

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.
NMNM-088909

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit of CA/Agreement, Name and/or No.
N/A

8. Well Name and No
NM Federal 8 FC #2

9. API Well No.
30-045-28917

10. Field and Pool or Exploratory Area
Basin Fruitland Coal

11. Country or Parish, State
San Juan County, New Mexico

SUBMIT IN TRIPLICATE – Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
XTO Energy Inc.

3a. Address
382 CR 3100, Aztec, NM 878410

3b. Phone No. (include area code)
505-333-3100 Bureau of Land Management

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1060 FSL/1890 FWL, Section 8-T30N-R12W

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other <u>Install Cathodic</u> |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | <u>Protection (Cables Pole,</u> |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | <u>Surface Anode Bed)</u> |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

XTO Energy Inc. requests approval to install cathodic protection for the NM Federal 8 FC #2 well and associated pipeline to protect the well casing and pipeline from corrosion. This well and associated pipeline was acquired from Pogo Producing and does not have cathodic protection installed at this time. The attached plat shows the proposal as follows:

- 1) install new rectifier at existing overhead power source located on SW corner of well pad
- 2) install 179.4 feet of cathodic cable to NM Federal 8 FC #2 well casing
- 3) install ground bed (3' deep) on west side of well site (existing disturbance) ground bed is approximately 70 feet in length, and cable is 81.7 feet in length
- 4) install 656.77 feet of cathodic cable along existing pipeline corridor (one Williams pipeline and one XTO pipeline). Install 18' deep.

Distance applied for (656.77) is to get to existing steel pipeline installed by Pogo. The existing pipeline from well site to Valve Can as shown on plat is poly and does not need cathodic protection.

All proposed facilities are on previously disturbed ground. The new rectifier will be one pole and rectifier, the cable will be trenched in with a small trencher and will be installed to the well casing and the associated steel pipeline.

All disturbance required for installation will be backfilled and reseeded with appropriate seed mixture for area.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Paul Lehrman

Title Sr. Land Coordinator

Signature

Date

8-23-11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Mark Kelly

Title

**ENVIRONMENTAL
COMPLIANCE TEAM LEAD**

Date

8-29-11

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

NMOC

Dykeman Roebuck Archaeology



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Farmington, NM 87401

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F 505 325.5062
info@drarchaeology.com

www.drarchaeology.com

August 17, 2011

Paul Lehrman
XTO Energy
382 Road 3100
Aztec, NM 87410

Re: Negative Report, Project DRA116026; New Mexico Federal 8 FC 2 Cathodic Protection Line Cultural Resource Survey for XTO Energy, Inc., San Juan County, New Mexico

Dear Mr. Lehrman,

Enclosed is a copy of the archaeological report for the XTO Energy, Inc.'s New Mexico Federal 8 FC 2 cathodic protection line cultural resource survey located on lands administered by Bureau of Land Management, Farmington Field Office (BLM-FFO) in San Juan County, New Mexico.

No cultural resources were found in the project area. We recommend archaeological approval for the proposed cathodic protection project.

We have submitted the report to the BLM-FFO. Your business is much appreciated. Please get in touch with me if you have any questions about this project.

Sincerely,

Paul Roebuck, Ph.D., Archaeologist
Dykeman Roebuck Archaeology, LLC
333 E. Main
Farmington, NM 87401
720.206.6385

NMCRI INVESTIGATION ABSTRACT FORM (NIAF)

| 1. NMCRI Activity No.: 121602 | 2a. Lead (Sponsoring) Agency: BLM, Farmington Field Office | 2b. Other Permitting Agency(ies): | 3. Lead Agency Report No.: | | | | | | | | | |
|---|---|--|--|-------------------------------------|-------------------------------------|-----------------|--------------------------------------|-------------------------------------|-------------------|--|-------------------------------------|----------------|
| 4. Title of Report: New Mexico Federal 8 FC 2 Cathodic Protection Line Cultural Resource Survey for XTO Energy, Inc., San Juan County, New Mexico Author(s): Douglas D. Dykeman | | | 5. Type of Report <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive | | | | | | | | | |
| 6. Investigation Type <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other | | | | | | | | | | | | |
| 7. Description of Undertaking (what does the project entail?): XTO Energy, Inc. proposes to construct a cathodic protection system to serve the Federal 8 FC 2 well. The system consists of a 656.77 ft cathodic protection line that extends from an existing "Valve Can" to a proposed 81.7 ft cathodic protection service line, a 70 ft long cathodic bed location, and a 179.4 ft cathodic wellhead protection line. The cathodic protection line is positioned in a pipeline right-of-way (ROW) that parallels a well-maintained road to the Federal 8 FC 2 well. The service line, cathodic bed, and wellhead protection line occur on or adjacent to the New Mexico Federal 8 FC 2 well pad. The width of the area of potential effect (APE) is 20 ft, centered on the proposed cathodic protection lines and service line. Disturbance in the area of potential effect, including blading and excavation, will be extensive and intensive. | | | 8. Dates of Investigation: July 11, 2011 9. Report Date: August 17, 2011 | | | | | | | | | |
| 10. Performing Agency/Consultant: Dykeman Roebuck Archaeology, LLC Principal Investigator: Paul Roebuck, Ph.D. Field Supervisor: Douglas D. Dykeman Field Personnel Names: Julia Chavez and Victoria Yazzie | | | 11. Performing Agency/Consultant Report No.: DRA116026-1 12. Applicable Cultural Resource Permit No(s): 223-2920-09-D | | | | | | | | | |
| 13. Client/Customer: XTO Energy, Inc. Contact: Paul Lehrman Address: 382 Road 3100, Aztec, New Mexico 87410 Phone: (505) 333-3100 | | | 14. Client/Customer Project No.: n/a | | | | | | | | | |
| 15. Land Ownership Status (Must be indicated on project map): <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Land Owner</th> <th style="text-align: center;">Acres Surveyed</th> <th style="text-align: center;">Acres in APE</th> </tr> </thead> <tbody> <tr> <td style="border: 1px solid black;">Federal, BLM-FFO</td> <td style="border: 1px solid black; text-align: center;">4.95¹</td> <td style="border: 1px solid black; text-align: center;">0.46¹</td> </tr> <tr> <td colspan="3">calculated using map geometry</td> </tr> </tbody> </table> | | | | Land Owner | Acres Surveyed | Acres in APE | Federal, BLM-FFO | 4.95 ¹ | 0.46 ¹ | calculated using map geometry | | |
| Land Owner | Acres Surveyed | Acres in APE | | | | | | | | | | |
| Federal, BLM-FFO | 4.95 ¹ | 0.46 ¹ | | | | | | | | | | |
| calculated using map geometry | | | | | | | | | | | | |
| 16. Records Search(es): Results of the records searches are presented in Appendix B. | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Date(s) of ARMS File Review 6/17/11</td> <td style="width: 40%;">Name of Reviewer(s) Douglas Dykeman</td> <td style="width: 20%;"></td> </tr> <tr> <td>Date(s) of NR/SR File Review 6/17/11</td> <td>Name of Reviewer(s) Douglas Dykeman</td> <td></td> </tr> <tr> <td>Date(s) of Other Agency File Review 7/6/11</td> <td>Name of Reviewer(s) Victoria Yazzie</td> <td>Agency BLM-FFO</td> </tr> </table> | | | | Date(s) of ARMS File Review 6/17/11 | Name of Reviewer(s) Douglas Dykeman | | Date(s) of NR/SR File Review 6/17/11 | Name of Reviewer(s) Douglas Dykeman | | Date(s) of Other Agency File Review 7/6/11 | Name of Reviewer(s) Victoria Yazzie | Agency BLM-FFO |
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| Date(s) of Other Agency File Review 7/6/11 | Name of Reviewer(s) Victoria Yazzie | Agency BLM-FFO | | | | | | | | | | |
| 17. Survey Data: a. Source Graphics <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> USGS 7.5' (1:24,000) topo map <input type="checkbox"/> Other topo map, Scale: <input checked="" type="checkbox"/> GPS Unit Accuracy <input type="checkbox"/> <1.0m <input checked="" type="checkbox"/> 1-10m <input type="checkbox"/> 10-100m <input type="checkbox"/> >100m b. USGS 7.5' Topographic Map Name USGS Quad Code <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black;">Farmington North, NM</td> <td style="border: 1px solid black;">36108-G2</td> </tr> <tr> <td style="border: 1px solid black;">Flora Vista, NM</td> <td style="border: 1px solid black;">36108-G1</td> </tr> </table> c. County(ies): San Juan | | | | Farmington North, NM | 36108-G2 | Flora Vista, NM | 36108-G1 | | | | | |
| Farmington North, NM | 36108-G2 | | | | | | | | | | | |
| Flora Vista, NM | 36108-G1 | | | | | | | | | | | |

17. Survey Data (continued):**d. Nearest City or Town:** Farmington, New Mexico**e. Legal Description:**

| Township (N/S) | Range (E/W) | Section* | 1/4 | 1/4 | 1/4 |
|----------------|-------------|----------|-----|-----|-----|
| 30 N | 12 W | 8 | NE | SW | SW |
| 30 N | 12 W | 8 | NW | SE | SW |
| 30 N | 12 W | 8 | SE | NW | SW |

* Template anchored on SW corner and west section line

Projected legal description? Yes ☐ , No ☒ **Unplatted** ☐**f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):****18. Survey Field Methods:****Intensity:** ☒ 100% coverage ☐ <100% coverage**Configuration:** ☐ block survey units ☒ linear survey units (l x w): ☐ other survey units (specify):**Scope:** ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)**Coverage Method:** ☒ systematic pedestrian coverage ☐ other method (describe)**Survey Interval (m):** 15 **Crew Size:** 2 **Fieldwork Dates:** 7/11/11**Survey Person Hours:** 4 **Recording Person Hours:** 0 **Total Hours:** 4

Additional Narrative: Between 1980 and 2004, most of the project area was archaeologically surveyed for a variety of energy facilities. Given the age of the previous work and some uncertainty about previous coverage, DRA conducted a complete archaeological survey of the proposed cathodic lines. The centerlines of the proposed cathodic protection lines were marked with orange flagging tape on existing gas well facilities and on vegetation growing in the existing pipeline ROW. DRA personnel performed a systematic, pedestrian survey of a 200 ft wide corridor centered on the proposed cathodic protection lines. The pedestrian survey entailed walking parallel transects with intervals not exceeding 15 m, adjusting the transect interval down for variations in surface visibility. This class 3 survey is an intensive field inventory: a continuous, intensive survey of an entire target area, aimed at locating and recording all archaeological properties that have surface indications, by walking close-interval parallel transects until the area has been thoroughly examined. Field conditions ranged from warm and sunny to hot and cloudy.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project is located on the southeastern slope of Hood Mesa. Sediment consists of aeolian sand. Episodes of sheet wash and rill wash are transporting sediments downslope to the southeast. The vegetation community is an open piñon-juniper woodland with an overstory of piñon and juniper trees, and an understory of sagebrush, snakeweed, rabbitbrush, Russian thistle, cheatgrass, Indian ricegrass, and cactus. The elevation of the project area ranges from 5855-5880 ft.

20. a. Percent Ground Visibility: 90% **b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):** The area is used primarily for energy development and recreational vehicles. An existing pipeline parallels the proposed cathodic protection line. Woodcutting activities are evident in the woodland. Some modern trash from gas field and recreational uses has accumulated along the roads.

21. CULTURAL RESOURCE FINDINGS ☐ Yes, See Page 3 ☒ No, Discuss Why:**22. Required Attachments (check all appropriate boxes):**

- ☒ USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
☒ Copy of NMCRIS Mapserver Map Check
☐ LA Site Forms - new sites (*with sketch map & topographic map*)
☐ LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
☐ Historic Cultural Property Inventory Forms
☐ List and Description of isolates, if applicable
☐ List and Description of Collections, if applicable

23. Other Attachments:

- ☐ Photographs and Log
☐ Other Attachments

(Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.**Principal Investigator/Responsible Archaeologist:** Paul Roebuck, Ph.D.**Signature** _____**Date:** August 17, 2011 **Title (if not PI):****25. Reviewing Agency:****Reviewer's Name/Date****Accepted** () **Rejected** ()**Tribal Consultation (if applicable):** ☐ Yes ☐ No**26. SHPO****Reviewer's Name/Date:****HPD Log #:****SHPO File Location:****Date sent to ARMS:**

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

| | | |
|--|--|-----------------------------------|
| 1. NMCRIS Activity No.: 121602 | 2. Lead (Sponsoring) Agency: BLM, Farmington Field Office | 3. Lead Agency Report No.: |
|--|--|-----------------------------------|

SURVEY RESULTS: No cultural resources were encountered during the survey.

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited *(site update form required)*: 0
Previously recorded sites not relocated *(site update form required)*: 0
TOTAL SITES VISITED: 0
Total isolates recorded: 0 **Non-selective isolate recording?** ☒
Total structures recorded *(new and previously recorded, including acequias)*: 0

MANAGEMENT SUMMARY: DRA recommends cultural resources approval for the project as currently proposed since no cultural resources were encountered.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG

Sites Discovered:

| LA No. | Field/Agency No. | Eligible? (Y/N, applicable criteria) |
|--------|------------------|--------------------------------------|
| | | |
| | | |
| | | |

Previously recorded revisited sites:

| LA No. | Field/Agency No. | Eligible? (Y/N, applicable criteria) |
|--------|------------------|--------------------------------------|
| | | |

MONITORING LA NUMBER LOG *(site form required)*

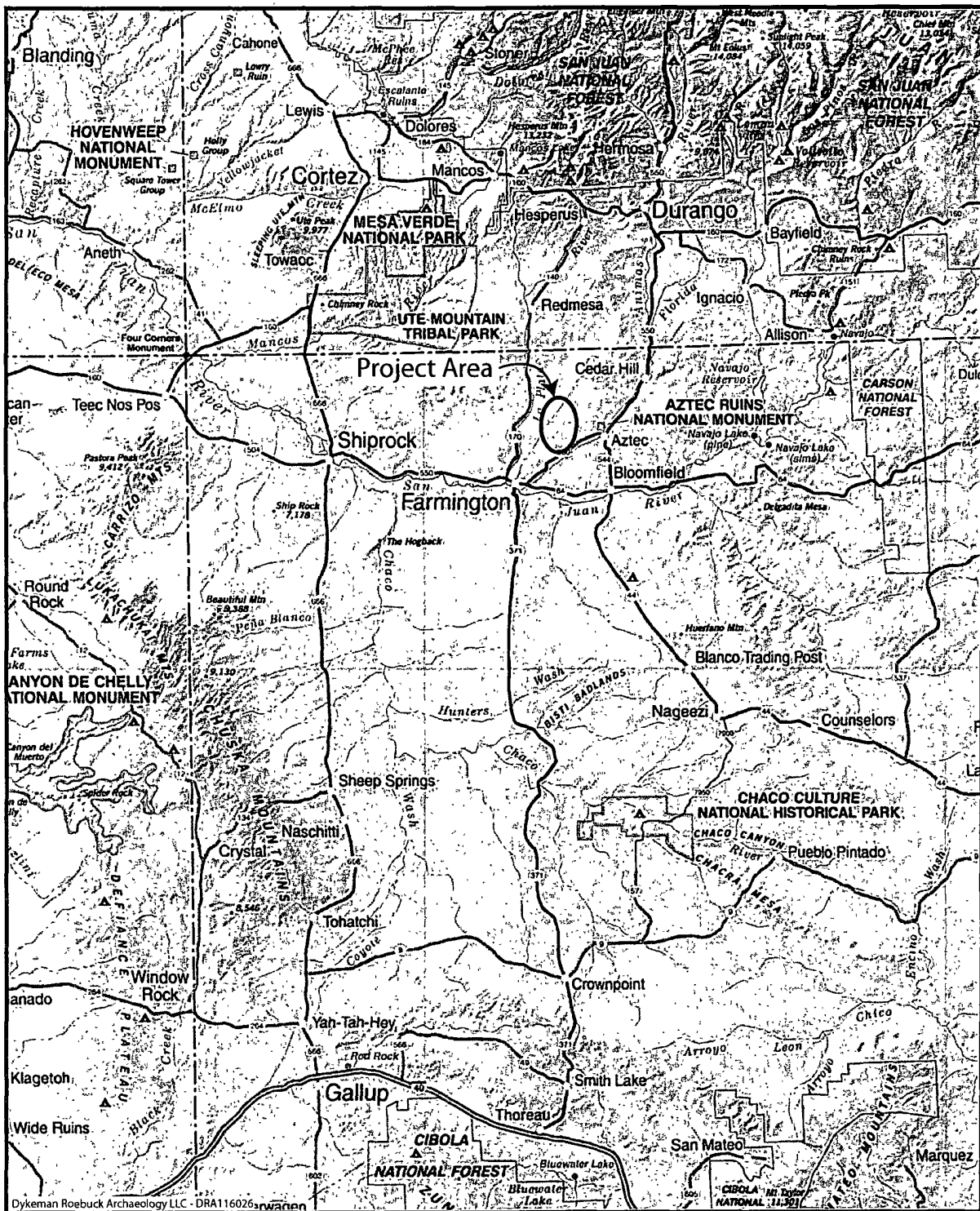
Sites Discovered *(site form required)* : **Previously recorded sites** *(Site update form required)*:

| LA No. | Field/Agency No. | LA No. | Field/Agency No. |
|--------|------------------|--------|------------------|
| | | | |
| | | | |

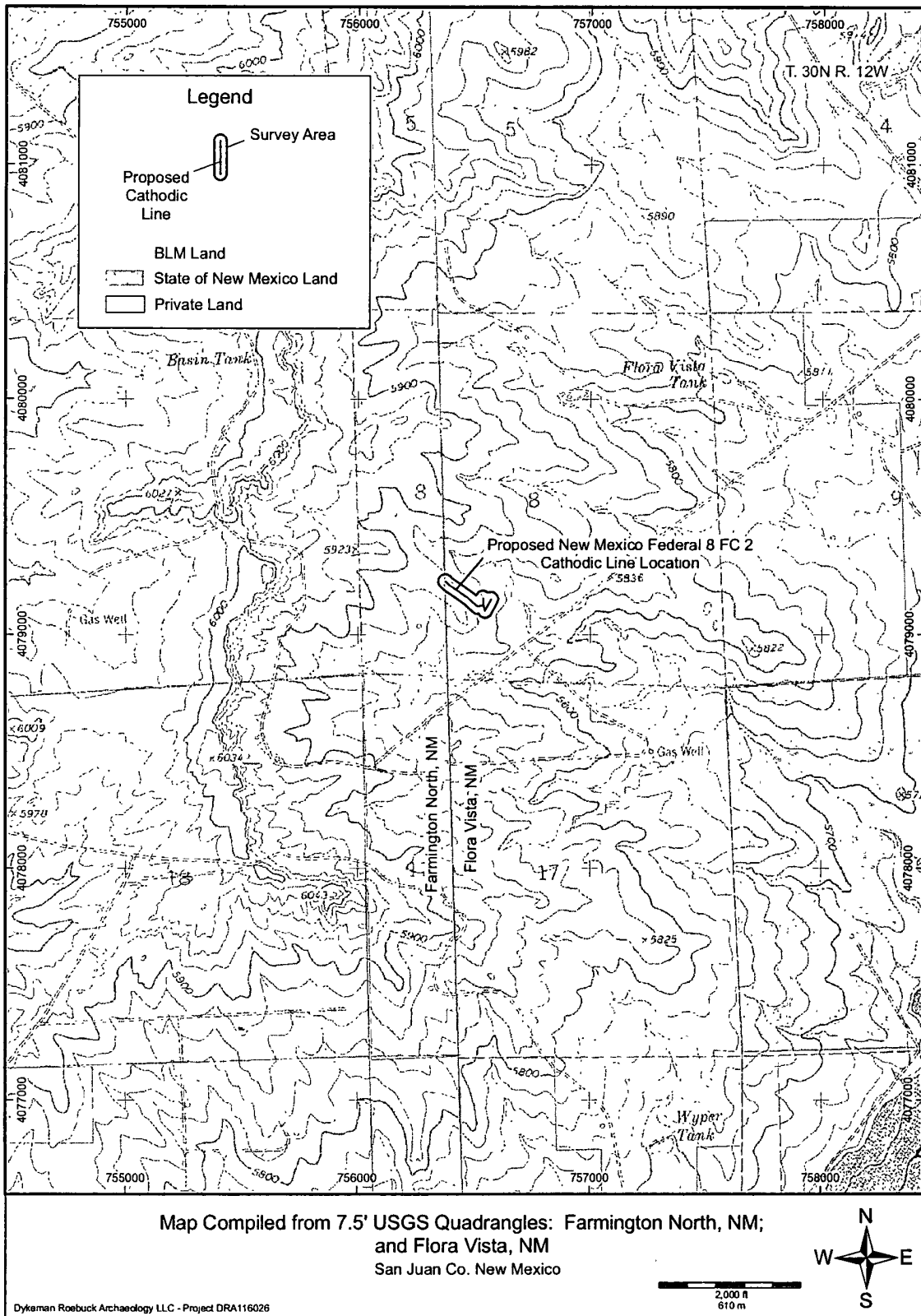
Areas outside known nearby site boundaries monitored? Yes ☐, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG *(site form required)*

| Tested LA number(s) | Excavated LA number(s) |
|---------------------|------------------------|
| | |



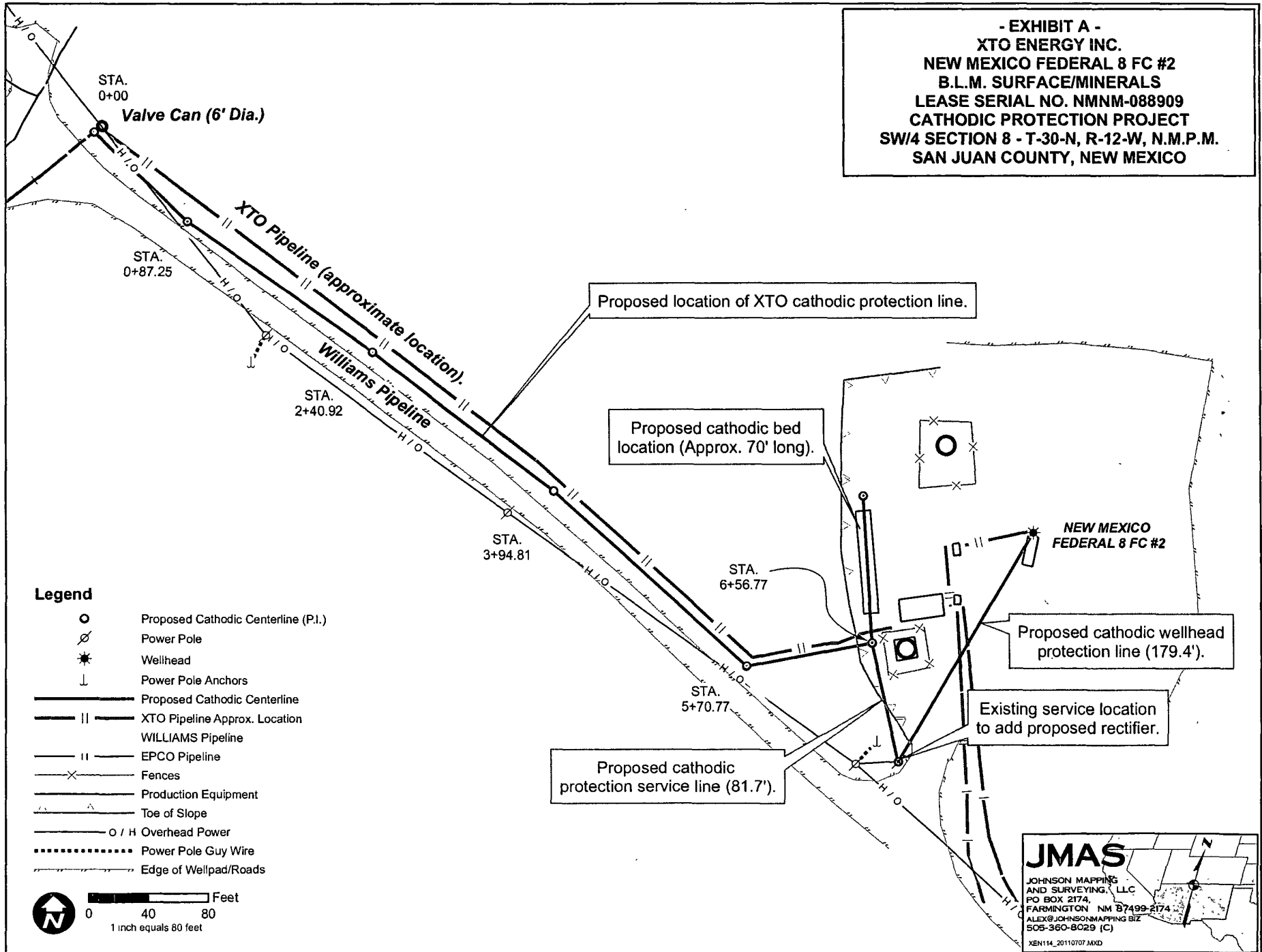
General vicinity map.



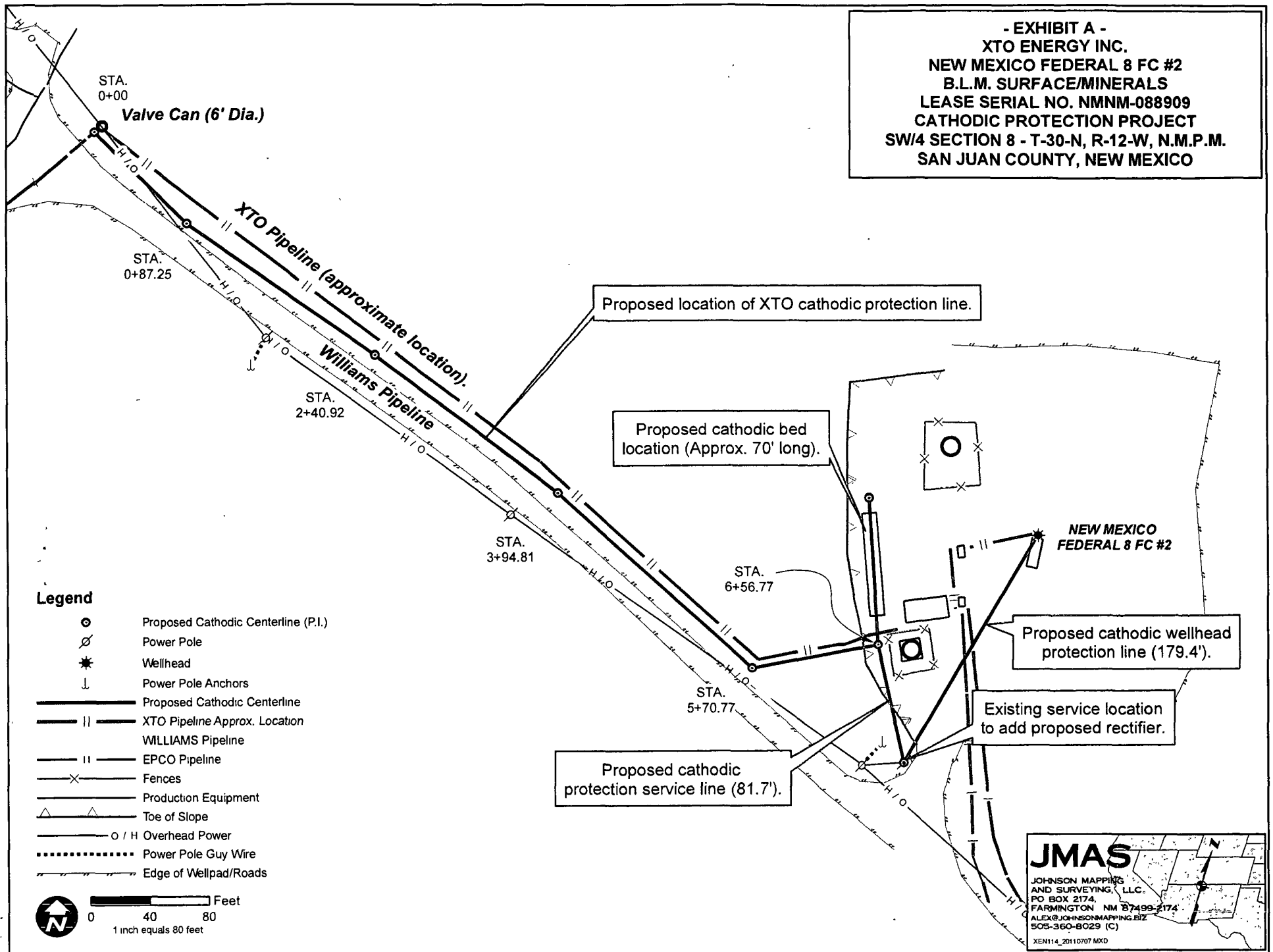
Project area map.

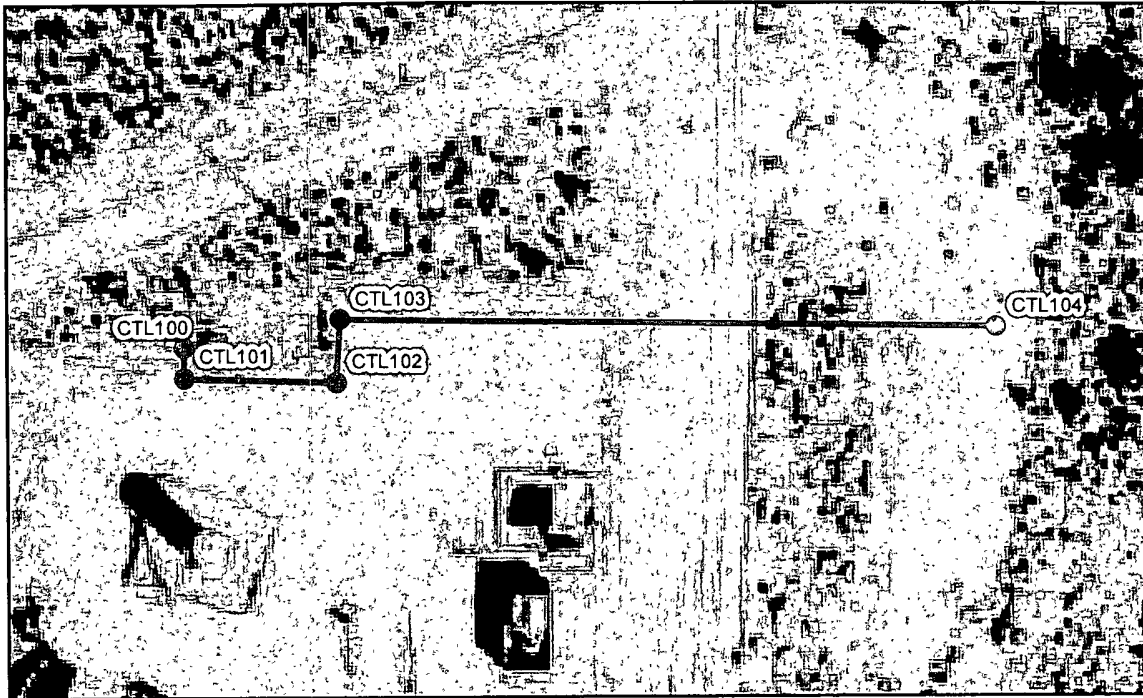
Appendix A
Plat Maps

- EXHIBIT A -
XTO ENERGY INC.
NEW MEXICO FEDERAL 8 FC #2
B.L.M. SURFACE/MINERALS
LEASE SERIAL NO. NMNM-088909
CATHODIC PROTECTION PROJECT
SW/4 SECTION 8 - T-30-N, R-12-W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



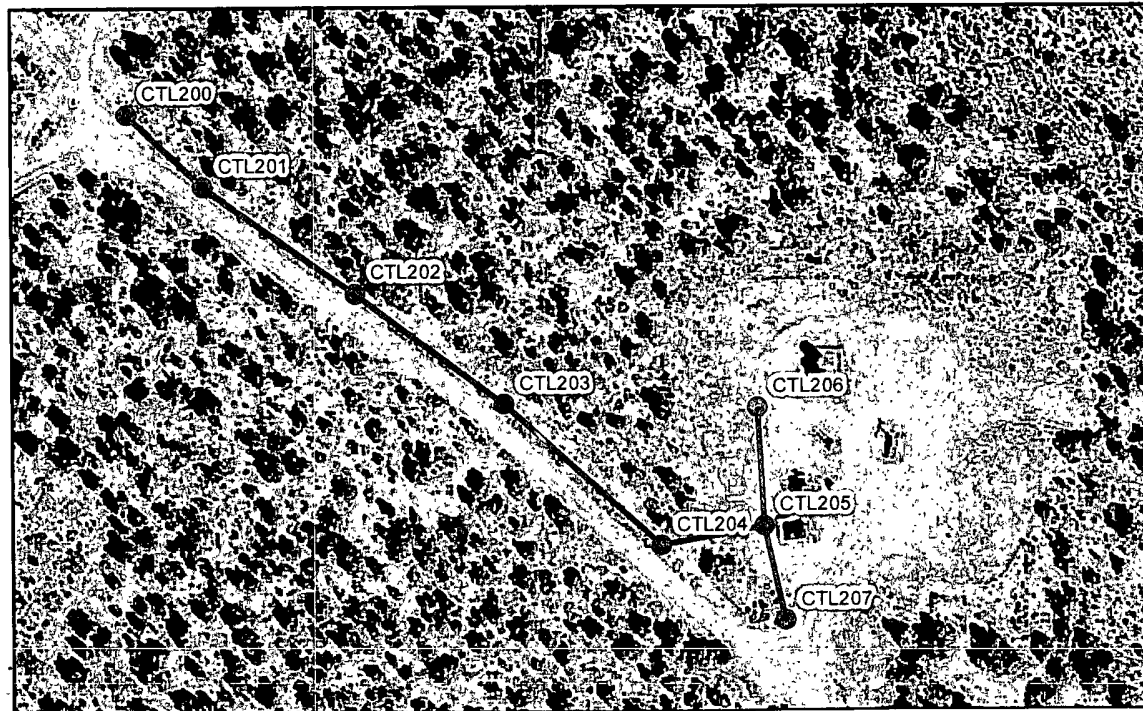
**- EXHIBIT A -
XTO ENERGY INC.
NEW MEXICO FEDERAL 8 FC #2
B.L.M. SURFACE/MINERALS
LEASE SERIAL NO. NMNM-088909
CATHODIC PROTECTION PROJECT
SW/4 SECTION 8 - T-30-N, R-12-W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO**





XTO ENERGY INC.
NEW MEXICO FEDERAL N #5
B.L.M. SURFACE/MINERALS
LEASE SERIAL NO. NMNM-0000047
CATHODIC PROTECTION PROJECT
SW/4 SECTION 7 - T-30-N, R-12-W,
N.M.P.M.

0 30 60 120 Feet
 1 inch equals 60 feet



XTO ENERGY INC.
NEW MEXICO FEDERAL 8 FC #2
B.L.M. SURFACE/MINERALS
LEASE SERIAL NO. NMNM-088909
CATHODIC PROTECTION PROJECT
SW/4 SECTION 8 - T-30-N, R-12-W,
N.M.P.M.

0 75 150 Feet
 1 inch equals 150 feet

