

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, 2008

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

8910
Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

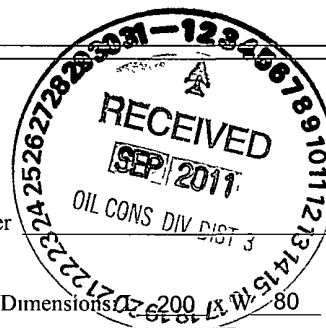
Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted 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: Breach D #685G
API Number 30-039-31014 OCD Permit Number _____
U/L or Qtr/Qtr J Section 11 Township 26N Range 6W County: Rio Arriba
Center of Proposed Design: Latitude 36 49930 Longitude 107.43439 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 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume. _____ bbl Dimensions 200 x 80 x D 8-12



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) **To be used during completion operations**
☐ 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: _____ bbl Type of fluid. _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
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 _____

7.

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)

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. Fencing- Hogwire
- ☐ 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 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 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 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 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 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 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 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 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 type="checkbox"/> No
Within a 100-year floodplain - FEMA map	<input type="checkbox"/> Yes <input 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 H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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 identify 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 Envirotech Disposal Facility Permit Number NM01-0011
 Disposal Facility Name: IEI Disposal Facility Permit Number. NM01-0010B

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 - NM Office of the State Engineer - iWATERS database search; USGS, Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <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) - 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 - Visual inspection (certification) of the proposed site; Aerial photo, Satellite image	<input type="checkbox"/> Yes <input checked="" 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. - NM Office of the State Engineer - iWATERS database, 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

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): Malia Villers Title: Permitting Tech.

Signature: Malia Villers Date: 9-2-11

e-mail address: malia_villers@xtoenergy.com Telephone: (505) 333-3100

20.

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

OCD Representative Signature: Jonah D. Kelly Approval Date: 9/07/2011

Title: Compliance Officer OCD Permit Number: _____

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 identify 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: _____

Pit Permit Siting Criteria Information Sheet

Well Name	Breach D #685 G	
Date	August 30, 2011	
Prepared By	K. Wilson	

API #	N/A
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Depth to groundwater:	Greater than 50 feet
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Distance to closest continuously flowing watercourse:	26 Miles NE to San Juan River
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	815 ft SE of a 1st order tributary of Dogie Canyon. 2,000 ft NW of Albert Lake

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

Domestic fresh water well or spring within 500':	NO
Any other fresh water well or spring within 1000':	NO

Within incorporated municipal boundaries:	NO
Within defined municipal fresh water well field:	NO

Wetland within 500':	NO, 1085 ft NW of wetlands associated with Albert Lake
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Within unstable area:	NO
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Within 100 year flood plain:	NO
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Additional Notes:

USPLSS:	T26N, R6W, 11J
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Lat/Long:	36.4993, -107.43439
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Geologic formation:	San Jose Formation
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Soil Type:	Entisols
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Annual Precipitation:	8.21" - Farmington; 10.41" - Otis; 8.71" - Bloomfield
Precipitation Notes:	No significant precipitation events on record.

Attached Documents:	Hydrogeologic Report Figure 1 Topographical Map Figure 2. Aerial Mpa Figure 3: FEMA Flood Zone Map XTO Water Well Data
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Mining Activity:	None Identified in the vicinity
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DISTRICT II
1301 W Grand Ave., Artesia, NM 88210

OIL CONSERVATION DIVISION

1220 South St. Francis Dr
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd , Aztec, NM 87410

DISTRICT IV
1220 South St Francis Dr., Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name BREECH D		⁶ Well Number 685G
⁷ OGRID No	⁸ Operator Name XTO ENERGY INC		⁹ Elevation 6577'

¹⁰ Surface Location

UL or lot no	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
J	11	26-N	6-W		1760	SOUTH	1865	EAST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature

Date _____

Printed Name _____

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge & belief

OCTOBER 27, 2008

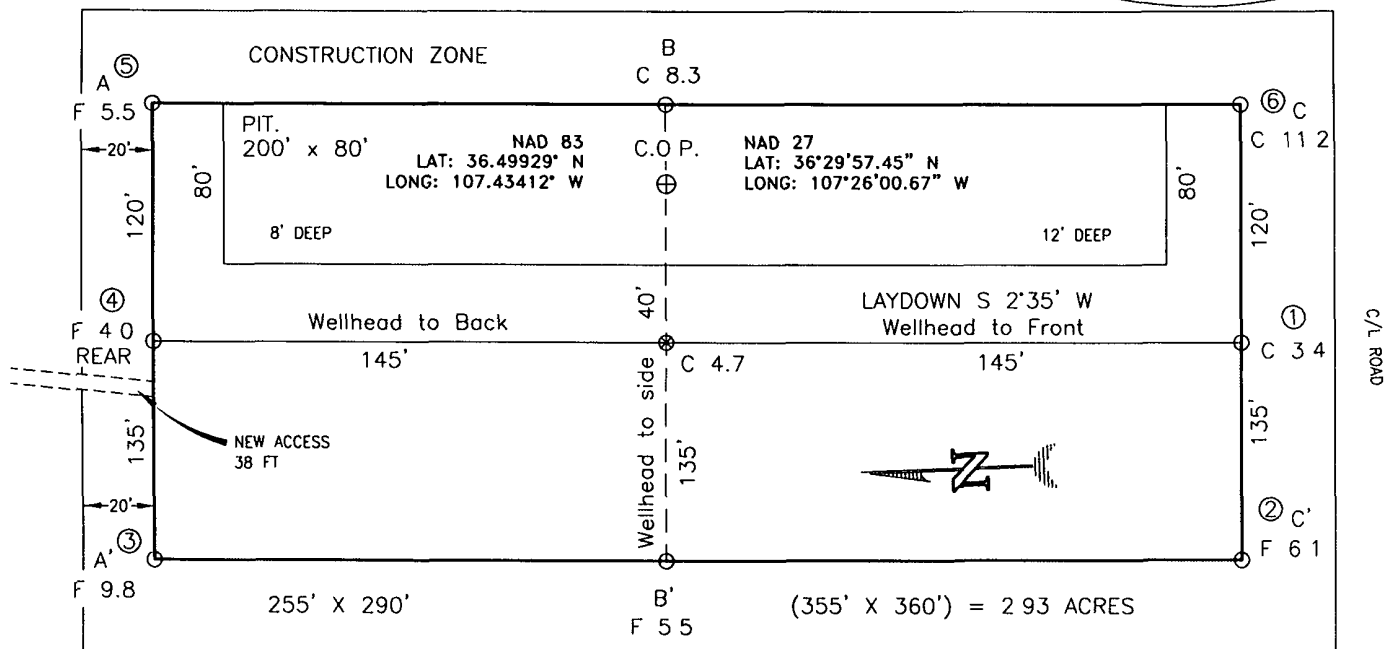
Date of Survey _____

Signature and Seal of Professional Surveyor

Certificate Number

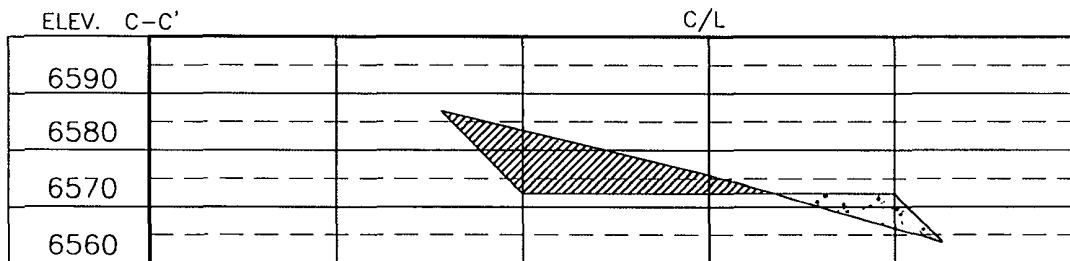
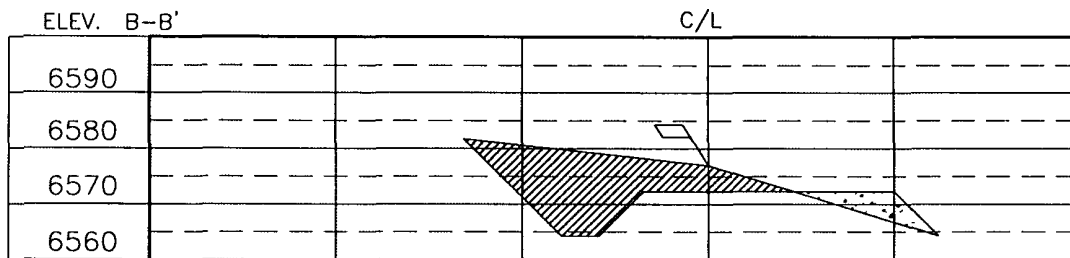
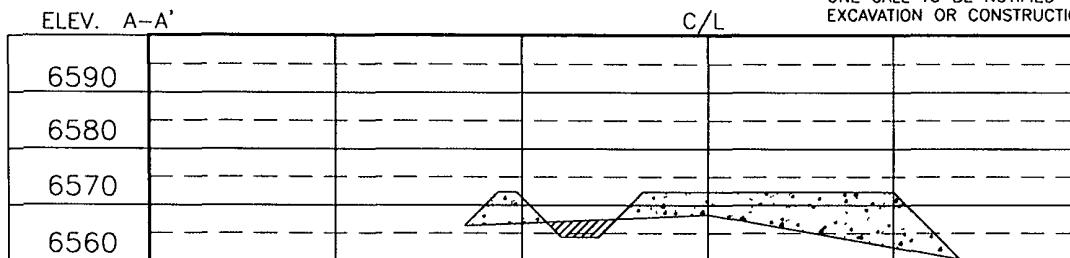
XTO ENERGY INC.
 BREECH D No. 685G, 1760 FSL 1865 FEL
 SECTION 11, T26N, R6W, N.M.P.M., RIO ARRIBA COUNTY, N.M.
 GROUND ELEVATION: 6577' DATE: OCTOBER 27, 2008

NAD 83
 LAT. = 36.49930° N
 LONG. = 107.43439° W
 NAD 27
 LAT. = 36°29'57.45" N
 LONG. = 107°26'01.65" W



RESERVE PIT DIKE TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE)
 BLOW PIT OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT

NOTE: DAGGETT ENTERPRISES, INC IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION



NOTE CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P O Box 510 Farmington, NM 87499
 Phone (505) 326-1772 • Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894

DATE: 11/26/08
 DRAWN BY: G.V.
 ROW# CR1063



A Subsidiary of ExxonMobil

Breech D #685 G

Hydrogeologic Report for Siting Criteria

General Geologic 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 the surficial geology. The proposed pit location will be situated on the undulating surface of Ensenada Mesa near the head of Ice Canyon (figure 1). The predominant geologic formation is the San Jose Formation, which underlines surface soils or is exposed as sandstone outcrops. The San Jose Formation occurs in both New Mexico and Colorado and its outcrop forms the land surface over much of the eastern half of the central basin.

Cretaceous and Tertiary sandstones and Quaternary alluvial deposits serve as the primary aquifers in the San Juan Basin. In the proposed area, the San Juan Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and shale. Groundwater is associated with alluvial and fluvial sandstone aquifers. Porous sandstones form the principal aquifers, while relatively impermeable shales and mudstones form confining units between the aquifers. The aquifers are found between 0 and 2700 feet. The reported or measured discharge from numerous water wells completed in the formation range from 0.15 to 61 gallons per minute (gpm) of production, with a median of 5 gpm. Most of the wells provide water for livestock and domestic purposes.

The formation is suitable for recharge from precipitation due to the sandy nature of overlying soils, which are highly permeable and absorbent. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the formation by the San Juan River and its main tributaries all tend to reduce the effective recharge of the formation. Most recharge occurs during the inter months during snowmelt periods within the upper elevations (Western Regional Climate Center, www.wrcc.dri.edu).

The predominate vegetation is sagebrush and grasses with a more restricted pinon-juniper association.

Site-Specific Hydrology

Ensenada Mesa lies to the north of Largo Canyon. It consists of shales and sandstones of the San Jose Formation. The site in question is located near the center of Ensenada Mesa at an elevation of approximately 6,580 feet above sea level (Figures 1 and 2). The immediate surrounding area consists of shallow washed and canyons that have eroded through the sandstone into underlying shale units. The washes drain to Dogie Canyon, a major tributary of Largo Canyon.



A Subsidiary of ExxonMobil

Depth to groundwater is estimated to be greater than 50 feet. This estimation is based on data from existing XTO water wells within the near vicinity, 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.

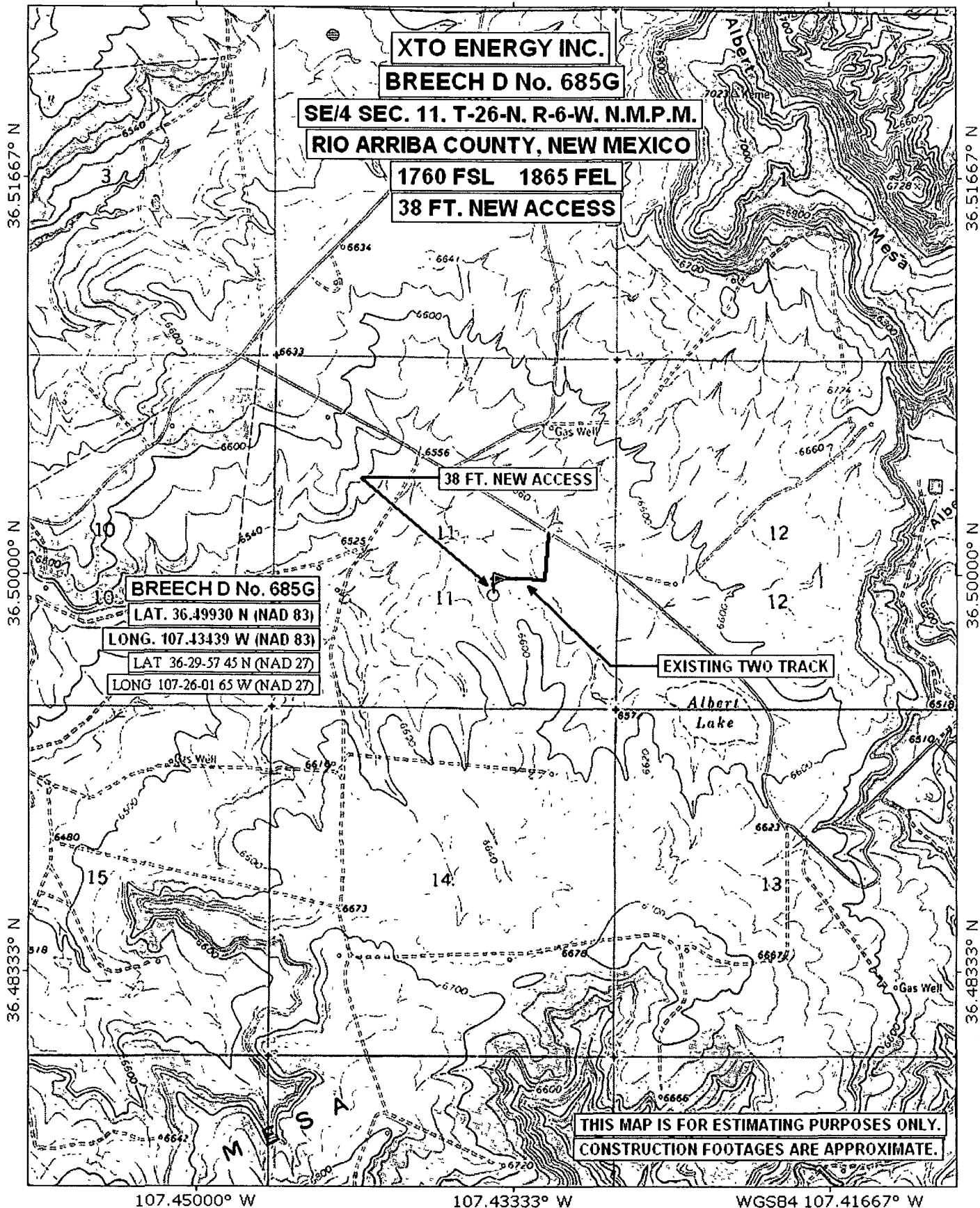
Ground water data available from water well logs for wells within the near vicinity is attached. The Calkins # 1 Water Well is located within an approximate 2 mile radius of the proposed pit, water logs for this well show depth to ground water at 265 feet to 303 feet (attached XTO Water Well Data). There are 7 additional fresh water wells within an approximate 5 to 6 mile radius. The information included within the attached XTO Water Well Data will show that all 8 wells within a 5-7 mile proximity of the proposed pit location do not have the presence of ground water above 50 feet.

The proposed pit location is approximately 1,100 feet northwest of the Albert Lake and an adjacent small pond. The distance between the proposed pit location and the water bodies plus the topography features surrounding area suggests that ground water would not be present at 50 feet.

References:

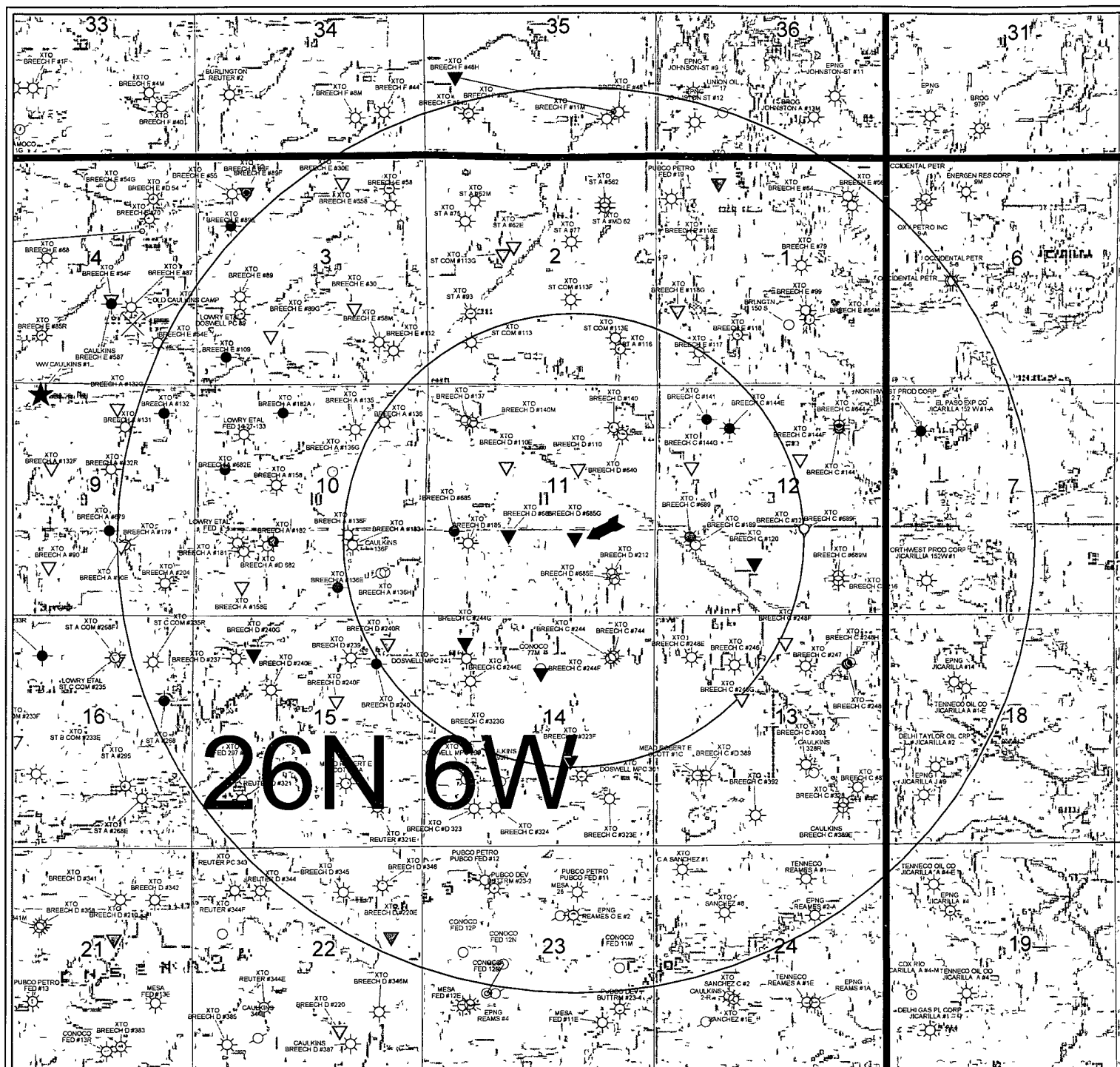
USDA-NRCS, Web Soil Survey: (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>)

USDA-NRCS, Plants Data Base: (<http://plants.usda.gov/java/>)



TN MN
10%

0 1000 FEET 0 500 1000 METERS
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XTO ENERGY INC.

Breech D #685G

SEC 11, T26N, R6W

W \Petra\Virginia\Rio Arriba\Maps

San_Juan_with Radius OVL



FEET

POSTED WELL DATA

Operator
Well Label



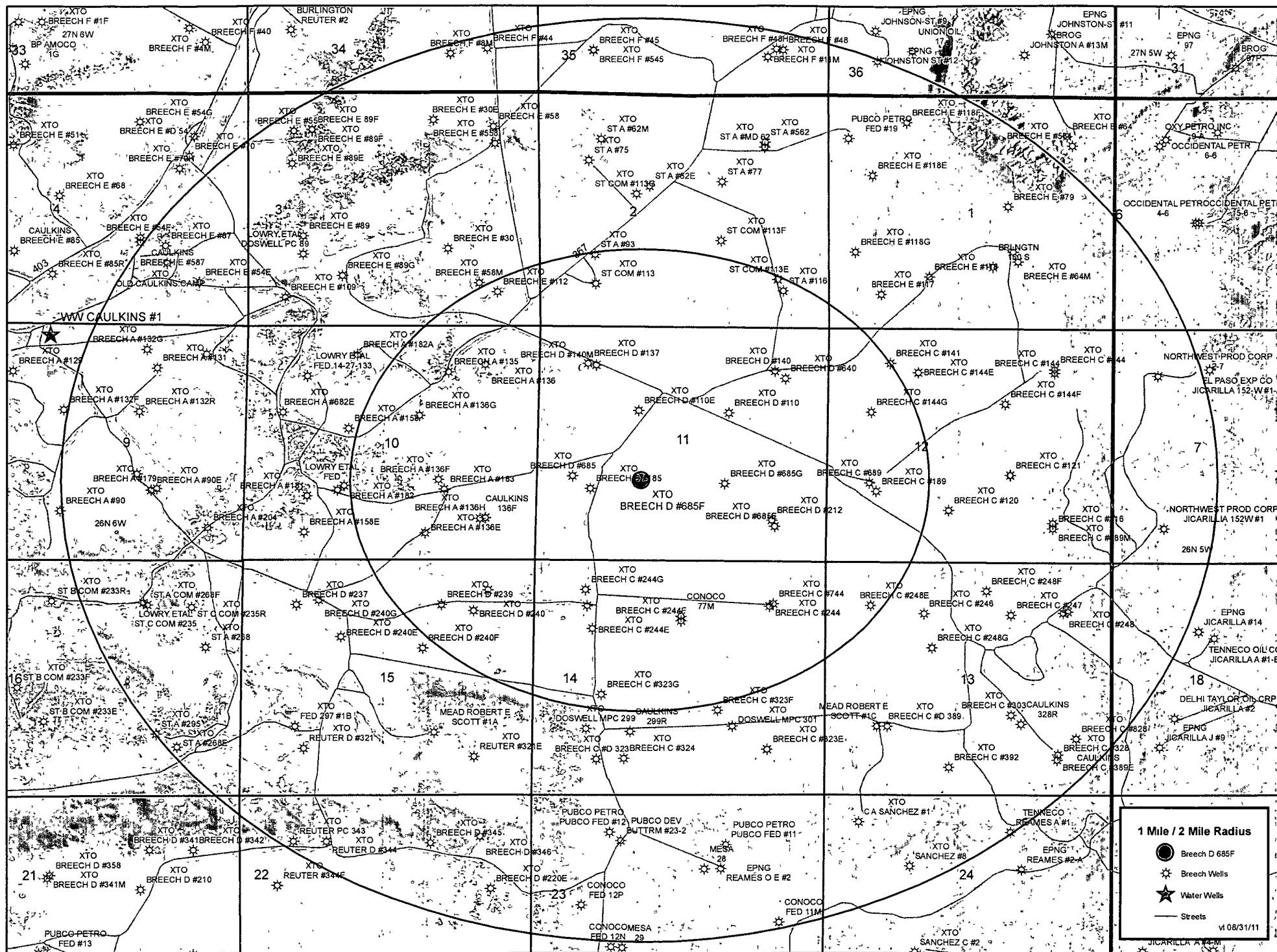
SYMBOL HIGHLIGHT

WELL SYMBOLS

-  13XTO Location
-  12XTO Location
-  11XTO Location
-  Fresh Water Well
-  Gas Well
-  Oil & Gas Well
-  Plugged and Abandoned
-  Abandoned Well
-  Oil Well
-  LAND MARK

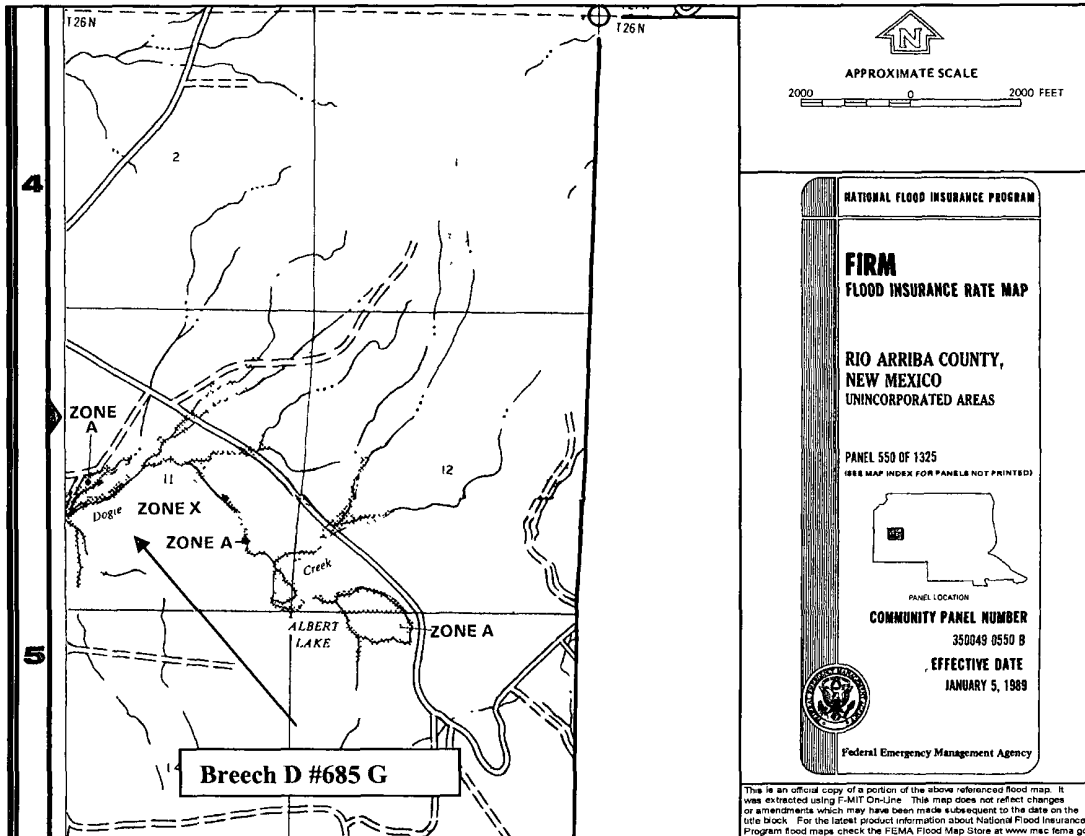
By vl

August 31 2011



Breach D #685 G
Section 11, T26N, R6W

FEMA Flood Zone Map



Fresh water wells

6-18-92.

well

No.	Location	Year	Depth	Present Condition
1	SE 1/4 NE 1/4 4-26-6	70	?	P & R
2	NE 1/4 NE 1/4 16-26-6	State Land 204	311	Plugged w/ sand & dirt.
3	SW 1/4 SW 1/4 4-26-6	321 321	?	Rancher Pumping Equipment in use.
4	NW 1/4 SW 1/4 4-26-6	68E	373	unknown - never Pumped after Sept 1952
5	NW 1/4 SW 1/4 9-26-6	Private Surface 204 in	348	assume in Good shape.
6	1918 F/S 118 F/W 11-26-6	685	345	- - - -
7	925 F/S 1122 F/E 4-26-6	54E	402	Plugged & abandoned.
8 camp	45 F/S 9' F/E 4-26-6	camp water well	406	In use

Charles Verguen

> 120' water column

120' water column

Test, you may

Date 11-30-884 or
ferred From _____to Location water well # 3

Description of Pipe _____ Size _____ Weight _____ Grade _____ Thread _____

Kind _____ Couplings _____ Class _____

JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS
1			26			51			76		
2	<u>32</u>	<u>80</u>	27			52			77		
3	<u>66</u>	<u>05</u>	28			53			78		
4	<u>66</u>	<u>10</u>	29			54			79		
#3 5	<u>WPA</u>	<u>99</u>	30			55			80		
6	<u>66</u>	<u>01</u>	31			56			81		
7			32			57			82		
8	<u>296</u>	<u>95</u>	33			58			83		
9			34			59			84		
10			35			60			85		
11			36			61			86		
12			37			62			87		
13			38			63			88		
14			39			64			89		
15			40			65			90		
16			41			66			91		
17			42			67			92		
18			43			68			93		
19			44			69			94		
20			45			70			95		
21			46			71			96		
22			47			72			97		
23			48			73			98		
24			49			74			99		
25			50			75			00		
TOTALS											

REMARKS _____

TOTAL

Purchase Order or
Material Transfer _____

Tallied By _____

Form 9-330

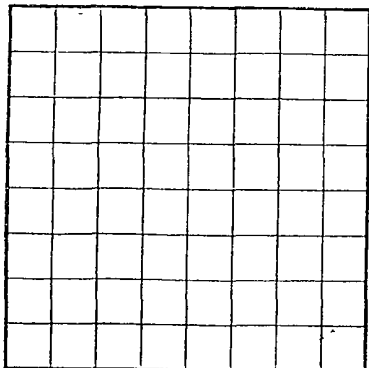
Budi
Appr.Bu No 42-R355 2
pires 12-31-52

NM-03553

U.S. LAND OFFICE

SERIAL NUMBER

LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER WELL

LOG OF OIL OR GAS WELL

Company Lowry et al Operating Account Address Room 213, 616 East Central Albuquerque, New Mexico
Lessor or Tract Federal-Doswell 129 Field Wildcat State New Mexico
Water Well No. 3 Sec. 11 T. 26N R. 6W Meridian _____ County Rio Arriba
Location 1600 ft. {N} of S Line and 120 ft. {E} of W Line of Elevation Not known
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records

Signed [Signature]
Date October 12, 1951 Title General Superintendent

The summary on this page is for the condition of the well at above date.

Commenced drilling September 10, 1951 Finished drilling September 20, 1951

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from _____ to _____ No. 4, from _____ to _____
No. 2, from _____ to _____ No. 5, from _____ to _____
No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from 215 to 230 No. 3, from _____ to _____
No. 2, from 320 to 342 No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
5 1/2"	20	10	350	350			320	340	drilling or cementing
HISTORY OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7"	345'	None			

SHOOTING RECORD

HISTORY OF OIL OR GAS WITHIN

DATES

Rock pressure, lbs per sq in _____

EMPLOYEES

_____, Driller, _____, Driller

007 FORMATION RECORD

~~(OVER)~~

LOG REPORT

8-29

1951

CONTRACTORS

For

In

Out

Shot Point, No.

Lease

County

FROM	TO	FORMATION	CASING	SIZE	FEET
0	20	SOIL			
20	40	Gray Shale			
40	85	Sand Rock			
85	95	Blue Shale			
95	120	Sand Rock			
120	145	Blue Shale			
145	180	Sand Rock			
180	185	Water Sand			
185	230	Sandy Shale (Water)			
230	270	Blue " "			
270	355	Sand Rock (Water)			
355	373	Blue Shale			
			20.5'S	7"OD	374.5'

REMARKS:

Signed

Don Smithhart
Clint Odum Jr.

Driller

Helper

Helper

LOG REPORT

8-29

1951

CONTRACTORS

For

In

Out

9/8/51

Shot Point, No.

Lease

County

FROM	TO	FORMATION	CASING	SIZE	FEET
0	20	SOIL			
20	40	Gray Shale			
40	85	Sand Rock			
85	95	Blue Shale			
95	120	Sand Rock			
120	145	Blue Shale			
145	180	Sand Rock			
180	185	Water Sand			
185	230	Sandy Shale (Water)			
230	270	Blue " "			
270	355	Sand Rock (Water)			
355	373	Blue Shale			
			20.5'S	7"OD	374.5'

REMARKS

Water #4

Signed

Don Smithhart
Clint Odum Jr.

Drill

Help

Help

Form 9-731a
(Feb 1951)Budget Bureau 42-R358.2
Approval expires 12-31-52.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYLand Office SF
Lease No. 079035-A
Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 13, 1952

Water
Well No. 5 is located 1955 ft. from AX line and 173 ft. from EX line of sec. 9

<u>NW SW Section 9</u> (1/4 Sec. and Sec. No.)	<u>26N</u> (Twp)	<u>6W</u> (Range)	<u>N.M.P.M.</u> (Meridian)
<u>Wildcat</u> (Field)	<u>Rio Arriba</u> (County or Subdivision)	<u>New Mexico</u> (State or Territory)	

The elevation of the derrick floor above sea level is _____ ft. Not Known

Spudded 9-25-51

DETAILS OF WORK

Completed 10-2-51

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

0	28	Surface Sand
28	39	Sand Rock
39	60	Blue Shale
60	105	Sandy Shale
105	175	Sand Rock
175	181	Water Sand
181	266	Blue Sandy Shale
266	311	Gray Sandy Shale
311	338	Blue Shale
338	340	Sandy Shale
340	348	Water Sand

7" OD perforated casing ran.
No cement.

Estimated to Produce 30 GPM

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Lowry et al Operating AccountAddress Room 215616 East Central AvenueAlbuquerque, New MexicoBy E. R. Richardson
Title Business Manager

(SUBMIT IN TRIPLICATE)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYLand Office RM
Lease No. 03553
Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	X
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 13, 19 **52**Water Well No. 6 is located 1918 ft. from N line and 118 ft. from E line of sec. 11

NW 1/4 Section 11 26N 6E N.M.E.M.
 (Twp) (Range) (Meridian)
Wilcox Rio Arriba New Mexico
 (Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is _____ ft. **Not known**

Spudded 9/10/51

DETAILS OF WORK

Completed 9/20/51

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudlogging jobs, cementing points, and all other important proposed work)

Surface	12	Surface soil	230	255	Sand Rock
12	28	Gray Shale	255	320	Blue Shale
28	33	Sand Rock	320	342	Water Sand
33	55	Brown Shale	342	345	Blue Shale
55	67	Sand Rock			
67	84	Brown Shale			
84	138	Blue Shale			
138	160	Gray Shale			
160	165	Sand & Rock			
165	170	Sandy Shale			
170	184	Brown Shale			
184	215	Sandy Shale			
215	230	Water Sand			

Ran 7" OD perforated casing.
No cement.

Estimated to produce 30 GPM

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Lowry et al Operating Account
 Address Room 215
616 East Central Avenue
Albuquerque, New Mexico
 By E. R. Richardson
 Title Business Manager

Form 9-331a
(March 1942)

Budget Bureau No. 42-R358.
Approval expires 11-30-46.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office _____
Lease No. _____
Unit _____ S F
M-03552

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	Complete water well

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

1 4/6/51 19

SW 1 Sec 15 is located 1550 ft. from line and 1065 ft. from line of sec. 15

26 n 6 W 15

(1/4 Sec. and Sec. No.) Rio Arriba (Range) (Mile) (State or Territory)

(Field) (County or Subdivision) New Mexico

The elevation of the derrick floor above sea level is _____ ft.

DETAILS OF WORK

TD 305' Water sand shale. Ran 305' 7" casing with 15' Bottom 2 ft. hard blue perforations.

State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cement- points, and all other important proposed work)

Doswell & Peterson
I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

719 First National Bank Bldg
Dallas, Texas
Address _____

By *Carlson Moore*
C. Wilson Moore
Supt Title

INTER OFFICE CORRESPONDENCE

6

To Mr. C. Wilson Moore

Date 6/5 1951

Subject Water Well Fed R L 1

0-8 - top soil
8-26 yellow sand
26-50 - blue sand
50-100 - gray shale
100-240 - Blue shale & sand
240-260 gray water sand
260-303 Blue shale
303-305 Gray water sand
305-307 Hard blue shale

305' - 7" sm/s - bottom,
15' - perforated.

W.M.

INTER OFFICE CORRESPONDENCE

To C. Wilson Moore

Date May June 1, 1951

Subject _____

#1 well

Please send us a copy of the USGS on the Federal "B" Lease Water Well.
Also the record of the total depth and depth of water producing formation, and casing record of this well.

Thank you,

Louis D. Gibbons
Louis D. Gibbons

ms

FORM NO. 968-R (ORDER BY NUMBER)
MANLY OFFICE SUPPLY CO - PRINTER-OKLA C

Date 6-5-60

Purchased or
Transferred From _____

To Location Water Well #1-A

Description of Pipe _____ Size 7" + 7/8" Weight _____ Grade _____ Thread _____

Kind _____ Couplings _____ Class _____

JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS	JOINT NO	FT	HNDRTHS
1	29	90	7	58	23	51	bottom end open				
2	31	00	(24)	26	40	2	is 26.40# and 7' in spiral weld				
3	20	53	7	80	26	40	5	55	78		
4	32	08	29			54			79		
5	32	18	30			55			80		
6	31	08	31			56			81		
7	21	20	32			57			82		
8	32	60	33			58			83		
9	32	75	34			59			84		
10	32	60	35			60			85		
11			36			61			86		
12			37			62			87		
13			38			63			88		
14			39			64			89		
15			40			65			90		
16			41			66			91	305	92
17			42			67			92	7	00
18			43			68			93	298	92
19			44			69			94		
20			45			70			95		
21			46			71			96		
22			47			72			97		
23			48			73			98		
24			49			74			99		
25			50			75			00		
TOTALS	305	92									
TOTAL											

REMARKS _____

Purchase Order or
Material Transfer _____

Tallied By JS

FORM NO 969 R (ORDER BY NUMBER)
MANLY OFFICE SUPPLY CO - PRINTER-OKLA. CH

Date 6-7-60

Purchased or
Transferred From _____

To Location Run in Water Well #1A

Description of Pipe Galvanized Size 4 1/2" Weight 11 Grade A/B Thread P/V

Kind _____ Couplings _____ Class _____

JOINT NO	FT.	HNDRTHS	JOINT NO	FT.	HNDRTHS	JOINT NO	FT.	HNDRTHS	JOINT NO	FT.	HNDRTHS
1	20	33	26			51			76		
2	20	22	27			52			77		
3	20	30	28			53			78		
4	20	22	29			54			79	302	40
5	20	31	30			55			80	12	67
6	19	77	31			56			81	289	73
7	21	90	32			57			82		
8	21	06	33			58			83		
9	21	86	34			59			84		
10	20	12	35			60			85		
11	21	05	36			61			86		
12	21	14	37			62			87		
13	21	25	38			63			88		
14	13	40	39			64			89		
15	12	67	40			65			90		
16	5	90	41			66			91		
17		90	42			67			92		
18			43			68			93		
19			44			69			94		
20			45			70			95		
21			46			71			96		
22			47			72			97		
23			48			73			98		
24			49			74			99		
25			50			75			00		
TOTALS	302	40									

REMARKS

used for tubing

TOTAL

Purchase Order or
Material Transfer _____

Tallied By _____

#1 well

Total 54 Pipe
Left 55 Over
Ant. Run

Right water well

LOG REPORT

19

COAN AND ANDERSON
CONTRACTORSFor *Doswell # 2*In *11-29-50*# *water well*

Out

Shot Point, No. *21**Shelby County*

County

FROM	TO	FORMATION	CASING	SIZE	FEET
0	5	Sand			
5	45	Red SANDY Shale			
45	255	Shale and SAND STONE (HARD)			
255	265	Water sand			
265	290	Shale and sand stone			
290	302	Block sand			
302	311	Grey shale			

REMARKS:

Signed

E. M. Donald
Will Herring

Driller

Helper

Helper

Form 9-331a
(Feb 1951)Budget Bureau 42-R358 2.
Approval expires 12-31-52.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYLand Office NMLease No. 03551

Unit _____

well #7

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	X
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 13, 19 52

Water Well No. 7 is located 925 ft. from N line and 1122 ft. from E line of sec. 4SE SE Section 4 26N 6W N.M.P.M.
(1/4 Sec and Sec. No.) (Twp.) (Range) (Meridian)Wildcat Rio Arriba New Mexico
(Field) (County or Subdivision) (State or Territory)The elevation of the derrick floor above sea level is _____ ft. Not Known

Spudded 10-31-51

DETAILS OF WORK

Completed 11-10-51

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Sand	0	39	Sandy Shale	333	402
Shale	39	80			
Sand Rock	80	95			
Sandy Shale	95	136			
Sand Rock	136	164			
Sandy Shale	164	178			
Shale	178	210			
Sand Rock	210	238			
Shale	238	240			
Sand Rock	240	291			
Sandy Shale	291	303			
Sand	303	314			
Shale	314	333			

Ran 7" OD perforated casing.
No cement.

Estimated to produce 38 GPM

Sandy Shale that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Lowry et al Operating AccountAddress Room 215616 East Central AvenueAlbuquerque, New Mexico

By

E. E. Richardson

Title

Business Manager

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office _____

Lease No. 13551Unit _____ *well #8*

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	X
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 13, 1952

Water
Well No. 8 is located 45 ft. from [N] line and 9 ft. from [E] line of sec. 4

SE SE Section 4 26N 6W N.M.P.M.
(1/4 Sec. and Sec No) (Twp) (Range) (Meridian)
Wildcat Rio Arriba New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is _____ ft. **Not Known**

Spudded 11-15-51

DETAILS OF WORK

Completed 11-29-51

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Sand	0	20	Shale	400	406
Clay	20	39			
Shale	39	78			
Sand Rock	78	105			
Sandy Shale	105	135			
Water Sand	135	158			
Sand Rock	158	236			
Shale	236	245			
Water Sand	245	260			
Shale	260	272			
Sand Rock	272	320			
Sand	320	340			
Sand Rock	340	400			

Ran 7" OD perforated casing.
No cement.

Estimated to produce 32 GPM

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Lowry et al Operating AccountAddress Room 215616 East Central AvenueAlbuquerque, New MexicoBy E. R. Richardson
E. R. Richardson
Title Business Manager



Malia Villers /FAR/CTOC
09/02/2011 08:13 AM

To mark_kelly@blm.gov
cc
bcc
Subject Breech D #685G

RE: Breech D #685G
Sec. 11 (J), T26N-R6W, Rio Arriba County

Dear Mr. Kelly,

This submittal is pursuant to Rule 19.15.17.13 requiring operators to notify surface owners of on site burial of temporary pits. XTO Energy Inc. (XTO) is hereby providing written documentation of our intention to close the temporary pit associated with the aforementioned location by means of in place burial

Should you have any questions or require additional information please feel free to contact me at your earliest convenience (505) 333-3100.

Malia Villers
XTO Energy a subsidiary of ExxonMobil
Office: 505-333-3698
Cell 505-787-7700
Fax: 505-333-3284
malia_villers@xtoenergy.com

XTO Energy Inc.
San Juan Basin
Pit Design and Construction Plan

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

General Plan

- 1 XTO will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2 Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- 3 XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the well site prior to construction of the temporary pit. 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.
- 4 XTO shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
- 5 XTO shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
- 6 XTO shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.
- 7 Pit walls will be walked down by a crawler type tractor following construction.
- 8 All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- 9 Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- 10 All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
- 11 XTO will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used when possible. XTO will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. XTO will minimize the number of field seams in corners and irregularly shaped areas.
- ~~12 The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.~~
- 13 The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some areas.
- 14 The volume of the pit shall not exceed 10 acre-feet, including freeboard.

XTO Energy Inc.
San Juan Basin
Maintenance and Operating Plan

In accordance with Rule 19 15 17 12 NMAC the following information describes the operation and maintenance of temporary pits on XTO Energy Inc. locations. This is XTO's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

General Plan

- 1 XTO will operate and maintain a temporary pit to contain liquids and solids and prevent
- 2 contamination of fresh water and protect public health and environment
- 3 XTO will conserve drilling fluids by transmitting liquids to pits ahead of the rigs whenever
- 4 possible. All drilling fluids will be disposed at Basin Disposal Inc, Permit # NM-01-005
- 5 XTO will not discharge or store any hazardous waste in any temporary pit.
- 6 If any pit liner integrity is compromised, or if any penetration of the liner occurs above the liquid
- 7 surface, then XTO shall notify the Aztec Division office by phone or email within 48 hours of the
- 8 discovery and repair the damage or replace the liner.
- 9 If a leak develops below the liquid level, XTO shall remove all liquids above the damaged liner
- 10 within 48 hours and repair the damage or replace the liner. XTO shall notify the Aztec Division
- 11 office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. XTO
- 12 shall notify the Aztec Division office as required pursuant to Subsection B of 19 15 3 116
- 13 NMAC within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition,
- 14 immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of
- 15 19 15 3 116 NMAC shall be reported to the division's Environmental Bureau Chief
- 16 The liner shall be protected from any fluid force or mechanical damage through the use of mud
- 17 pits slides, or a manifold system
- 18 The pit shall be protected from run-off by constructing and maintaining diversion ditches around
- 19 the location or around the perimeter of the pit in some cases
- 20 XTO shall immediately remove any visible layer of oil from the surface of the temporary pit after
- 21 cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and
- 22 remove oil from pits surface. An oil absorbent boom will be stored on-site until closure of pit
- 23 Only fluids generated during the drilling or workover process will be discharged into a temporary
- 24 pit
- 25 XTO will maintain the temporary pit free of miscellaneous solid waste or debris
- 26 During drilling or workover operations, XTO will inspect the temporary pit at least once daily to
- 27 ensure compliance with this plan. Inspections will be logged and logs maintained for review
- 28 XTO will file this log with the Aztec Division office upon closure of the pit
- 29 After drilling or workover operations, XTO will inspect the temporary pit weekly so long as
- 30 liquids remain in the temporary pit. A log of the inspections will be stored at XTO's office
- 31 electronically and will be filed with the Aztec Division office upon closure of the pit
- 32 XTO shall maintain at least two feet of freeboard for a temporary pit
- 33 XTO shall remove all free liquids from a temporary pit within 30 days from the date the operator
- 34 releases the drilling or workover rig.

XTO Energy Inc. San Juan Basin Closure Plan

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

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

General Plan:

1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycled, reused, or reclaimed in a manner that the Aztec Division office approves.
2. The preferred method of closure for all temporary pits will be on-site, in-place burial, assuming that all criteria listed in sub-section (B) of 19.15.17.13 are met.
3. The surface owner shall be notified of XTO proposed closure plan using a means that provides proof of notice i.e., Certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring XTO will ensure that temporary pits are closed, re-contoured, and reseeded.
5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
 - i. Operators Name
 - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number
6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "ALL" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve appropriate solidification. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul. Disposal facility to be utilized should this method be required will be Envirotech, Permit No. NM01-0011 or IEI, Permit No. NM01-0010B.

Components	Test Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500 or background

- 9 Upon completion of solidification and testing, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 10 Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, ponding prevention, and erosion prevention. 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.
- 11 Notification will be sent to OCD when the reclaimed area is seeded.
- 12 XTO shall 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 of 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.
- 13 The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time all wells on the pad are abandoned. The operator's information will include the following: Operator's Name, Lease Name, Well Name and Number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

XTO Energy Inc.
San Juan Basin
Closed-Loop System Design and Construction Plan

In accordance with Rule 19 15 17 11 NMAC the following information describes the design and construction of closed-loop systems on XTO Energy Inc (XTO) locations. This is XTO's standard procedure for all closed-loop systems. A separate plan will be submitted for any closed-loop system which does not conform to this plan.

General Plan

Our closed-loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will entail an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be of sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1 Fencing is not required for an above ground closed-loop system
- 2 It will be signed in compliance with 19 15 3 103 NMAC

XTO Energy Inc.
San Juan Basin
Closed-Loop Systems Maintenance and Operating Plan

In accordance with Rule 19 15 17 11 NMAC the following information describes the operation and maintenance of closed-loop systems on XTO Energy Inc (XTO) locations. This is XTO's standard procedure for all closed-loop systems. A separate plan will be submitted for any closed-loop system which does not conform to this plan.

General Plan

The closed-loop tank will be operated and maintained, to contain liquids and solids, to aid in the prevention of contamination of fresh water sources, in order to protect public health and the environment. To attain the goal the following steps will be followed:

- 1 The liquids will be vacuumed out and disposed of at the Basin Disposal, Inc. facility (Permit Number NM01-005). An alternative if available for liquids disposal, will be to move the liquids forward to a XTO temporary pit constructed in accordance with all specifications in NMAC Rule 19 15 17 for a well yet to be drilled. All specifications, limitations, and rules within the New Mexico Administrative Code regulating this transfer of liquids will be strictly adhered to. As a third alternative, if Basin Disposal turns away the fluids because of capacity reasons, and the second transfer option is not available, XTO may elect to haul fluids to IEI (Permit Number NM01-0010B) for final disposition.
- 2 Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit Number NM01-0011) or IEI (Permit Number NM01-0010B) on a periodic basis to prevent over topping.
- 3 No hazardous waste, miscellaneous solids, waste, or debris will be discharged into, or stored in the tank. Only fluids or cutting used or generated by rig operations will be placed or stored in the tank.
- 4 The division district office will be notified within 48 hours of the discovery of compromised integrity of the closed-loop tank. Upon discovery of the compromised tank, repairs will be enacted immediately.
- 5 All of the above operations will be inspected and a log will be signed and dated daily during rig operations.

XTO Energy Inc.
San Juan Basin
Closed-Loop System Closure Plan

In accordance with Rule 19.15.17.11 NMAC the following information describes the closure requirements of closed-loop systems on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all closed-loop systems. A separate plan will be submitted for any closed-loop system which does not conform to this plan.

General Plan

XTO will close a drying pad used for a closed-loop system within six months from the date that XTO released the drilling or workover rig. XTO will not the date of the drilling or workover rig's release on form C-105 or C-103, filed with the division, upon the well's or workover's completion.

The closed-loop tank will be closed in accordance with 19.15.17.13 NMAC. This will be done by transporting cuttings and all remaining sludges to Envirotech (Permit Number NM01-0011) or IEI (Permit Number NM01-0010B) immediately following rig operations.

All remaining liquids will be transported and disposed of at the Basin Disposal, Inc facility (Permit Number NM 01-005). As an alternative (in the event Basin Disposal refused liquids because of capacity considerations, and if proper inventory space is available for liquids transfer while meeting free board requirements), the liquids will be moved forward to a XTO temporary pit constructed in accordance with all specifications in NMAC Rule 19.15.17 for a well yet to be drilled. All specifications, limitations, and rules within the New Mexico Administrative Codes regulating this transfer of liquids will be strictly adhered to. As a third alternative, if Basin Disposal turns away the fluids because of capacity reasons, and the second transfer option is not available, XTO may elect to haul the fluids to IEI (Permit Number 01-0010B) for final disposition.

The tanks will be removed from the location as part of the rig move. At the time of well abandonment the site will be reclaimed and re-vegetated to pre-existing conditions when possible.

XTO Energy Inc.
San Juan Basin
Closed-Loop System Closure Plan

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