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.

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

Type of action: [X] 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 RCVD AUG 1 '08
Facility or well name: La Plata 4 #2 OIL CONS. DIV.
API Number: 30-045-31306 OCD Permit Number: DIST. 3
U/L or Qtr/Qtr _____ Section 4C Township 31N Range 13W County: San Juan
Center of Proposed Design: Latitude 36.933909 Longitude 108.211181 NAD: [ ]1927 [ ] 1983
Surface Owner: [ ] Federal [ ] State [X] 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.
[X] **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Steel
[ ] Secondary containment with leak detection [X] Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
[ ] Visible sidewalls and liner [ ] Visible sidewalls only [ ] Other _____
Liner type: Thickness 60 mil [X] 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	☐ Yes ☒ 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	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☒ 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	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ 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.

- [X] Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- [ ] Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- [X] Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- [X] Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- [X] Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- [X] Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 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_2S, 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 [X] Below-grade Tank [ ] Closed-loop System [ ] Alternative

Proposed Closure Method:
- [X] 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.***

- [X] Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- [X] Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- [X] Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- [X] Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- [X] Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- [X] 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. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a 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	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ 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: July 31, 2008

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: Brad Rell **Approval Date:** 8-5-08

Title: Enviro Spec **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 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:

District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
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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

Form C-102

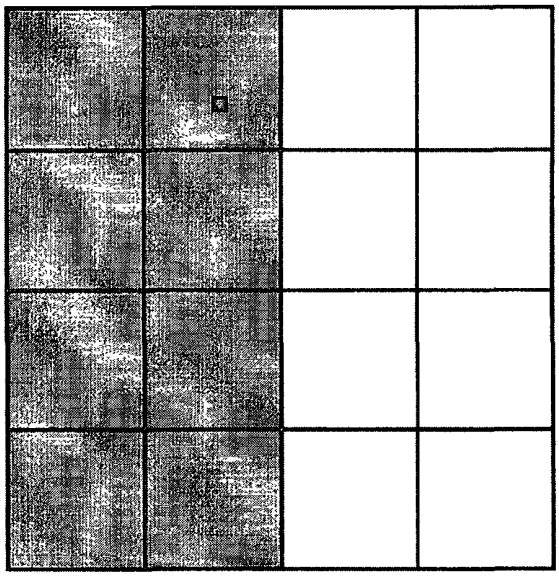
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
30-045-31306	BASIN FRUITLAND COAL (GAS)	71629
Property Code	**Property Name**	**Well No.**
15613	LA PLATA 4	002
OGRID No.	**Operator Name**	**Elevation**
22521	TEXAKOMA OIL & GAS CORP	5890

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	4	31N	13W		904	N	2053	W	San Juan

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
321.9			



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Electronically Signed By: Tom Sprinkle
Title: Drilling Manager
Date: 01/03/2003

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat 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 belief.

Surveyed By: Gerald Huddleston
Date of Survey: 12/14/2002
Certificate Number: 6844

Hydrogeological Report for La Plata 4 #2 Below Ground Tank (30-045-31306)

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 below ground tank location will be located in the northwest corner of the San Juan Basin, where the Hogback monocline ends and the topographically flatter sandstones and shales of the Nacimiento/Animas Formations are exposed. The stratigraphic section reflects the Late Cretaceous transition of shallow marine depositional environment to Tertiary terrestrial fluvial depositional environment.

Major stratigraphic units, in ascending order, are the Ojo Alamo Sandstone, the Nacimiento and Animas Formations and the San Jose Formation (Brister and Hoffman, 2002). Also, deposits of Quaternary alluvial and aeolian sands occur prominently near the surface, especially near streams and washes.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface and grades into the Animas Formation to the west. Thickness of the Nacimiento ranges from 418 to 2232 feet (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000' deep in this section of the basin (Stone et al., 1983). Groundwater within these aquifers flows toward the nearby La Plata River, which is a tributary of the San Juan River.

The prominent soil type at the proposed site is entisols, which are defined as soils that do not show any profile development. Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the La Plata River (www.emnrd.state.nm.us). These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes soils that cover the area.

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).

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

Site Specific Hydrogeology for La Plata 4 #2 Below Ground Tank (30-045-31306)

Depth to groundwater is estimated to between 50 and 100 feet. This estimation is based on data from Stone and others, 1983 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.

Local aquifers include sandstones within the Nacimiento and Animas Formations, which range from 0 to 1000 feet deep in this area (Stone et al., 1983). This depth range covers an area over 20 miles wide and depth decreases towards the margin of the San Juan Basin, where sandstones outcrop at the surface. The site in question is located on a slope approximately 5 miles away from outcropping sandstones. The slope is composed of shale and alluvium which, taken together, are expected to be at least 50 feet thick.

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. Wells are clustered near populated areas to the southwest of the site. Depth to groundwater within the wells ranges from 40 to 180 feet below ground surface. In general, wells located near the La Plata River are shallow, while wells located on the shaley slopes west of the river are deeper. A map showing the location of wells in reference to the proposed pit location is attached. Pinpoints show locations of wells and the labels for each pinpoint indicate depth to groundwater in feet. Wells with shallow groundwater are located near the La Plata River. The one exception is the well farthest south, which contains groundwater at 40' depth. Close inspection of the aerial photo and topographic map indicates this well is located within the floodplain of the La Plata River, where groundwater is expected to be shallow. The proposed below grade tank site is situation a good 50 feet higher in elevation. The proposed site elevation is 5900', while the well with shallow groundwater is 5846' in elevation (Google Earth).

Siting Criteria for La Plata 4 #2 Below Ground Tank (30-045-31306)

Depth to Groundwater
Groundwater is estimated to be between 50 and 100 feet as argued in the previous section, "Site Specific Hydrogeology".

Surface Water
The closest continuously flowing watercourse is the La Plata River, which is 1.5 miles to the east of the proposed site. Left Hand and Cunningham irrigation ditches run for half of the year and are located between the river and the proposed site. Left Hand Ditch is approximately 2200 feet away and Cunningham Ditch is approximately 5000' away. See the attached aerial photo for ditch locations. Murphy Arroyo, a dry wash, is 425 feet away from the site (see attached topographic map). No wetlands are identified through inspection of the topographic map. A FEMA floodplain map is attached, indicating the site is located in a zone that is defined as outside of the 500-year flood plain.

Private and Public Structures
An aerial photo is attached and it is clear that no residences, schools, hospitals, public institutions or churches are located within 500 feet of the site.

Private or Public Water Sources
The below grade tank will not be located near any private fresh water well or spring. No water well was found within 4500 feet of the proposed site on the iWaters database, and no freshwater spring is identified on the topographic map.

Municipal Boundaries
The well site is not located within any incorporated municipal boundaries or municipal fresh water well field.

Wetlands
No wetlands can be identified through inspection of the topographic map.

Subsurface Mines
A NM Bureau of Geology and Mineral Resources map is attached showing the location of any mines, mills or quarries that may be nearby the proposed site. There is a stone quarry approximately 2 miles north of the site. The La Plata Mine is 4.5 miles north of the site.

Site Stability
The site is not located in an unstable area, as is evident on the attached topographic map.

Floodplain
A FEMA floodplain map is attached, indicating the site is located in a zone that is defined as outside of the 500-year flood plain.

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 13W Sections: 3,5,8,9,10

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 07/18/2008

(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 (in feet)
SJ 03386	31N	13W	03	2						80	11	69
SJ 02879	31N	13W	03	2	3	2				30		
SJ 03137	31N	13W	03	2	3	3				50		
SJ 02990	31N	13W	03	2	3	4				100	22	78
SJ 01295	31N	13W	09	2	1	1				230	180	50
SJ 02977	31N	13W	09	2	1	3				325	124	201
SJ 02920	31N	13W	09	2	3	3				85		
SJ 02755	31N	13W	09	2	3	4				60	40	20
SJ 02987	31N	13W	09	4	1	3				250	87	163
SJ 03382	31N	13W	09	4	3	2				50		
SJ 02717	31N	13W	10	1	3					42	22	20
SJ 00798	31N	13W	10	2						125	65	60
SJ 01094	31N	13W	10	2						130	60	70
SJ 00089	31N	13W	10	2	1	1				80	18	62
SJ 01952	31N	13W	10	2	4					16	6	10
SJ 01944	31N	13W	10	2	4					20	4	16

SJ 02276	31N	13W	10	3		24	19	5
SJ 01945	31N	13W	10	3	3	31	16	15
SJ 00729	31N	13W	10	4	1	43	10	33
SJ 01950	31N	13W	10	4	1	21	11	10
SJ 02637	31N	13W	10	4	2 2	20	6	14

Record Count: 21

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 32N Range: 13W Sections: 32,33,34

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

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WATER COLUMN REPORT 07/18/2008

(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 (in feet)
SJ 03256	32N	13W	34	1	4	2				21	6	15
SJ 03037	32N	13W	34	1	4	3				100		
SJ 03066	32N	13W	34	2	2	2				41	28	13
SJ 01079	32N	13W	34	3	3					100	30	70
SJ 01943	32N	13W	34	4						8	3	5
SJ 02901	32N	13W	34	4	2	2				50		
SJ 03635	32N	13W	34	4	2	4				44	35	9
SJ 02577	32N	13W	34	4	4					30	15	15

Record Count: 8

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 13W Sections: 3,5,8,9,10

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

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POD / SURFACE DATA REPORT 07/18/2008

DB File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Tws	Rng	Sec	q	q	q
SD 02720	IRR	0	LEFT HAND DITCH	SD 02720		31N	13W	03	4	2	
SD 02720 1	IRR	0	THELMA NICKLES	SD 02720		31N	13W	03	4	2	
SD 02720 2	IRR	0	LLOYD L. NICKLES	SD 02720		31N	13W	03	4	2	
SD 02876	IRR	0	MCDERMOTT DITCH	SD 02876		31N	13W	03	2	2	
SD 02876 1	IRR	0	WM. HUGHES	SD 02876		31N	13W	03	2	2	
SD 02876 2	IRR	0	F.F. MCCARTY	SD 02876		31N	13W	03	2	2	
SD 02876 2A	IRR	0	STEPHEN A. MCCARTY	SD 02876		31N	13W	03	2	2	
SD 02876 3	IRR	0	FEDERAL LAND BANK	SD 02876		31N	13W	03	2	2	
SD 02876 4	IRR	0	HAMBLIN FARMS, INC.	SD 02876		31N	13W	03	2	2	
SD 02876 5	IRR	0	GUY BELL	SD 02876		31N	13W	03	2	2	
SD 02876 6	IRR	0	J.E. REECE	SD 02876		31N	13W	03	2	2	
SD 02876 7	IRR	0	A.J. NEFF	SD 02876		31N	13W	03	2	2	
SD 02876 7A	IRR	0	THELMA FAYE NICKLES	SD 02876		31N	13W	03	2	2	
SJ 00089	IRR	120	PRICE W. NELSON	SJ 00089	Shallow	31N	13W	10	2	1	1
SJ 00544	SAN	0	LA PLATA VOLUNTEER FIRE DEPT	SJ 00544		31N	13W	03	1	4	2
SJ 00729	DOM	3	LAURIE FROST	SJ 00729	Shallow	31N	13W	10	4	1	
SJ 00798	STK	3	INC. HAMBLIN FARMS	SJ 00798	Shallow	31N	13W	10	2		

SJ 00997	PUB	3	NM STATE HWY. DEPT.	SJ 00997		31N	13W	10	2	3 1
SJ 01000	PRO	3	INC. CONSOLIDATED OIL & GAS	SJ 01000		31N	13W	03	4	2 1
SJ 01001	PRO	3	INC. CONSOLIDATED OIL & GAS	SJ 01001		31N	13W	03	1	4 1
SJ 01094	DOM	3	ELBERT HAMBLIN	SJ 01094	Shallow	31N	13W	10	2	
SJ 01295	DOM	3	JOHN D. TERRY	SJ 01295	Shallow	31N	13W	09	2	1 1
SJ 01448	DOM	3	GEORGE T. WALTERS	SJ 01448		31N	13W	03	1	1 3
SJ 01799	DOM	3	CHARLOTTE B. RICHARDS	SJ 01799		31N	13W	09	4	3 3
SJ 01944	DOM	3	TERRY G. HOOD	SJ 01944	Shallow	31N	13W	10	2	4
SJ 01945	DOM	3	DEZMER R. HARRIS	SJ 01945	Shallow	31N	13W	10	3	3
SJ 01950	DOM	3	GEORGE A. PHIPPS	SJ 01950	Shallow	31N	13W	10	4	1
SJ 01952	DOM	3	STEVEN CRAIG SIEGEL	SJ 01952	Shallow	31N	13W	10	2	4
SJ 02276	DOM	3	JOSE MANTALVO	SJ 02276	Shallow	31N	13W	10	3	
SJ 02373	DOM	3	ROBERT AND SHERRIE TROBAUGH	SJ 02373		31N	13W	03	2	1
SJ 02456	DOM	3	LYNN SHINSKY	SJ 02456		31N	13W	03	2	1 2
SJ 02467	DOM	3	GEORGE TROSKY	SJ 02467		31N	13W	03	2	3
SJ 02471	DOM	3	STANLEY VOLLMERT	SJ 02471		31N	13W	03	2	4
SJ 02637	DOM	3	NOEL ROGERS	SJ 02637	Shallow	31N	13W	10	4	2 2
SJ 02717	DOM	3	SUE DECKER	SJ 02717	Shallow	31N	13W	10	1	3
SJ 02718	STK	3	JAYE E. DECKER	SJ 02718		31N	13W	09	2	4
SJ 02755	DOM	3	HOMER JACKSON	SJ 02755	Shallow	31N	13W	09	2	3 4
SJ 02879	DOM	3	MICHAEL WOFFORD	SJ 02879		31N	13W	03	2	3 2
SJ 02920	DOM	3	WILLIAM R. WALKER	SJ 02920		31N	13W	09	2	3 3
SJ 02977	DOM	3	PATRICK MONTOYA	SJ 02977	Shallow	31N	13W	09	2	1 3
SJ 02987	MUL	3	ROY LEE MOREHEAD, JR.	SJ 02987	Shallow	31N	13W	09	4	1 3
SJ 02990	DOM	3	CORY A. KNOTE	SJ 02990	Shallow	31N	13W	03	2	3 4
SJ 03137	STK	3	DON BRUMBAUGH	SJ 03137		31N	13W	03	2	3 3
SJ 03382	STK	3	BEN HAZLEWOOD	SJ 03382		31N	13W	09	4	3 2
SJ 03386	DOM	3	GRETTA BECAY	SJ 03386	Shallow	31N	13W	03	2	
SP 01303	IRR	5.5	HARRISON H. BROWN	SP 01303		31N	13W	10	4	1 2
SP 03453	IND	0	SAN JUAN BASIN WATER HAULERS	SP 03453 LP1		31N	13W	03	2	4 3
SP 03873	OIL	0	AMOCO PRODUCTION COMPANY	SP 03873 21		31N	13W	03	2	4 3

Record Count: 48

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 32N Range: 13W Sections: 32,33,34

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

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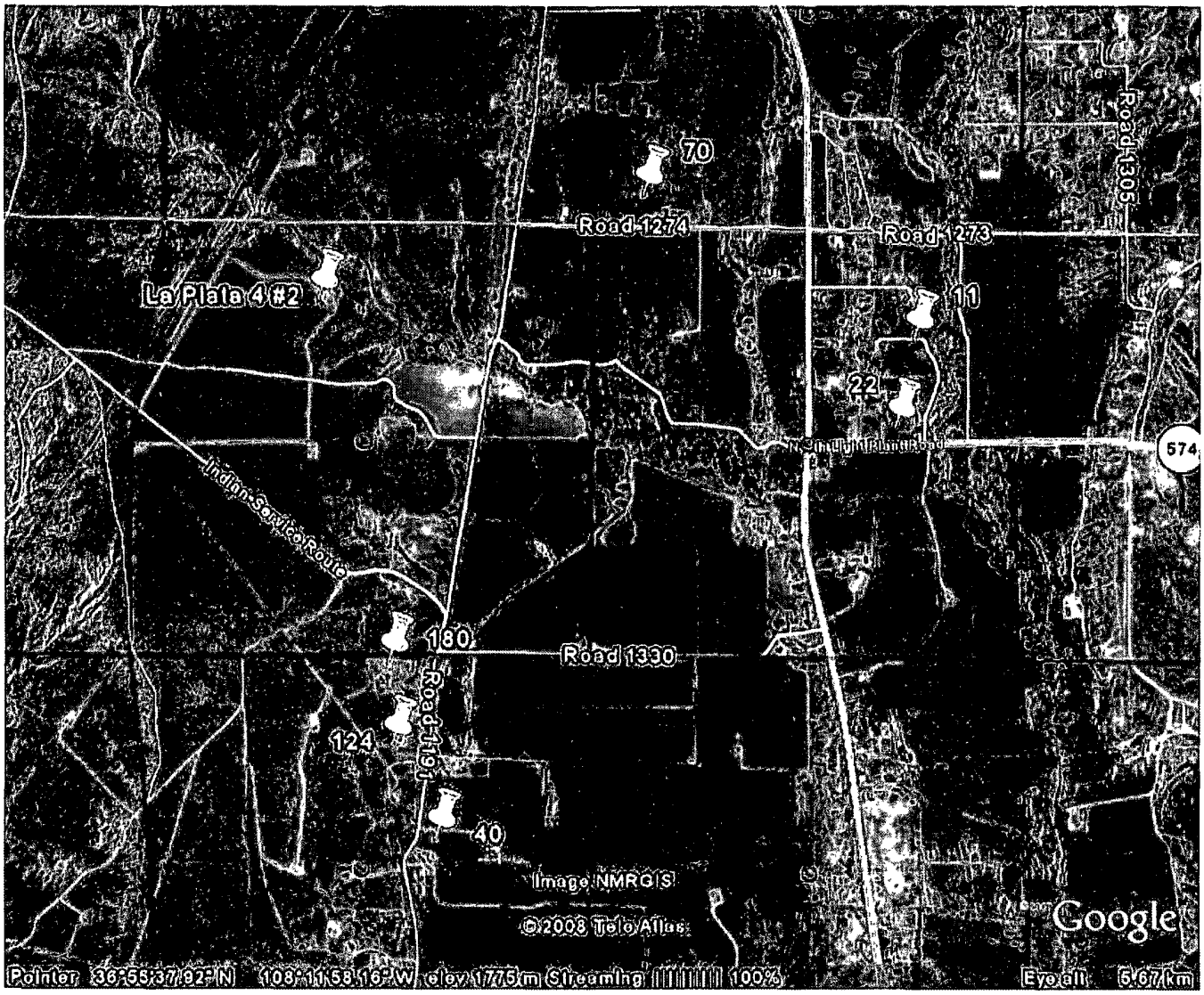
POD / SURFACE DATA REPORT 07/18/2008

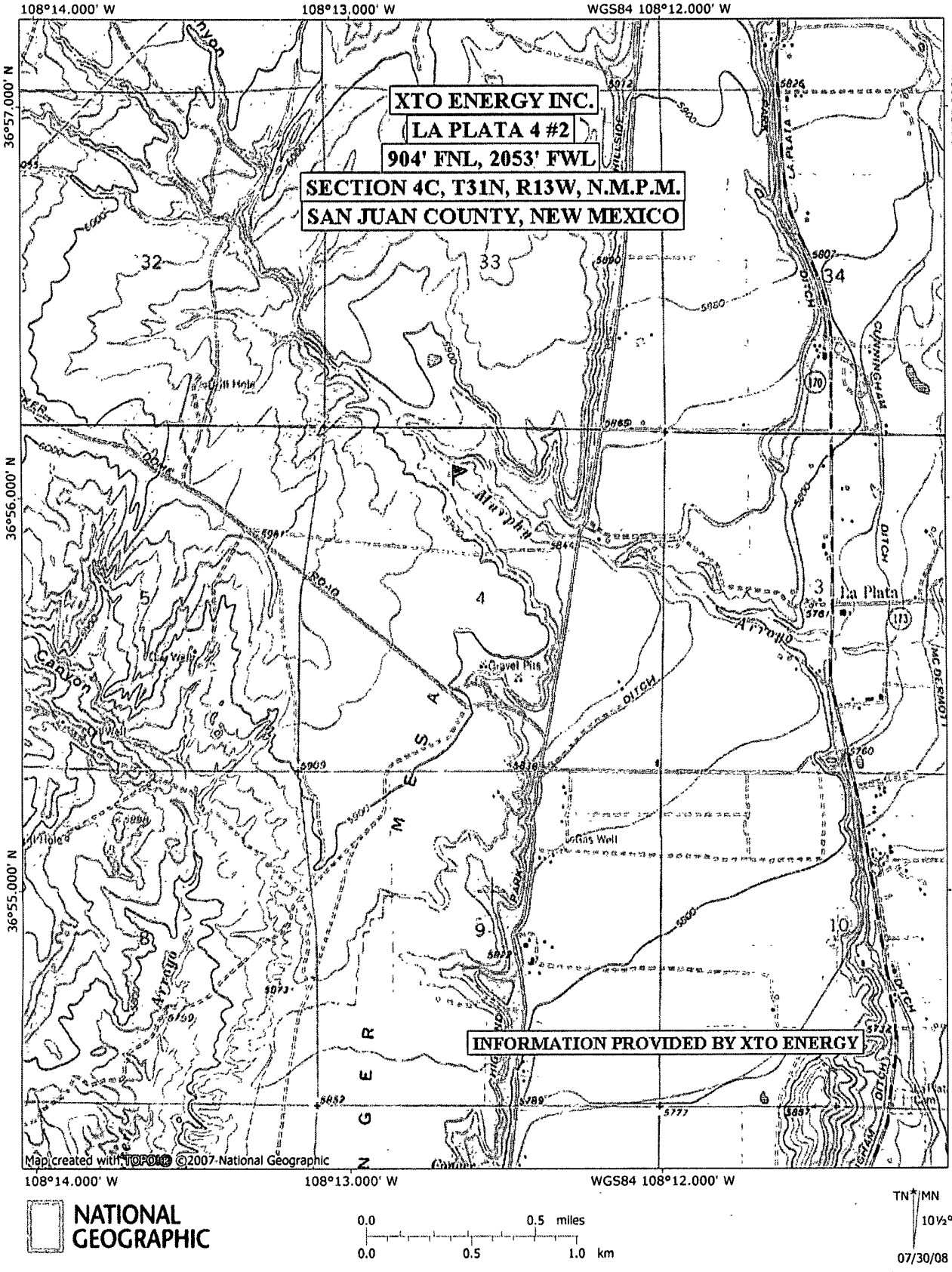
	(acre ft per annum)					(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest					
DB File Nbr	Use	Diversion	Owner	POD Number	Source	Tws	Rng	Sec	q	q	q
SD 02506	IRR	0	CUNNINGHAM DITCH	SD 02506		32N	13W	34	1	1	
SD 02506 1	IRR	0	ROBERT ANDERSON ESTATE	SD 02506		32N	13W	34	1	1	
SD 02506 10	IRR	0	F.F. MCCARTY	SD 02506		32N	13W	34	1	1	
SD 02506 11	IRR	0	EDWARD C. MCNAMEE	SD 02506		32N	13W	34	1	1	
SD 02506 11A	IRR	0	NICKLES BROS., INC.	SD 02506		32N	13W	34	1	1	
SD 02506 12	IRR	0	J.M. KEENEY	SD 02506		32N	13W	34	1	1	
SD 02506 13	IRR	0	HARRISON BROWN	SD 02506		32N	13W	34	1	1	
SD 02506 13A	IRR	0	ROY GIBSON	SD 02506		32N	13W	34	1	1	
SD 02506 13B	IRR	0	W.L. FULLER	SD 02506		32N	13W	34	1	1	
SD 02506 13C	IRR	0	CONNIE S. DINNING	SD 02506		32N	13W	34	1	1	
SD 02506 2	IRR	0	BETH P. BRUMBELOW	SD 02506		32N	13W	34	1	1	
SD 02506 3	IRR	0	GEORGE T. WALTERS	SD 02506		32N	13W	34	1	1	
SD 02506 3A	IRR	0	DEBBIE A. MONTALVO	SD 02506		32N	13W	34	1	1	
SD 02506 3AA	IRR	0	JOHN L. & LINDA L. WATKINS	SD 02506		32N	13W	34	1	1	
SD 02506 3B	IRR	0	JOHN W. & DONNA M. HUFF	SD 02506		32N	13W	34	1	1	
SD 02506 3BA	IRR	0	RONALD H. & NANCY G. BALDWIN	SD 02506		32N	13W	34	1	1	
SD 02506 3C	IRR	0	SALLY SUTER	SD 02506		32N	13W	34	1	1	

SD 02506 4	IRR	0	ELLEN D. CONGER	SD 02506		32N	13W	34	1 1
SD 02506 4A	IRR	0	NICKLES BROS., INC.	SD 02506		32N	13W	34	1 1
SD 02506 5	IRR	0	LUELLA LANIER	SD 02506		32N	13W	34	1 1
SD 02506 5A	IRR	0	DANNY B. BRUMBELOW	SD 02506		32N	13W	34	1 1
SD 02506 6	IRR	0	OSCAR PARKER	SD 02506		32N	13W	34	1 1
SD 02506 6A	IRR	0	ROGER M. ALLYN	SD 02506		32N	13W	34	1 1
SD 02506 7	IRR	0	NICKLES BROS., INC.	SD 02506		32N	13W	34	1 1
SD 02506 8	IRR	0	STEPHEN A. MCCARTY	SD 02506		32N	13W	34	1 1
SD 02506 8A	IRR	0	MICHAEL A. & BEVERLY F. CZERNI	SD 02506		32N	13W	34	1 1
SD 02506 8B	IRR	0	TANYA DORSETT	SD 02506		32N	13W	34	1 1
SD 02506 8C	IRR	0	MONICA CHERYL LAMBRIGHT	SD 02506		32N	13W	34	1 1
SD 02506 9	IRR	0	JEFFREY O. & CHARLOTTE DAVIS	SD 02506		32N	13W	34	1 1
SD 02854	IRR	0	LARKIN-REYNOLDS DITCH	SD 02854		32N	13W	34	4 2
SD 02854 1	IRR	0	PATRICK M. WALTERS	SD 02506		32N	13W	34	1 1
SD 02854 2	IRR	0	LYLE SMITH	SD 02854		32N	13W	34	4 2
SD 02854 2A	IRR	0	PATRICK M. WALTERS	SD 02854		32N	13W	34	4 2
SJ 01002	PRO	3	INC. CONSOLIDATED OIL & GAS	SJ 01002		32N	13W	34	3 4 2
SJ 01079	DOM	3	HARRY J. BURRIS	SJ 01079	Shallow	32N	13W	34	3 3
SJ 01943	IRR	488.4	LA PLATA FARMS	SJ 01943	Shallow	32N	13W	34	4
SJ 02570	DOM	3	TROY L. BATEMAN	SJ 02570		32N	13W	34	4 2 4
SJ 02577	DOM	3	THOMAS D. SITTON	SJ 02577	Shallow	32N	13W	34	4 4
SJ 02592	DOM	3	JACK DAVID MCFARLAND	SJ 02592		32N	13W	34	4 4 4
SJ 02629	DOM	3	HOWARD ENGLE	SJ 02629		32N	13W	34	4 4 2
				SJ 02629 X		32N	13W	34	4 4 2
SJ 02660	DOM	3	JENE L. & VALESKA KIRK	SJ 02660		32N	13W	34	4 4 2
SJ 02661	DOM	3	JENE L. OR VALESKA KIRK	SJ 02661		32N	13W	34	4 4 2
SJ 02685	DOM	3	LYNN JEWELL	SJ 02685		32N	13W	34	4 4 2
SJ 02696	DOM	3	HOWARD & JEWELL, LYNN ENGLE	SJ 02696		32N	13W	34	4 4 2
SJ 02901	DOM	3	JOHN CUMMINGS	SJ 02901		32N	13W	34	4 2 2
SJ 03037	DOM	3	KATHLEEN A. CASAS	SJ 03037		32N	13W	34	1 4 3
SJ 03066	STK	3	MONTOYA SHEEP & CATTLE	SJ 03066	Shallow	32N	13W	34	2 2 2
SJ 03256	DOM	3	MELODY ARRINGTON	SJ 03256	Shallow	32N	13W	34	1 4 2
SJ 03635	DOM	3	TONI LORENZEN	SJ 03635	Shallow	32N	13W	34	4 2 4

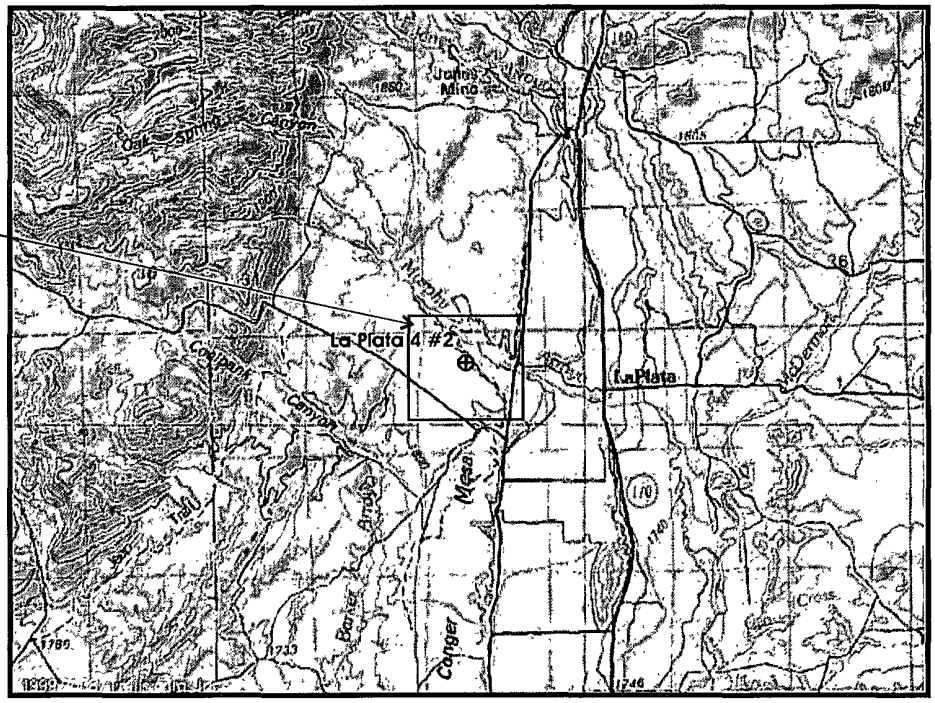
Record Count: 50



Aerial Photo showing locations of proposed below grade tank location (La Plata 4 #2) and existing groundwater wells from the NM State Engineer's Office iWATERS database. Numbers beside pinpoints are depth to water in feet measured in wells.


TOPO! map printed on 07/30/08 from "Untitled.tpo"
108°14.000' W
108°13.000' W
WGS84 108°12.000' W
36°57.000' N
36°56.000' N
36°55.000' N
XTO ENERGY INC.
LA PLATA 4 #2
904' FNL, 2053' FWL
SECTION 4C, T31N, R13W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO
INFORMATION PROVIDED BY XTO ENERGY
Map created with TOPO!® ©2007 National Geographic
NATIONAL GEOGRAPHIC
0.0 0.5 miles
0.0 0.5 1.0 km
TN MN
10½°
07/30/08

Approximate Location of Aerial Photo



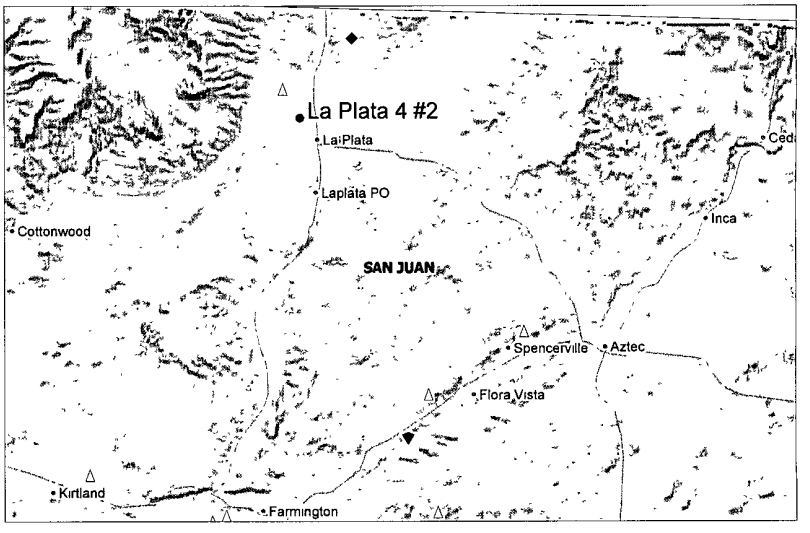
Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	La Plata 4 #2 SEC. 4, T31N, R13W SAN JUAN COUNTY, NEW MEXICO	PROJECT: Pit Permits DRAWN BY: ALA REVISED: 07/17/2008	TOPOGRAPHIC MAP AND AERIAL PHOTOGRAPH

MMQonline Public Version

Mines, Mills & Quarries Commodity Groups

- △ Aggregate & Stone Mines
- ◆ Coal Mines
- ★ Industrial Minerals Mines
- ▼ Industrial Minerals Mills
- ◪ Metal Mines and Mill Concentrate
- ■ Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

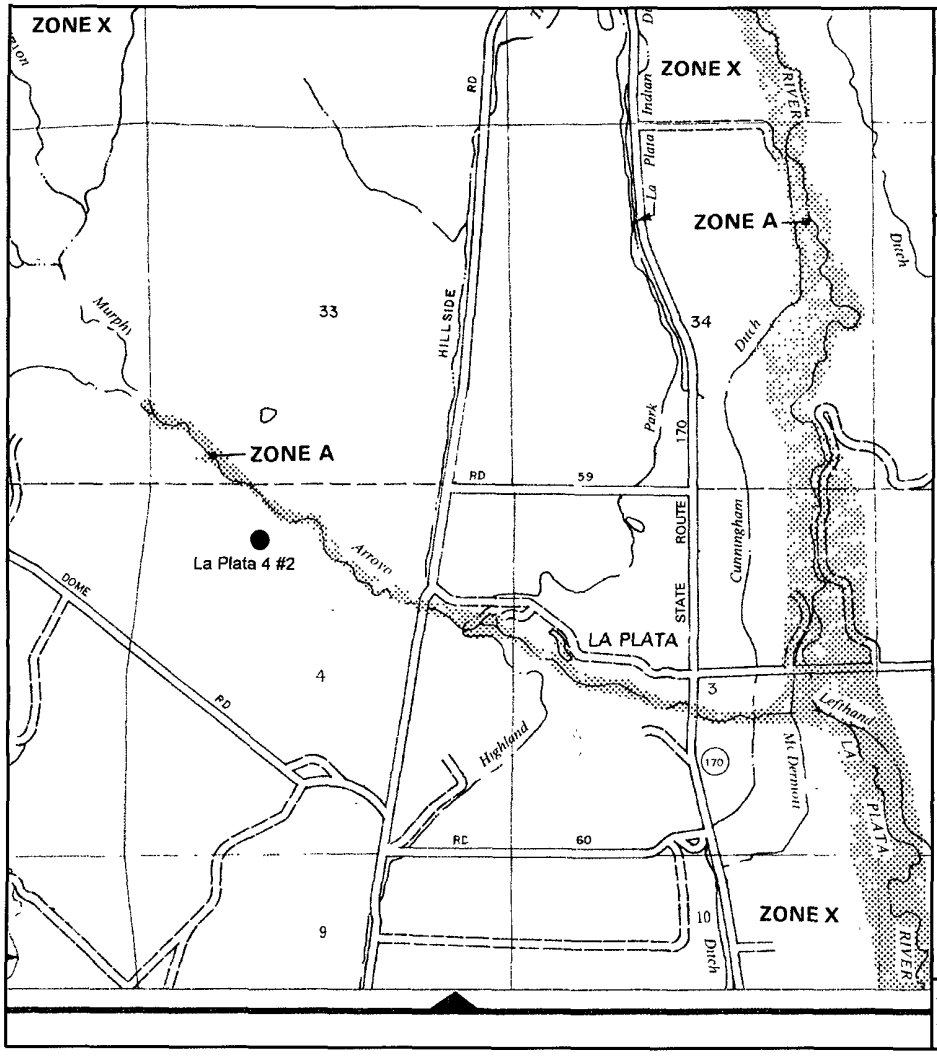
Population



SCALE 1 : 422,289

5 0 5 10 15

MILES



APPROXIMATE SCALE

2000 0 2000 FEET

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined
- **ZONE AE** — Base flood elevations determined
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined
- **ZONE A99** — To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined
- **ZONE V** — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** — Coastal flood with velocity hazard (wave action); base flood elevations determined

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood

OTHER AREAS

- **ZONE X** — Areas determined to be outside 500-year flood plain
- **ZONE D** — Areas in which flood hazards are undetermined

Flood Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones

513 — Base Flood Elevation Line; Elevation in Feet*

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*

RM7 X — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

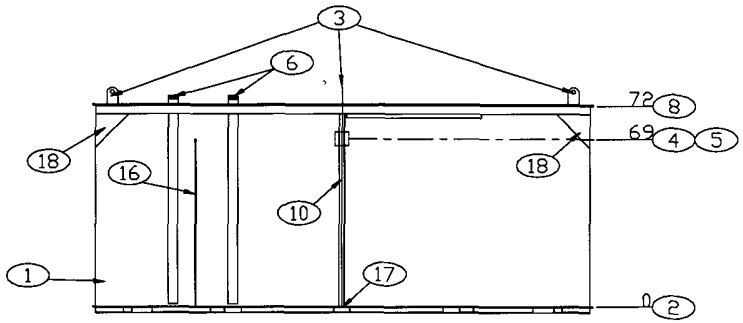
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

XTO Energy Inc.
San Juan Basin
Below Grade Tank Design and Construction Plan

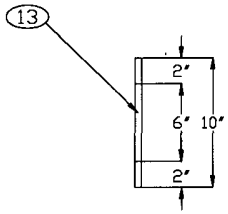
In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of below grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below grade tanks. A separate plan will be submitted for any below grade tank (BGT) which does not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

General Plan

1. XTO will design and construct a BGT to contain liquids and solids and prevent contamination of fresh water and protect public heath 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 BGT. 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 two strands of barbed wire on top, or with a pipe top rail. A 6' chain link fence topped with three stands of barbed wire will be used if the well location is within 1000' of a permanent residence, school, hospital, institution or church.
5. XTO shall construct an expanded metal covering on top of the BGT.
6. XTO will ensure that a BGT is constructed of materials resistant to the BGT's particular contents and resistant to damage from sunlight.
7. The BGT 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.
8. XTO will construct a BGT in a manner that prevents the collection of surface water run-on.
8. XTO will construct and use BGT that does not have double walls. The BGT sidewalls will be open for visual inspection for leaks, the BGT bottom will be elevated a minimum of 6" above the underlying ground surface and the BGT will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. XTO will equip BGT's designed in this manner with a properly functioning automatic high-level shut-off control device and manual controls to prevent overflows.
10. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity greater that 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.
11. The general specifications for design and construction are attached.



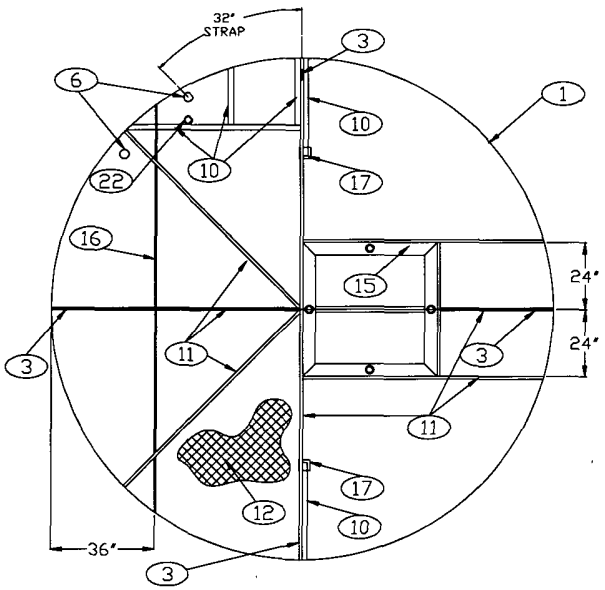
SIDE VIEW



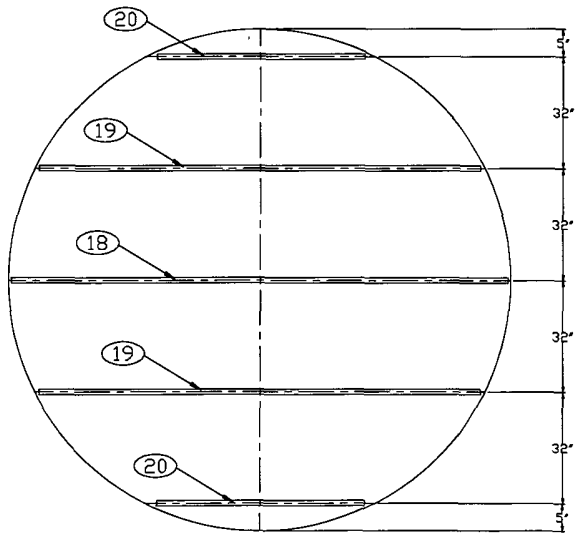
MATERIAL SPECIFICATION

ITEM	QTY.	PART #	DESCRIPTION	GRADE
1	1	RR-316612	ROLLED RING 3/16" X 6'-0" X 12'-0"	X
2	1	BOT-1412	BOTTOM, TANK 1/4" X 12'-2" OD	X
3	4	LE-3846	EYE-LIFTING 3/8" PLATE 4" X 6"	X
4	1	X	NAME PLATE BRACKET	X
5	1	T-NMPLBET	TANK MODEL NUMBER NAME PLATE	X
6	2	X	PIPE-USED 3-1/2" OD X .216" WALL X 6'-6" TOE	X
7	X	X	X	X
8	2	RA21412	ROLLED ANGLE 2" X 2" X 1/4" X 12'-0" OD	X
9	X	X	X	X
10	35'-0"	SA2214	ANGLE, 2" X 2" X 1/4"	X
11	24' -0"	SC341	CHANNEL 3" X 4.1#	X
12	144 SF	EX649612R	EXPANDED METAL 3/4" #9 RAISED 6'-0" X 12'-0"	X
13	1'-0"	R012	ROUND 1/2" HOT ROLLED	X
14	2	M1-A	HINGE-4" WITH 1/2" PIN	X
15	1	MUF-445	MUFFLER 48" X 48" (DRG # BET-A-35)	X
16	1	X	BAFFLE 5'-0" TALL X 10'-0" LG	X
17	3	PD-66	PAD 1/4" X 6" X 6"	X
18	2	GUS88	PLATE 1/4" X 8" X 8"	X
19	1	SC682	CHANNEL 6" X 8.2# X 144" LG	X
20	2	SC682	CHANNEL 6" X 8.2# X 123-1/2" LG	X
21	8	SC682	CHANNEL 6" X 8.2# X 41-3/8" LG	X
22	1	X	FS CPLG 2" 3000# FULL	X

GENERAL NOTES



TOP VIEW



BOTTOM VIEW

CUSTOMER ----------

BENCHMARK EQUIPMENT & TANK
326 N. BERGIN LANE
BLOOMFIELD, N.M. 87413
(505)-632-9030

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DWN BY:	CHK BY	QC BY	ENG	DATE	DRAWING #
MCB				08-18-07	BET-071

TITLE: 120 BBL PIT TANK
BAFFLE WITH MUFFLER
AND 6" 8.2# CHANNE

REV 2

SCALE X"=12"

BET PART #: ----------

XTO Energy Inc.
San Juan Basin
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17.11 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 (BGT) which does not conform to this plan.

General Plan

1. XTO will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public heath and environment.
2. XTO will not allow a BGT to overflow or allow surface water run-on to enter the BGT.
3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of a BGT in order to prevent significant accumulation of oil.
4. XTO will inspect the BGT monthly and maintain written records for five years.
5. XTO will maintain adequate freeboard to prevent overtopping of the BGT.

XTO Energy Inc.
San Juan Basin
Below Grade Tank Closure Plan

In accordance with Rule 19.15.17.11 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 (BGT) which does not conform to this plan.

General Plan

1. XTO will close a BGT 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 an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
3. XTO will close a permitted BGT within 60 days of cessation of the BGT'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 a BGT prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility.
5. XTO will remove the BGT and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
6. XTO will remove any on-site equipment associated with a BGT unless the equipment is required for some other purpose.
7. XTO will test the solids beneath the BGT 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 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 will be given to the Aztec Division District III office between 72 hours and one week of closure via email or verbally. The notification will include the following:
    i. Operator's name
    ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

11. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the BGT. Closure report will be filed on form C-144 and incorporate the following:
    i. Details on capping and covering, where applicable
    ii. Inspection reports
    iii. Sampling results
12. 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.
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.
14. A minimum of 4' of cover shall be achieved and the cover shall include 1' of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
15. The surface owner shall be notified of XTO's proposal to close the BGT as per the approved closure plan using certified mail, return receipt requested.