

<b>Siting Criteria (regarding permitting)</b> 19.15.17.10 NMAC
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**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.**

<b>Siting Criteria, General Siting</b>	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank	Not answered.
NM Office of the State Engineer - iWATERS database search	Not answered.
USGS	Not answered.
Data obtained from nearby wells	Not answered.

<b>Siting Criteria, Below Grade Tanks</b>	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	No

<b>Proposed Closure Method</b>	
Below-grade Tank	Below Grade Tank - (BGT)
Waste Excavation and Removal	Not answered.
Alternate Closure Method. Please specify (Variance Required)	Not answered.

<b>Operator Application Certification</b>	
Registered / Signature Date	01/12/2009

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ACKNOWLEDGMENTS  
  
Action 98045

ACKNOWLEDGMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 98045
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I have received prior approval from the OCD to submit documentation of a legacy below-grade tank on behalf of my operator.
<input checked="" type="checkbox"/>	I hereby certify that the information submitted with this documentation is true, accurate and complete to the best of my knowledge and belief.

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CONDITIONS  
  
Action 98045

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 98045
	Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

CONDITIONS

Created By	Condition	Condition Date
jburdine	None	8/10/2022