

Jones, Brad A., EMNRD

From:

John Fergerson [john@laenvironmental.com]

Sent:

Friday, July 17, 2009 10:22 AM

To: Cc: Jones, Brad A., EMNRD Mark Larson

Subject:

Request for Approval: XTO-EMSU Below Grade Tank Closure Plans

Dear Mr. Jones,

LAI, on behalf of XTO Energy, requests approval of the following Below Grade Tank Closure Plans for the following Eunice Monument South Unit (EMSU) Facilities:

EMSU-Satellite 8/EMSU Well No. 293 (Nearest Well)

API No.: 30-025-04539 (EMSU Well No. 293)

Unit I, Sec 7, T-21-S, R-36-E Lea County, New Mexico

EMSU-Satellite 9/EMSU Well No. 376 (Nearest Well)

API No.: '30-025-04680 (EMSU Well No. 376)

Unit I, Sec 18, T-21-S, R-36-E Lea County, New Mexico

EMSU-Central Battery Tank 1/EMSU Well No. 626 (Nearest Well)

API No.: 30-025-31465 (EMSU Well No. 626)

Unit E, Sec 4, T-21-S, R-36-E Lea County, New Mexico

EMSU-Central Battery Tank 2/EMSU Well No. 626 (Nearest Well)

API No.: 30-025-31465 (EMSU Well No. 626)

Unit E, Sec 4, T-21-S, R-36-E

Lea County, New Mexico

EMSU-Satellite 3/EMSU-Well No. 182 (Nearest Well)

API No.: 30-025-29868 (EMSU-Well No. 182)

Unit D, Sec 4, T-21-S, R-36-E

Lea County, New Mexico

EMSU-Satellite 5/EMSU-Well No. 258 (Nearest Well)

API No.: 30-025-21251 (EMSU-Well No. 258)

Unit M, Sec 4, T-21-S, R-36-E

Lea County, New Mexico

EMSU-Satellite 10/EMSU-Well No. 382 (Nearest Well)

API No.: 30-025-04663 (EMSU-Well No. 382)

Unit F, Sec 16, T-21-S, R-36-E

Lea County, New Mexico

EMSU-Satellite 12/EMSU-Well No. 442 (Nearest Well)

API No.: 30-025-29584 (EMSU-Well No. 442)

Unit G, Sec 21, T-21-S, R-36-E

Lea County, New Mexico

EMSU-Satellite 6/EMSU-Well No. 263 (Nearest Well)

RECEIVED 2008 DEC 15 AM 11 39

BELOW GRADE TANK CLOSURE PLAN EMSU-SATELLITE #9 UNIT I, SEC 18, T-21-S, R-36-E LEA COUNTY, NEW MEXICO

PREPARED FOR:
XTO ENERGY, INC.
PERMIAN DIVISION-SE NEW MEXICO
200 N. LORAINE
SUITE 800
MIDLAND, TEXAS 79701

PREPARED BY:
LARSON & ASSOCIATES, INC.
507 N. MARIENFELD STREET,
SUITE 200
MIDLAND, TEXAS 79701

SUBMITTED FOR APPROVAL:
MR. WAYNE PRICE
NEW MEXICO OIL CONSERVATION DIVISION
1220 SOUTH ST FRANCIS DRIVE
SANTA FE, NEW MEXICO 87505

DECEMBER 11, 2008



December 11, 2008

Mr. Wayne Price, Chief Environmental Bureau New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Below Grade Closure Plan

XTO Energy, Inc., EMSU-Satellite #9

Unit I (NE/4, SE/4), Section 18, Township 21 South, Range 36 East

Lea County, New Mexico

Dear Mr. Price:

Form C-144 and corresponding closure plan is submitted to the New Mexico Oil Conservation Division (NMOCD) Santa Fe office on behalf of XTO Energy, Inc. (XTO) by Larson & Associates, Inc. (LAI), it's consultant, for closure of a below-grade tank at its Eunice Monument South Unit (EMSU) Satellite #9 (Facility) located in Unit I (NE/4, SE/4), Section 18, Township 21 South and Range 36 East in Lea County, New Mexico. This closure plan has been prepared in conformance with 19.15.17 NMAC and template approved by the OCD on November 5, 2008.

If you have any questions or concerns, please call me at 432.687.0901 to discuss. Sincerely,

LARSON & ASSOCIATES, INC.

John M Fergerson, PG No. 3231

Texas Professional Geologist

john@laenvironmental.com

Cc: File

Mr. Guy Haykus, XTO, Midland

Mr. Dudley McMinn, XTO, Midland

Mr. Rick Wilson, XTO, SE New Mexico

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

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: 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.									
Operator: XTO ENERGY, INC. OGRID #: 5380									
Address: PERMIAN DIVISION-SE NEW MEXICO, P.O. BOX 700, EUNICE, NEW MEXICO 88231									
Facility or well name: EMSU-SATELLITE NO. 9/EMSU-WELL NO. 376 (Nearest Well)									
API Number: 30-025-04680 (EMSU Well No. 376) OCD Permit Number:									
U/L or Qtr/Qtr Unit I Section 18 Township 21S Range 36E County LEA									
Center of Proposed Design: Latitude 32° 28′ 44.82" N Longitude 103° 17′ 51.00" W NAD: 1983									
Surface Owner: Federal State Private Tribal Trust or Indian Allotment									
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									
☑ Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 90 bbl Type of fluid: OIL & PRODUCED WATER Tank Construction material: FIBERGLASS ☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off ☐ Visible sidewalls and liner ☐ Visible sidewalls only ☑ Other LEAK DETECTION & METAL BARRICADE 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.									
Form C 144 Oil Consumption Division Procedures									

	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, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	hospital,					
	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)						
	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						
	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 consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for					
	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					
	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					
	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					
1	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. 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 19.15.17.12 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:											
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: 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)											
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 ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC											
14. <u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.											
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank 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)											
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 G of 19.15.17.13 NMAC											

	Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.1 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if 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) \(\sumsymbol{\substack} \) 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										
	Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disting considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justif demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict office or may be									
3	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									
B	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											
	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									
	No. No.										

65.	
	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): W. G. Haykus Title: Production Superintendent
	Signature:
	e-mail address: William_haykus @ KTO ENERGY.com Telephone: 432-620-6705
, o o .	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
	OCD Representative Signature: Approval Date: 4/12/09
	Title: 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
	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:

EMSU-SATELLITE #9 BELOW GRADE TANK CLOSURE PLAN DOCUMENT

INTRODUCTION

Larson & Associates, Inc (LAI), on behalf of XTO Energy, Inc. (XTO), submits this plan to the New Mexico Oil Conservation Division (NMOCD) Santa Fe office for closure of a belowgrade tank (BGT) at its Eunice Monument South Unit (EMSU) Satellite #9 (Facility) located in Unit I (NE/4, SE/4), Section 18, Township 21 South and Range 36 East in Lea County, New Mexico. Figure 1 is a topographic map depicting the Facility's location. This closure plan has been prepared in conformance with 19.15.17 NMAC, and template approved by the New Mexico Oil Conservation Division (OCD) on November 5, 2008 (Appendix A).

Operator

XTO Energy Inc.
Permian Division-SE New Mexico
P.O. Box 700
Eunice, New Mexico 88231

Contact Person:

Rick Wilson

Phone Number:

(575) 394-2089

XTO Energy Inc.
Midland Office
200 N. Loraine Street, Suite 800
Midland, Texas 79701

Contact Person:

Guv Havkus

Phone Number:

(432) 682-8873

Proposed Application

The proposed application is for closure of a BGT which 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) Subsection I of 19.15.17.11 NMAC. The BGT is located outside the Facility's western fence line. Figure 2 is a recent aerial image depicting Facility and location of the buried tank. Figure 3 is a scaled site map depicting Facility and location of the buried tank.

Facility Description, Location, and Siting Criteria

The Facility encompasses a tract of land approximately 0.6 acres in size that is covered with crushed caliche rock and is flat to very gently sloping (Figure 2). The GPS coordinates (NAD 1983) near the center of the facility are 32° 28′ 44.82″ North and 103° 17′ 51.00″ West. EMSU-Well #376, API #30-025-04680 is an oil well closest to the facility.

The Facility is located in south-central Lea County, New Mexico, an area referred to as the Pecos Valley, a part of the Great Plains physiographic province. The land surface is an irregular erosional surface that generally slopes to the west and south towards the Pecos River. This area includes large areas of stabilized and drifting sand dunes and drainage areas created by solution deep-seated collapse. Monument Draw, located approximately

five and half (5.5) miles northeast, is a prominent stream valley which almost trends due south and parallels the New Mexico and Texas border. Surface water accumulating in Monument Draw generally flows for only a short distance before being lost to seepage or evapotranspiration, and only during rare periods of heavy rainfall does water flow out of Lea County.

The Facility's siting criteria includes the following:

- 1) Groundwater is more than 100 feet below the bottom of below-grade Tank 1. Figure 1 is a topographic map presenting the average depth-to-groundwater data used to determine the vertical distance from bottom of the BGT to nearest groundwater.
- 2) No continuously flowing watercourse is within 300 horizontal feet of the Facility (Figure 1).
- 3) No other significant watercourse, lakebed, sinkhole, or playa lake is within 200 horizontal feet of Facility (Figure 1).
- 4) No permanent residence, school, hospital, institution, or church is within 300 horizontal feet of Facility (Figure 1).
- 5) No private, domestic fresh water well or spring that less than five households use for domestic or stock water purposes are within 500 horizontal feet of Facility (Figure 1).
- 6) No other fresh water wells or springs are within 1000 horizontal feet of Facility (Figure 1).
- 7) The Facility is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance.
- 8) The Facility is not within 500 feet an area designated as wetlands as defined by EPA Regulation listed at 40 CFR 230.3(t) of the Clean Water Act of 1977 (Figure 4).
- 9) The Facility is not within an area overlying a subsurface mine (Figure 5).
- 10) The Facility is not within an unstable area.
- 11) The Facility is not within a 100-year flood plain (Figure 6).

Identification of Soil and Subsoils

The Maljamar fine-loamy series mixed with the Pyote loamy series comprise the majority of soil in the Facility area. The Maljamar series is well drained, moderately permeable, with very slow runoff. Maljamar soils are formed on nearly level to undulating sandy plains and in moderately sandy to sandy mixed sediments that have been somewhat reworked by wind. The Pyote series is well drained, moderately rapidly permeable, with negligible to low surface run-off on very gentle slopes. Pyote soils are formed on nearly level to undulating uplands and in sandy and loamy sediments that have been modified by wind.

The Cenozoic Pecos Alluvium is the uppermost geologic unit and is composed of Tertiary and Quaternary age alluvium. The alluvium is mostly composed of unconsolidated or poorly cemented clay, sand, gravel, and caliche which unconformably overlie older Permian, Triassic, and Cretaceous age rocks. In places, the alluvium is overlain by windblown sand deposited in dunes. The Cenozoic Pecos Alluvium Aquifer is composed of alluvial sediments deposited in two main north-south oriented basins or troughs. During the Cenozoic Era the Pecos Trough and Monument Draw Trough formed due to subsidence that resulted from dissolution of underlying evaporates.

Land Ownership

The Facility is located on Bureau of Land Management land (Figure 7). 2008 Deed and tax records from the Lea County Appraisers Office verify the land surface does not have private ownership (Appendix B-Lea County Deed & Tax Records).

Below Grade Tank Description and Burial Construction

The BGT is a 90-barrel (bbl) fiberglass tank that is used for oil and produced water (Appendix C-Facility Photo Log). Leak detection consists of a four (4) inch PVC pipe that is incorporated into the burial construction. Secondary containment, liners, visible sidewalls, and automatic shut-off are not associated with the construction. A steel pipe barricade is installed around the tank location for protection.

Below Grade Tank Closure Protocols and Procedures

- 1. In accordance with Agreed Scheduling Order dated October 15, 2008, a Closure Plan application shall be submitted to NMOCD Santa Fe office environmental staff prior to December 31, 2008. Upon Closure Plan approval, the existing BGT shall be closed as soon as technically feasible, but no later than five (5) years after June 16, 2008. However, an earlier date may be required because of imminent danger to fresh water, public health, or the environment.
- 2. Written notification shall be provided to the NMOCD Sante Fe and District 1-Hobbs office environmental staffs no less than 72 hours and no greater than one (1) week prior to BGT removal, as required by 19.15.17.13 Subsection J Paragraph (2) NMAC. Written notification will include the following:

Operator Name:
Facility Name:
Legal Description:
Nearest Well & API Number:
County Name:
Date & Time:

- 3. The surface owner shall be notified, via Return Receipt Requested Certified Mail, of closure plan submission to the NMOCD Santa Fe office and no later than 24 hours prior to BGT removal. Copies of the notification letters and evidence of the notification mailings shall be submitted as closure report attachments.
- 4. Liquids and sludge shall be removed from BGT prior to implementing closure. Liquids shall be disposed at Coopers SWD Facility, API number 30-025-29962, a NMOCD approved Class II commercial salt-water disposal (SWD) well. Sludge and contaminated soil shall be disposed at Sundance Services, Inc. an NMOCD permitted (NM-01-0003) facility, as required in 19.15.17.13 Subsection E Paragraph (1) NMAC.
- 5. Upon removal the BGT shall be integrity tested for re-use as an above-grade storage tank (AST). Approval by the NMOCD Santa Fe office environmental staff shall be requested prior to re-use as an AST. A new AST shall be installed should the BGT fail the integrity test.
- 6. Leak detection piping and associated sub-surface material shall be removed, recycle or disposed at Sundance Services, Inc.
- 7. Soils beneath the below-grade tank will be tested to determine whether a release has occurred upon removal of the BGT. Five (5) point composite samples will be collected directly below the BGT or below the leak detection system if present. Discrete samples will be collected from any wet or discolored areas or areas beneath the BGT showing other evidence of a release. All samples will be analyzed for benzene, toluene, ethylbenzene, xylene (BTEX) using EPA Method 8021B, total petroleum hydrocarbons (TPH) using EPA Method 418.1, and chloride using EPA Method 300.1, as required by 19.15.17.13 Subsection E Paragraph (4) NMAC.
- 8. A form C-141 and an attached copy of laboratory results for collected samples shall be submitted to the NMOCD Santa Fe office environmental staff for review. Additional delineation shall be conducted if requested by the NMOCD. Compliance with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate, if determined that a release has occurred.
- 9. Backfill excavation with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC, should laboratory results verify that constituents do not exceed the concentrations specified in Paragraph 4 of Subsection E of 19.15.17.13 NMAC.

10. Site re-vegetation is not proposed. River gravel is proposed as an alternative and will cover the excavation and provide an elevated pad for either re-positioning the removed BGT above ground or installation of a new AST. A written document stating the proposed alternative shall be submitted to surface owner requesting signature approval. A copy of the signed document shall be submitted to the NMOCD Santa Fe office environmental staff as a closure report attachment.

REPORTING

LAI, on behalf of XTO, shall prepare and submit a final closure report to the NMOCD Santa Fe office environmental staff within 60 days following the BGT closure, which will include the following: Form C-144 with all supporting data; form C-141; proof of surface owner and division closure notices; confirmation sampling analytical data; disposal facility names(s) and permit number(s); soil backfilling and cover installation; proposed alternative revegetation installation & surface owner signed written agreement; photo documentation of the site reclamation; and other pertinent information related to onsite activities.

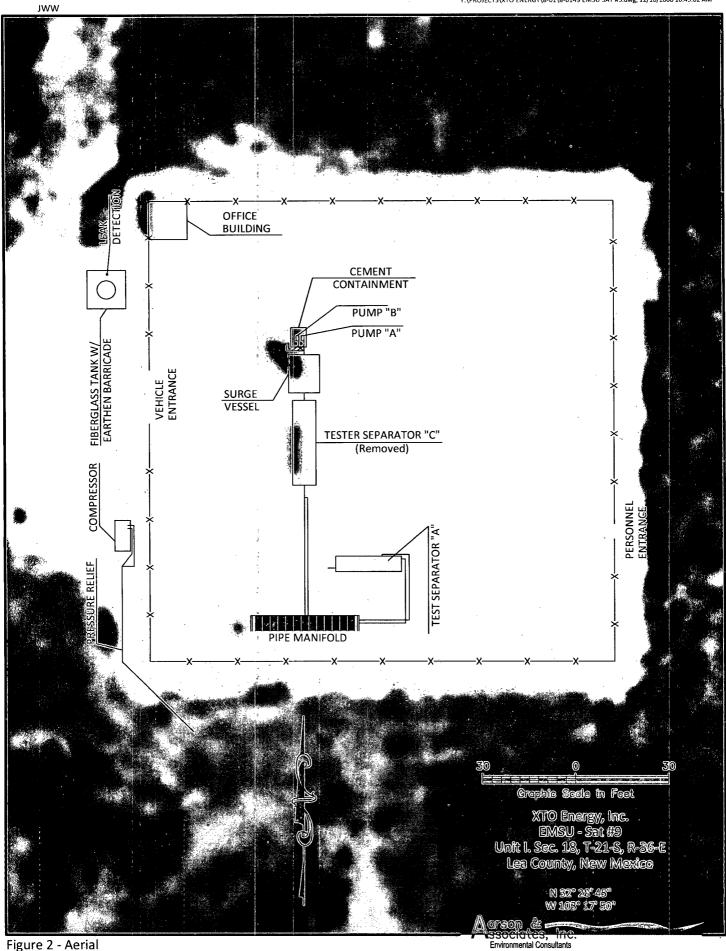


Figure 2 - Aerial

本

11(2)

XTO Energy, Inc.
EMSU - Sat #9
Unit I. Sec. 18, T-21-S, R-36-E
Lea County, New Mexico

N 32° 28' 45"
W 103° 17' 50"

Agrson & Inc.
Environmental Consultants

Figure 3 - Site Drawing

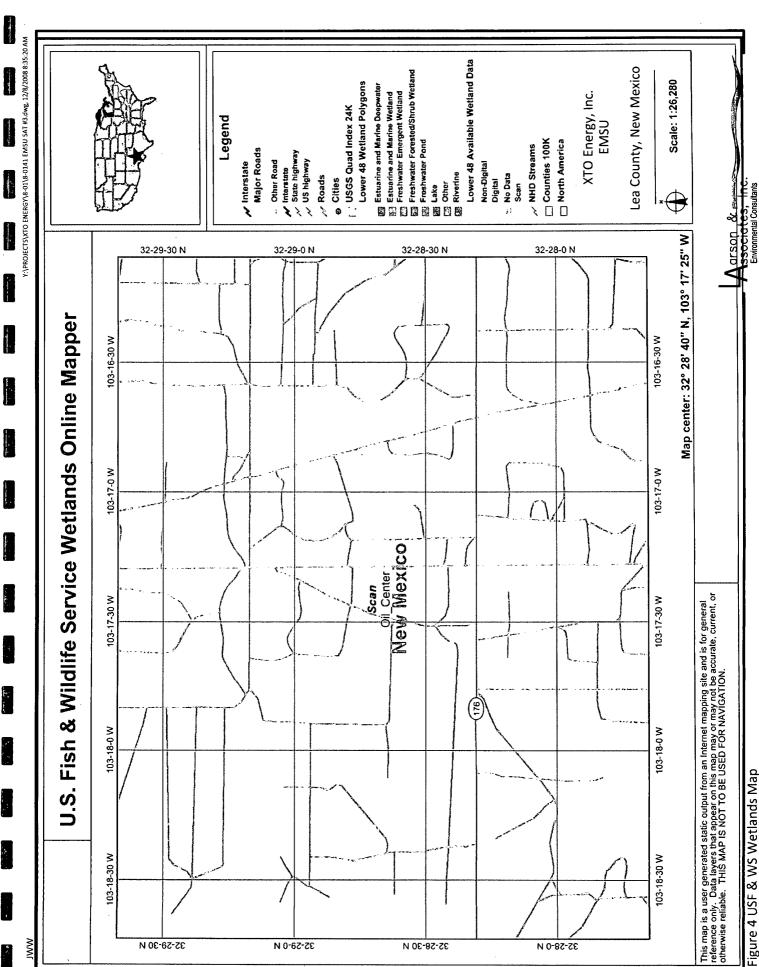
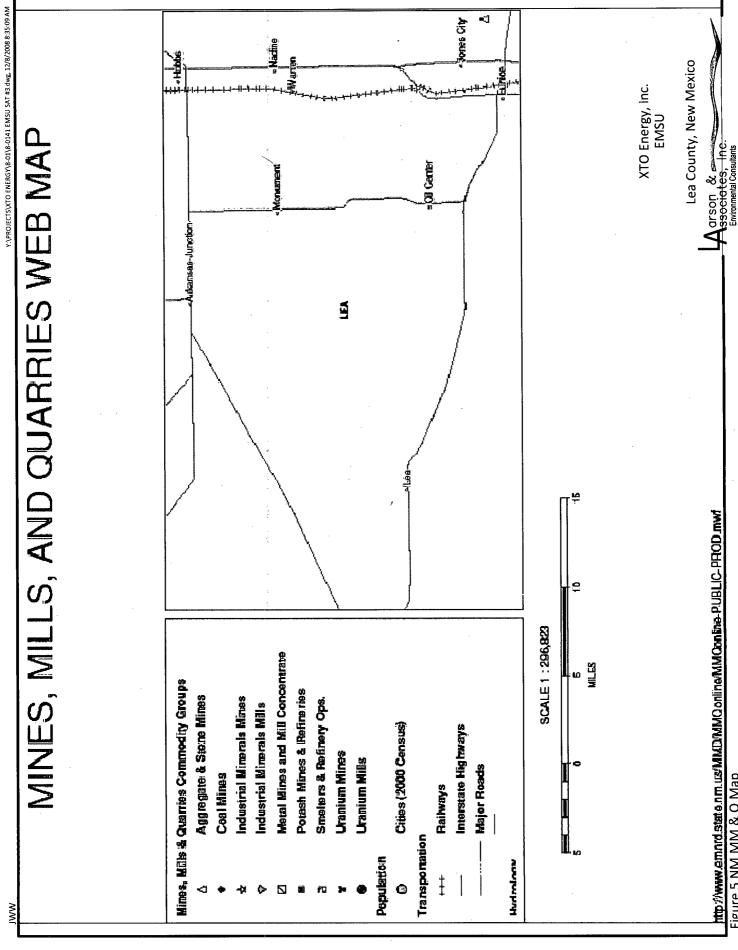


Figure 4 USF & WS Wetlands Map



1

ない

を

ない。

18.0

Section 1

100

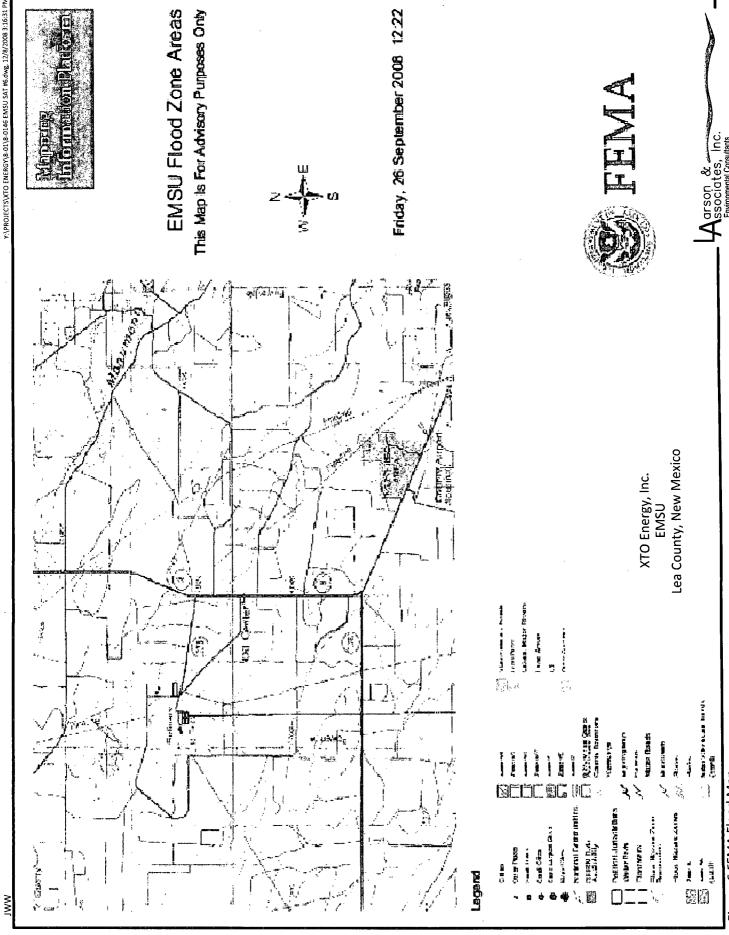
r k

1

Sept.

を

Figure 5 NM MM & Q Map



100

東東

物は、食品

de de de

- Joseph

-

K

S. Brance

事本

Carried St.

の社会

and the second

Aures of the second

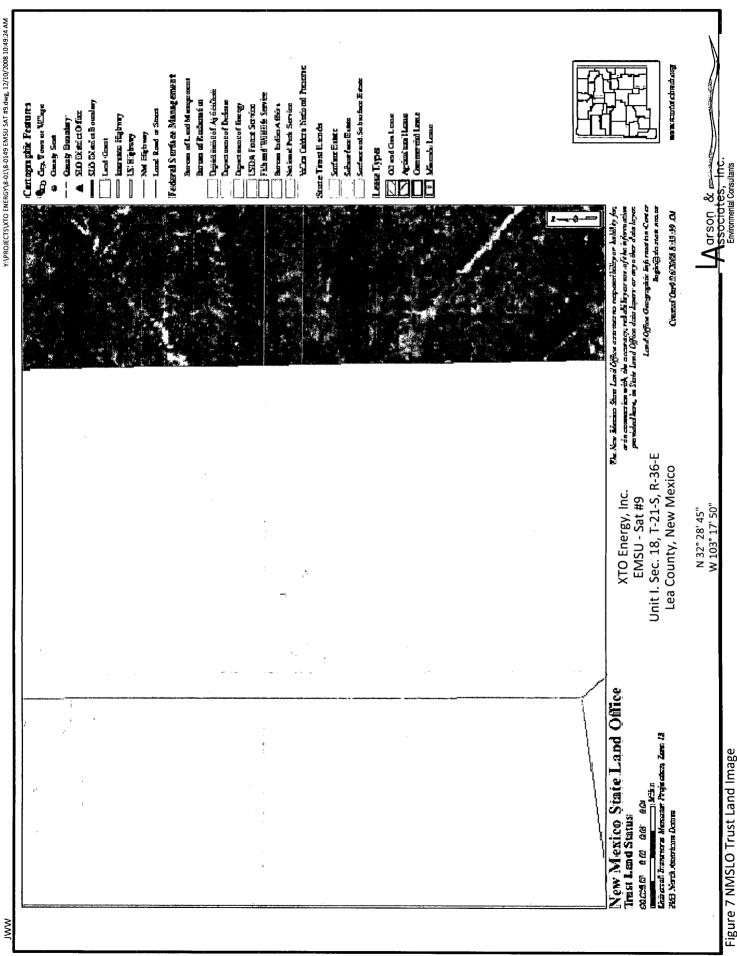
Yar.

There was

をなって

· Marie

Figure 6 FEMA Flood Map



2.5

6 7 8

A CONTRACTOR

3.

Allers on the

2

N.

A 100 M

100

Figure 7 NMSLO Trust Land Image



John Fergerson

From:

Jones, Brad A., EMNRD [brad.a.jones@state.nm.us]

Sent:

Wednesday, November 05, 2008 5:00 PM

To:

John Fergerson

Subject:

RE: BGT Closure Plan Template (Revised 11-5-08)

John,

Thanks for making the revision to the below-grade tank closure plan template. The information provided in the template complies with the requirements of 19.15.17 NMAC. Please submit the below-grade tank closure plan packets to Wayne Price at the OCD Santa Fe office. If you have any questions, please contact me.

Brad

Brad A. Jones

Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us

Office: (505) 476-3487 Fax: (505) 476-3462

From: John Fergerson [mailto:john@laenvironmental.com]

Sent: Wednesday, November 05, 2008 3:24 PM

To: Jones, Brad A., EMNRD

Subject: BGT Closure Plan Template (Revised 11-5-08)

Brad,

I have made the requested revision and submitting for approval.

Thanks,

John M. Fergerson, PG

Larson & Associates, Inc
507 North Marienfield Street
Suite 202

Midland, TX 79701

432-687-0901 (Main) 432-557-9703 (Cell) John@laenvironmental.com

This inbound email has been scanned by the MessageLabs Email Security System.

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

11:34:31 Year 2008 0050076 Dist 080 0 Centrl 7608 Full DECK, MILLARD EST #4193 FinCo 6447 Land 2536 Txbl HARDING & CARBONE INC % 1161 Impr 0 Exmpt 0 P.P. 3903 BELLAIRE BLVD 0 M.H. 2536 Net HOUSTON TX 77025 0 Livstk Print=Y _ Property Description 4 000 500 760 004

Property Description
4 000 500 760 004
FILE 436 PG 425 000009808 06/25/87
SECTION-04 TOWNSHIP-21S RANGE-36E
714.88 AC LOC E2SW4, SE4
1-2-3-14-15-16 & 6-11 INC
LESS 4.54 AC TO STATE HWY DEPT

APP B

Bottom

F3=Cancel F4=Prompt() F6=Chg Yrs F12=Return

_	11:34:57				Year	2008		
á	0050076 Dist 080 DECK, MILLARD EST #4193			0	Centrl		7608	Full
请	DECK, MILLARD EST #4193	FinCo		6447	Land		2536	Txbl
	HARDING & CARBONE INC %			1161	Impr		0	Exmpt
				0	P.P.			_
*	3903 BELLAIRE BLVD				M.H.		2536	Net
	HOUSTON TX 77025			0	Livstk			
21							Pri	nt=Y _
	Property Description							
121	4 000 500 760 003	120	GRAZING	204	16.75			2149
	FILE 436 PG 425 000009808 06/25/8	37 240	FENCE					387
1	SECTION-03 TOWNSHIP-21S RANGE-3	36E						
	SECTION-03 TOWNSHIP-21S RANGE-3 320.00 AC LOC S2							
	LESS 22.69 AT TO STATE HWY DEPT							
	1/25/08-LIVESTOCK ON #79657 LEASE TO LARRY STRAIN	ΞD						
	TO LARRY STRAIN							
_								

F3=Cancel F4=Prompt() F6=Chg Yrs F12=Return

Riving A

E said Meters

The Colorest of the Colorest o

الوارعات محللت

	11:35:01 0000595 Dist 080 BLOUNT, E KEITH 1682 CR 390	FinCo		1146 13824 0 0	Centrl Land Impr P.P. M.H.	4990) Exmpt
_	DENVER CITY TX 79323			0	Livstk	Pr	int=Y _
Control of the Contro	Property Description 4 000 005 950 001 FILE 508 PG 738 000068652 02/09/95	170 210	MISC SINGLE	R FA	3.60		382 4608
7	SECTION-03 TOWNSHIP-21S RANGE-36E 3.60 AC LOC SW COR LOT 13 TR BEG N0D02'W 2645.65' &						
神の大変	N89D58'E 93.70' FROM SW4 SEC 3; TH N03D35'39"W 256.07' TO BEG CURVE TO RIGHT RA 1845.82' &						
* To 100	CA 09D40'35" NE 311.73', S83D21'03"E 80.08', S86D56'53"E 194.87', S02D26'28"W 550.47', N89D07'58"W 263' TO BEG						
1.0	*1994-STATE LAND PURCHASED FROM F3=Cancel F4=Prompt() F6=Chg Yrs	F12=1	<u>Return</u>			Мо	ore
\$							

10 mg

A CALL

S. Carlot

_	11:35:28				Year	2008	
4	0050263 Dist 080			0	Centrl	19053	Full
28	0050263 Dist 080 DASCO CATTLE CO LLC	FinCo		5859	Land	6351	Txbl
			1	3194	Impr	0	Exmpt
1			*	0	P.P.		_
	PO BOX 798			0	M.H.	6351	Net
	TATUM NM 88267 0798			0	Livstk		
12						Pri	nt=Y _
	Property Description						
	4 000 502 630 001	120	GRAZING	175	59.00		1847
_	BOOK 055 PG 746	170	MISC R		1.00		106
A	SECTION-11 TOWNSHIP-21S RANGE-36E	210	SINGLE FA				3875
#	SECTION-11 TOWNSHIP-21S RANGE-36E 320.00 AC BEING E2	240	FENCE				523
	1/8/00-DASCO LAND CORP						
	1987-MCCASLAND, INC, WILL *1/8/00-DASCO LAND CORP*						

F3=Cancel F4=Prompt() F6=Chg Yrs F12=Return

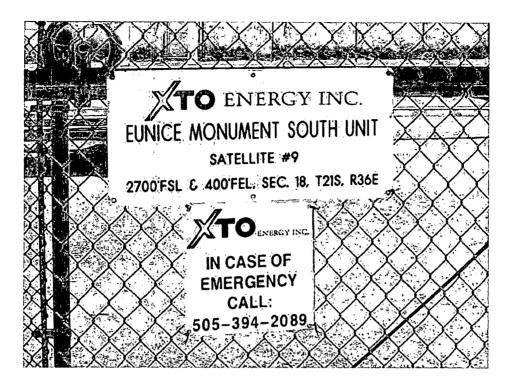
5000	·	FinCo		975	Year Centrl Land	2008		Txbl
F. 1824	SARTIN, BILLIE LOIS % 223 N MOORE ST SULPHUR SPRINGS, TX 75482			0	Impr P.P. M.H. Livstk		392	Exmpt Net
	Property Description 4 000 501 440 001 SECTION-07 TOWNSHIP-21S RANGE-36E 310.01 AC LOC LOTS 3-4,E2SW4,SE4	120 240	GRAZING FENCE	31	10.01		Pri	325 67

F3=Cancel F4=Prompt() F6=Chg Yrs F12=Return

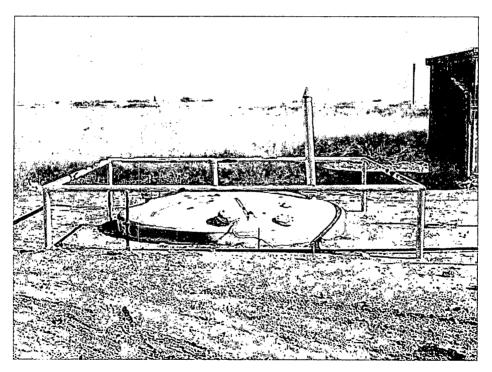
20 March	11:35:58 0050147 Dist 080 SARTIN, BILLIE LOIS ET AL	FinCo		1986	Year Centrl Land	2008		Txbl
18,779)	223 N MOORE ST SULPHUR SPRINGS, TX 75482			0	Impr P.P. M.H. Livstk		705	Exmpt Net
5. A. C.	Property Description			·			Prir	nt=Y _
	4 000 501 470 001 FILE 427 PG 488 000071517 05/26/86 SECTION-07 TOWNSHIP-21S RANGE-36E 310.27 AC LOC LOTS 1-2,E2NW4,NE4	120 240	GRAZING FENCE	6.1	30.27	1.05	5	662 43
	1985-HOUSTON, H L							

F3=Cancel F4=Prompt() F6=Chq Yrs F12=Return

APDC



EMSU-Sat #9: Close-up View of Facility Sign



EMSU-Sat #9: View Facing North of Buried Tank w/Barricade