

RESOLUTION OF THE
RESOURCES AND DEVELOPMENT COMMITTEE
23rd Navajo Nation Council --- Fourth Year, 2018

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE; APPROVING THE
GRANT OF RIGHT-OF-WAY TO XTO ENERGY, INC., FOR THE RED PEPPER
AS-BUILT 6-5/8" OD STEEL PIPELINE LOCATED ON NAVAJO NATION TRUST
LANDS IN UPPER FRUITLAND CHAPTER, NAVAJO NATION (SAN JUAN
COUNTY, NEW MEXICO)

BE IT ENACTED:

SECTION ONE. AUTHORITY

Pursuant to 2 N.N.C. Section §501 (B)(2), the Resources and Development Committee of the Navajo Nation Council has the authority to grant final approval for all land withdrawals, non-mineral leases, permits, licenses, rights-of-way, surface easements and bonding requirements on Navajo Nation lands and unrestricted (fee) land. This authority shall include subleases, modifications, assignments, leasehold encumbrances, transfers, renewals, and terminations.

SECTION TWO. FINDINGS

- A. The XTO Energy, Inc., 810 Houston Street, Fort Worth, Texas, has submitted a right-of-way application for the Red Pepper As-Built 6-5/8" OD Steel Pipeline on, over and across Navajo Nation Trust Lands in Upper Fruitland Chapter vicinity, Navajo Nation (San Juan County, New Mexico). The application request is attached hereto and incorporated herein as **Exhibit A**.
- B. The proposed right-of-way consist of Navajo Nation Trust Lands located in San Juan County, New Mexico, and the location is more particularly described in **Exhibits A** and **B**.
- C. The General Land Development Department with the Navajo Division of Natural Resources has determined that land user consents are not required because the land has already been withdrawn. The General Land Development Department memorandum dated December 28, 2017, is attached hereto as **Exhibit C**.

- D. The environmental and archaeological studies has been completed and attached hereto as **Exhibit F**.
- E. The application for the right-of-way has been reviewed by the Fish and Wildlife; Historic Preservation; Minerals; Navajo Nation Environmental Protection; Division of Natural Resources and the Department of Justice and "Approved" or found "Sufficient". See **Exhibit D**.

SECTION THREE. APPROVAL

- A. The Resources and Development Committee of the Navajo Nation Council hereby approves the Grant of Right-of-Way to XTO Energy, Inc., for the Red Pepper As-Built 6-5/8" OD Steel Pipeline on, over and across Navajo Nation Trust Lands in Upper Fruitland Chapter vicinity, Navajo Nation (San Juan County, New Mexico). The location is more particularly described in **Exhibits A and B**.
- B. The Resources and Development Committee of the Navajo Nation Council hereby approves the right-of-way subject to, but not limited to, the following terms and conditions incorporated herein and attached as **Exhibit E**.
- C. The Resources and Development Committee of the Navajo Nation Council hereby authorizes the President of the Navajo Nation to execute any and all documents necessary to affect the intent and purpose of this resolution.

CERTIFICATION

I, hereby, certify that the following resolution was duly considered by the Resources and Development Committee of the 23rd Navajo Nation Council at a duly called meeting at Twin Arrows Public Safety Building, Twin Arrows, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 4 in favor, 0 opposed, 1 abstained on this 25th day of April 2018.



Alton Joe Shepherd, Chairperson
Resources and Development Committee
of the 23rd Navajo Nation Council

Motion: Honorable Benjamin Bennett
Second: Honorable Walter Phelps



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
APPLICATION FOR RIGHT-OF-WAY

RIGHT-OF-WAY APPLICATION MUST IDENTIFY [§169.102(a)]:

1. Applicant Name and Address: XTO Energy Inc., 810 Houston Street, Fort Worth, Texas, 76102
2. Tract(s) or parcel(s) affected by the right-of-way: Township 29 North, Range 14 West, NMPM, Section 15: SE/4; SE/4NE/4; Section 22: E/2E/2; Section 26: W/2SW/4, SW/4SW/4; Section 27: E/2NE/4, NE/4SE/4, San Juan County, New Mexico.
3. General location (easement description): Upper Fruitland Chapter area of Navajo Nation as depicted on attached Survey Plats. Township 29 North, Range 14 West, NMPM, Sections 15,22,26,27.
4. Purpose: To operate an existing 6 5/8" O.D. steel natural gas pipeline (Red Pepper Pipeline) with appurtenances and valves thereto, to gather natural gas from XTO operated wells on Navajo Nation lands applied for herein, and delivers said natural gas to CCI San Juan Processing Gas Plant in Kirtland, NM.
5. Term (Renewal, if applicable): 20 years
6. Identify ownership of permanent improvements associated with the right-of-way and the responsibility for constructing, operating, maintaining, and managing; or removal of permanent improvements under §169.105:

Pipeline is existing with applicable valves and appurtenances thereto. XTO is currently operating the pipeline, and is responsible for maintaining and managing same. No new construction or maintenance requiring surface disturbance is anticipated.

REQUIRED SUPPORTING DOCUMENTS [§169.102(b)]:

1. Accurate legal description of the right-of-way, its boundaries, and parcels associated with the right-of way; ***Attached to application hereto.***

2. A map of definite location of the right-of-way; (25 CFR 169.102((b)(2); survey plat signed by professional surveyor or engineer showing the location, size, and extent of the ROW and other related parcels, with respect to each affected parcel of individually owned land, tribal land, or BIA land and with reference to the public surveys under 25 U.S.C. § 176, 43 U.S.C. § 2 AND § 1764, and showing existing facilities adjacent to the proposed project.) **Attached to application hereto.**
3. Bond(s), insurance, and/or other security meeting the requirements of §169.103; **Attached to application hereto.**
4. Record of notice that the right-of-way was provided to all Indian landowners; **Not applicable as land is Navajo Tribal and Right-of-Way is existing.**
5. Record of consent that the right-of-way meets the requirements of §169.107, or a statement documenting a request for a right-of-way without consent under §169.107(b); **Not applicable as land is Navajo Tribal.**
6. If applicable, a valuation meeting the requirements of §§ 169.110, 112, 114;
7. With each application, if the applicant is a corporation, limited liability company, partnership, joint venture, or other legal entity, except a tribal entity, information such as organizational documents, certificates, filing records, and resolutions, demonstrating that:
 - a. The representative has authority to execute the application;
 - b. The right-of-way will be enforceable against the applicant; and
 - c. The legal entity is in good standing and authorized to conduct business in the jurisdiction where the land is located. **Attached to application hereto.**
8. Current environmental and archaeological reports, surveys, and site assessments, as needed to facilitate compliance with applicable Federal and tribal environmental and land use requirements; **Attached to application hereto.**
9. If required, a statement from the appropriate tribal authority that the proposed right-of-way is in conformance with applicable tribal law.

THE APPLICANT FURTHER STIPULATES AND EXPRESSLY AGREES AS FOLLOWS:

To conform and to abide by all applicable requirements with respect to the right-of-way herein applied for. The applicant agrees to conform to and abide by the rules, regulations, and requirements contained in the *Code of Federal Regulations*, Title 25 Indians, Part 169, as amended, and by reference includes such rules, regulations and requirements as a part of this application to the same effect as if the same were herein set out in full.

Applicant Point of Contact Information:

Name: Paul Lehrman
Company: XTO Energy Inc.
Address 382 CR 3100
City: Aztec
State: New Mexico
Zip: 87410
Phone: 505-333-3172 Cell 505-486-0066
Fax: 505-333-3280
Email: paul_lehrman@xtoenergy.com

DATE: August 5, 2016

APPLICANT: XTO Energy Inc.

IN WITNESS WHEREOF, Edwin S. Ryan, Jr., Senior Vice President-Land for XTO Energy Inc.,
has caused this instrument to be executed this 5th day of August, 2016.



Edwin S. Ryan, Jr.
Senior Vice President-Land



Witness

5-5429
Nov. 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

EVIDENCE OF AUTHORITY OF OFFICERS TO EXECUTE PAPERS

(To be sworn to by secretary or president of a corporation and sealed with its seal)

I solemnly swear that Edwin S. Ryan, Jr. on the
5th day of August, 2016, the duly elected, qualified, and acting Sr. Vice
President – Land respectively, of XTO Energy Inc.
a corporation organized under the laws of Delaware on which day they executed Application for
Right of Way mining * 14-20-603-2199 and 14-20-603-2198 and 14-20-603-2172 for and in behalf of
said corporation, covering certain trust or Restricted Indian Lands, on the
Navajo Reservation, in the State of New Mexico; that they
were fully empowered to execute said instrument and all papers in connection therewith, and that their action in
executing the same binds the
said corporation to full performance of all obligations thereunder.

(CORPORATE SEAL)

By:

Warren J. Ludlow
Warren J. Ludlow- Assistant Secretary

This 5th day of August, 2016

Subscribed and sworn to before me this 5th day of August, 2016.

(Signed)

Stacy Lynn Whiteley
Notary Public



* Indicate whether lease, bond, or assignment.



Paul M. Lehrman
Sr. Staff Surface Landman
San Juan District

Western Division
382 Road 3100
Aztec, NM 87410
Office: (505) 333-3100
Direct: (505) 333-3172
Cell: (505) 486-0066
Fax: (505) 333-3673
paul_lehrman@xtoenergy.com
An **ExxonMobil** Subsidiary

XTO Energy Inc.
382 Road 3100
Aztec, New Mexico 87410
Office: 505.333.3100
Fax: 505.333.3280

February 2, 2017

Ms. Michelle Hoskie
Navajo Nation Land Department
Real Estate Services
Post Office 2249
Window Rock, AZ 86515



Re: XTO Energy Red Pepper Pipeline Application
Existing 6 5/8" O.D. Natural Gas Pipeline
Township 29 North, Range 14 West, NMPM
Various Sections
San Juan County, New Mexico,

Dear Ms. Hoskie:

XTO Energy Inc. is making application to the Navajo Nation and the Bureau of Indian Affairs Real Estate Services, Northern Agency, for an **existing** 6 5/8" O.D. natural gas pipeline (Red Pepper Pipeline) that runs through a portion of the Upper Fruitland Chapter Service Area. This pipeline services 45 natural gas wells operated by XTO Energy (**Navajo Nation Minerals**).

My contact information is as follows:

XTO Energy Inc., 382 CR 3100, Aztec, New Mexico 87410.

Name: Paul Lehrman
Address: 382 CR 3100
Aztec, New Mexico 87410
Telephone: (505) 333-3172 office or (505) 486-0066 (Cellular #)
Facsimile: (505) 333-3280

If you have any questions, please feel free to call me at the above numbers.

Sincerely,

Paul Lehrman
Sr. Staff Surface Landman

Enclosures: Application for Grant of Right-of-Way (BIA)
Evidence of Authority to Execute Papers
Maps, Clearances, FONSI, etc.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS**

NATIONWIDE OIL AND GAS LEASE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, XTO Energy Inc

of 810 Houston Street, Fort Worth, Texas 76102, as principal____,
and Travelers Casualty and Surety Company of America of
One Tower Square 3PB, Hartford, CT 06183

_____, as suret y____, are held and firmly bound unto the United States of America in the sum of one hundred and fifty thousand dollars (\$150,000), lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 10th day of December, 20 04.

The condition of this obligation is such that whereas the said principal____, as lessee/operator____, ha s heretofore or may hereafter enter into or otherwise acquire an interest in oil and gas leases(s)/permit(s)/mineral agreement(s) of various dates and periods of duration covering lands or interests held by the United States in trust for Individual Indians, or bands or tribes of Indians, or subject to restrictions against alienation without the consent of the Secretary of the Interior, or his authorized representative, which leases, permits or mineral agreements have been or may hereafter be granted or approved by the Secretary of the Interior, or his authorized representative, and the identification of which herein is expressly waived by both principal____ and suret y hereto.

WHEREAS the principal____ and suret y agree that the coverage of this bond shall extend to and include all extensions and renewals of the leases, permits and mineral agreements covered by this bond, such coverage to continue without any interruptions due to the expiration of the terms set forth therein.

WHEREAS the suret y hereby waive s any right to notice of any modification of any such lease, permit or mineral agreement, or obligation thereunder whether effected by extension of time for performance, by commitment of such lease/permit/mineral agreement to unit, cooperative, or communitization agreement, by waiver, suspension, or change in rental, by minimum royalty payment, or otherwise, this bond to remain in full force and effect notwithstanding.

WHEREAS the principal____ and suret y agree that the neglect or forbearance of the obligee under this bond in enforcing the payment of any rental or royalty or the performance of any other covenant, condition, or agreement of any such lease/permit/mineral agreement or Federal regulations shall not in any way release the principal____ and suret y, or either of them, from any liability under this bond; and

WHEREAS the principal____ and suret y agree that in the event of any default under any such lease, permit or mineral agreement, the obligee may prosecute any claim, suit, action, or other proceeding against the principal____ and suret y, or either of them, without the necessity of joining the other.

Now, if the said principal____ herein shall faithfully carry out and observe all the obligations assumed in said lease(s), permit(s) or mineral agreement(s) to which Principal
_____ is now or may hereafter become a party, and shall observe all the laws of the United States and regulations made, or which shall be made thereunder, for the

government of trade and intercourse with Indian tribes, and all rules and regulations that have been or shall hereafter be lawfully prescribed by the Secretary of the Interior relative to such lease(s), permit(s) and mineral agreement(s), and shall in all particulars comply with the provisions of said leases, permits, mineral agreements, rules and regulations, then the obligation shall be null and void; otherwise, to remain in full force and effect. No bond liability shall be terminated without written approval of the Bureau of Indian Affairs.

The rate of premium charged on this bond is \$ 12.50; the total premium paid is \$ 1,875.00.

Signed and sealed in the presence of –
WITNESSES*

P.O. 810 Houston Street, Ft Worth, TX

P.O. 810 Houston Street, Ft Worth, TX

P.O. 777 Main St., Ste C-50, Ft Worth, TX

P.O. 777 Main St., Ste C-50, Ft Worth, TX

P.O. _____

P.O. _____

P.O. _____

P.O. _____

*Two witnesses to all signatures

XTO Energy Inc

as to *Frank D. An Rld* [SEAL]

as to *Teresa Godsey* [SEAL]
Teresa Godsey, Attorney-in-Fact

as to _____ [SEAL]

as to _____ [SEAL]

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
OFFICE OF THE DEPUTY
BUREAU DIRECTOR - TRUST SERVICES
1849 C ST., NW, MS 4639-MIB
WASHINGTON, D.C. 20240

Approved: *Matt in* *5/27/05*



OFFICE OF THE
PUBLIC REGULATION COMMISSION

CERTIFICATE OF GOOD STANDING AND COMPLIANCE

IT IS HEREBY CERTIFIED THAT:

XTO ENERGY INC.

1522747

a corporation organized under the laws of
DELAWARE

is duly authorized to transact business in New Mexico, as a
Foreign Profit corporation, under the

BUSINESS CORPORATION ACT

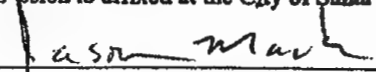
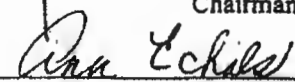
(53-17-1 to 53-17-20 NMSA 1978)

having filed its application on APRIL 13, 1991
Certificate of Authority issued as of said date.

IT IS FURTHER CERTIFIED that fees due the Public Regulation Commission, which have been assessed against the aforesaid corporation have been paid to date and aforesaid corporation is in corporate good standing & duly authorized to transact business as its corporate existence has not been revoked in New Mexico. This certificate is not to be construed as an endorsement, recommendation, or approval of the corporations financial condition or business activities and practices. This certificate of Good Standing and Compliance expires on MARCH 15, 2010

DATED: MARCH 31, 2008

In testimony whereof, the Public Regulation of the State of New Mexico has caused this certificate to be signed by its Chairman and the seal of said Commission to affixed at the City of Santa Fe.


Chairman

Bureau Chief
AJ

Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "XTO ENERGY INC.", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF JUNE, A.D. 2006, AT 1:08 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



2243325 3100

060596839

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 4843814

DATE: 06-21-06

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:37 PM 06/21/2006
FILED 01:08 PM 06/21/2006
SRV 060596839 - 2243325 FILE

**XTO ENERGY INC.
RESTATED CERTIFICATE OF INCORPORATION**

XTO Energy Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

1 The name of the Corporation is XTO Energy Inc. XTO Energy Inc. was originally incorporated under the name Cross Timbers Oil Company, and the original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on October 9, 1990.

2 Pursuant to Section 245 of the General Corporation Law of the State of Delaware, this Restated Certificate of Incorporation only restates and integrates and does not further amend the provisions of the Certificate of Incorporation of this Corporation, as theretofore amended or supplemented, and there is no discrepancy between those provisions and the provisions of this Restated Certificate of Incorporation. This Restated Certificate of Incorporation has been duly adopted in accordance with Section 245 of the General Corporation Law of the State of Delaware.

3 The text of the Certificate of Incorporation as heretofore amended or supplemented is hereby restated and integrated to read in its entirety as follows:

ARTICLE ONE

The name of the Corporation is XTO Energy Inc.

ARTICLE TWO

The address of the Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808, and the name of its registered agent at such address is Corporation Service Company.

ARTICLE THREE

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware ("Act").

ARTICLE FOUR

The Corporation shall have authority to issue two classes of stock, and the total number authorized shall be one billion (1,000,000,000) shares of Common Stock of the par value of one cent (\$0.01) per share, and twenty-five million (25,000,000) shares of Preferred Stock of the par value of one cent (\$0.01) per share. A description of the different classes of stock of the Corporation and a statement of the designations and the powers, preferences and rights, and the

qualifications, limitations or restrictions thereof, in respect of each class of such stock are as follows:

1. *Issuance in Class or Series.* The Common Stock or Preferred Stock may be issued from time to time in one or more series, or either or both of the Common or Preferred Stock may be divided into additional classes and such classes into one or more series. The terms of a class or series, including all rights and preferences, shall be as specified in the resolution or resolutions adopted by the Board of Directors designating such class or series which resolution or resolutions the Board of Directors is hereby expressly authorized to adopt. Such resolution or resolutions with respect to a class or series shall specify all or such of the rights or preferences of such class or series as the Board of Directors shall determine, including, without limitation, any or all of the following, if applicable: (a) the number of shares to constitute such class or series and the distinctive designation thereof; (b) the dividend or manner for determining the dividend payable with respect to the shares of such class or series and the date or dates from which dividends shall accrue, whether such dividends shall be cumulative, and, if cumulative, the date or dates from which dividends shall accumulate and whether the shares in such class or series shall be entitled to preference or priority over any other class or series of stock of the Corporation with respect to payment of dividends; (c) the terms and conditions, including price or a manner for determining the price, of redemption, if any, of the shares of such class or series; (d) the terms and conditions of a retirement or sinking fund, if any, for the purchase or redemption of the shares of such class or series; (e) the amount which the shares of such class or series shall be entitled to receive, if any, in the event of any liquidation, dissolution or winding up of the Corporation and whether such shares shall be entitled to a preference or priority over shares of another class or series with respect to amounts received in connection with any liquidation, dissolution or winding up of the Corporation; (f) whether the shares of such class or series shall be convertible into, or exchangeable for, shares of stock of any other class or classes, or any other series of the same or any other class or classes of stock, of the Corporation and the terms and conditions of any such conversion or exchange; (g) the voting rights, if any, of shares of stock of such class or series in addition to those granted herein, if any; (h) the status as to reissuance or sale of shares of such class or series redeemed, purchased or otherwise reacquired or surrendered to the Corporation on conversion; (i) the conditions and restrictions, if any, on the payment of dividends or on the making of other distributions on, or the purchase, redemption or other acquisition by the Corporation or any subsidiary, of any other class or series of stock of the Corporation ranking junior to such shares as to dividends or upon liquidation; (j) the conditions, if any, on the creation of indebtedness of the Corporation, or any subsidiary; and (k) such other preferences, rights, restrictions and qualifications as the Board of Directors may determine.

All shares of the Common Stock shall rank equally and all shares of the Preferred Stock shall rank equally, and be identical within their classes in all respects regardless of series, except as to terms which may be specified by the Board of Directors pursuant to the above provisions. All shares of any one series of a class of Common or Preferred Stock shall be of equal rank and identical in all respects, except that shares of any one series issued at different times may differ as to the dates which dividends thereon shall accrue and be cumulative.

2. *Other Provisions.* Shares of Common Stock or Preferred Stock of any class or series may be issued with such voting powers, full or limited, or no voting powers, and such

designations, preferences and relative participating, option or special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the resolution or resolutions providing for the issuance of such stock adopted by the Board of Directors. Any of the voting powers, designations, preferences, rights and qualifications, limitations or restrictions of any such class or series of stock may be made dependent upon facts ascertainable outside the resolution or resolutions of the Board of Directors providing for the issue of such stock by the Board of Directors, provided the manner in which such facts shall operate upon the voting powers, designations, preferences, rights and qualifications, limitations or restrictions of such class or series is clearly set forth in the resolution or resolutions providing for the issue of such stock adopted by the Board of Directors.

3. *Common Stock.* Except as otherwise provided in any resolution or resolutions adopted by the Board of Directors providing for the issuance of a class or series of Common Stock or Preferred Stock, the Common Stock shall (a) have the exclusive voting power of the Corporation; (b) entitle the holders thereof to one vote per share at all meetings of the stockholders of the Corporation; (c) entitle the holders to share ratably, without preference over any other shares of the Corporation in all assets of the Corporation in the event of any dissolution, liquidation or winding up of the Corporation; and (d) entitle the record holders thereof on such record dates as are determined, from time to time, by the Board of Directors to receive such dividends, if any, if, as and when declared by the Board of Directors.

4. *Series A Junior Participating Preferred Stock.* The voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof, of the Corporation's Series A Junior Participating Preferred Stock are set forth in Appendix A hereto and are incorporated herein by reference.

ARTICLE FIVE

The Corporation is to have perpetual existence.

ARTICLE SIX

1. *Number, Election and Term of Directors.* The business and affairs of the Corporation shall be managed by a Board of Directors, which, subject to the rights of holders of shares of any class or series of Preferred Stock of the Corporation then outstanding to elect additional directors under specified circumstances, shall consist of not less than three nor more than twenty-one persons. The exact number of directors within the minimum and maximum limitations specified in the preceding sentence shall be fixed from time to time by either (i) the Board of Directors pursuant to a resolution adopted by a majority of the entire Board of Directors, or (ii) the affirmative vote of the holders of 80% or more of the voting power of all of the shares of the Corporation entitled to vote generally in the election of directors voting together as a single class. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director. Each director shall hold office until his successor is elected and qualified.

2. *Stockholder Nomination of Director Candidates.* Advance notice of stockholder nominations for the election of directors shall be submitted to the Board of Directors at least 120 days in advance of the scheduled date for the next annual meeting of stockholders.

3. *Newly-Created Directorships and Vacancies.* Subject to the rights of the holders of any series of any Preferred Stock then outstanding, newly-created directorships resulting from any increase in the authorized number of directors and any vacancies in the Board of Directors resulting from the death, resignation, retirement, disqualification, removal from office or other cause may be filled by a majority vote of the directors then in office even though less than a quorum, or by a sole remaining director.

4. *Amendment, Repeal, etc.* Notwithstanding anything contained in this Certificate of Incorporation to the contrary, the affirmative vote of the holders of 80% or more of the voting power of all of the shares of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to alter, amend or adopt any provision inconsistent with or repeal this Article Six, or to alter, amend, adopt any provision inconsistent with or repeal comparable sections of the Bylaws of the Corporation provided, however, that the maximum number of directors that the Corporation may have may be increased to more than twenty-one by the vote of the holders of a majority or more of the shares of the Corporation entitled to vote thereon.

5. *Amendment of Bylaws* In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, alter or repeal the Bylaws of the Corporation.

ARTICLE SEVEN

Subject to the rights of the holders of any series of Preferred Shares then outstanding, any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders of the Corporation and may not be effected by any consent in writing by such stockholders unless all of the stockholders entitled to vote thereon consent thereto in writing. Notwithstanding anything contained in this Certificate of Incorporation to the contrary, the affirmative vote of the holders of 80% or more of the voting power of all the shares of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to call a special meeting of stockholders or to alter, amend, adopt any provision inconsistent with or repeal this Article Seven, or to alter, amend, adopt any provision inconsistent with comparable sections of the Bylaws.

ARTICLE EIGHT

The Board of Directors is hereby authorized to create and issue, whether or not in connection with the issuance and sale of any of its stock or other securities, rights (the "Rights") entitling the holders thereof to purchase from the Corporation shares of capital stock or other securities. The times at which and the terms upon which the Rights are to be issued will be determined by the Board of Directors and set forth in the contracts or instruments that evidence

the Rights. The authority of the Board of Directors with respect to the Rights shall include, but not be limited to, determination of the following:

- (a) The initial purchase price per share of the capital stock or other securities of the Corporation to be purchased upon exercise of the Rights.
- (b) Provisions relating to the times at which and the circumstances under which the Rights may be exercised or sold or otherwise transferred, either together with or separately from, any other securities of the Corporation.
- (c) Provisions that adjust the number or exercise price of the Rights or amount or nature of the securities or other property receivable upon exercise of the Rights in the event of a combination, split or recapitalization of any capital stock of the Corporation, a change in ownership of the Corporation's securities or a reorganization, merger, consolidation, sale of assets or other occurrence relating to the Corporation or any capital stock of the Corporation, and provisions restricting the ability of the Corporation to enter into any such transaction absent an assumption by the other party or parties thereto of the obligations of the Corporation under such Rights.
- (d) Provisions that deny the holder of a specified percentage of the outstanding securities of the Corporation the right to exercise the Rights and/or cause the Rights held by such holder to become void.
- (e) Provisions that permit the Corporation to redeem the Rights.
- (f) The appointment of a Rights Agent with respect to the Rights.

ARTICLE NINE

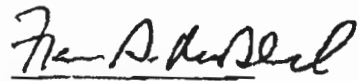
The Corporation shall have the power to indemnify its present or former directors, officers, employees and agents or any person who served or is serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise to the full extent permitted by the General Corporation Law of Delaware. Such indemnification shall not be deemed exclusive of any other rights to which such person may be entitled, under any bylaws, agreements, vote of stockholders or disinterested directors, or otherwise.

ARTICLE TEN

A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages or breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involved intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Act, or, (iv) for any transaction from which the director derived an improper personal benefit.

IN WITNESS WHEREOF, XTO Energy Inc. has caused this Restated Certificate of Incorporation to be executed by its duly authorized officer on this 21st day of June, 2006.

XTO ENERGY INC.

By: 
Frank G. McDonald
Senior Vice President

Appendix A

CERTIFICATE OF DESIGNATION

of

SERIES A JUNIOR PARTICIPATING PREFERRED STOCK

of

XTO ENERGY INC.

Pursuant to Section 151 of the General Corporation Law
of the State of Delaware

XTO Energy Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, in accordance with the provisions of Section 103 thereof, DOES HEREBY CERTIFY:

That pursuant to the authority vested in the Board of Directors in accordance with the provisions of the Second Restated Certificate of Incorporation of the said Corporation, the said Board of Directors on August 25, 1998 adopted the following resolution creating a series of 70,000 shares of Preferred Stock designated as "Series A Junior Participating Preferred Stock":

RESOLVED, that pursuant to the authority vested in the Board of Directors of this Corporation in accordance with the provisions of the Second Restated Certificate of Incorporation, a series of Preferred Stock, par value \$.01 per share, of the Corporation be and hereby is created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative, participating, optional or other rights of the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

Series A Junior Participating Preferred Stock

1. *Designation and Amount* There shall be a series of Preferred Stock that shall be designated as "Series A Junior Participating Preferred Stock," and the number of shares constituting such series shall be 70,000. Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, however, that no decrease shall reduce the number of shares of Series A Junior Participating Preferred Stock to less than the number of shares then issued and outstanding plus the number of shares issuable upon exercise of outstanding rights, options or warrants or upon conversion of outstanding securities issued by the Corporation.

2 Dividends and Distribution

(A) Subject to the prior and superior rights of the holders of any shares of any class or series of stock of the Corporation ranking prior and superior to the shares of Series A Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series A Junior Participating Preferred Stock, in preference to the holders of shares of any class or series of stock of the Corporation ranking junior to the Series A Junior Participating Preferred Stock in respect thereof, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the 15th day of January, April, July and October, in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Junior Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$10.00 or (b) the Adjustment Number (as defined below) times the aggregate per share amount of all cash dividends, and the Adjustment Number times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock, par value \$.01 per share, of the Corporation (the "Common Stock") since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Junior Participating Preferred Stock. The "Adjustment Number" shall initially be 1000. In the event the Corporation shall at any time after September 15, 1998 (i) declare and pay any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Junior Participating Preferred Stock as provided in paragraph (A) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock).

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Junior Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Junior Participating Preferred Stock in an

amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 60 days prior to the date fixed for the payment thereof.

3. *Voting Rights* The holders of shares of Series A Junior Participating Preferred Stock shall have the following voting rights:

(A) Each share of Series A Junior Participating Preferred Stock shall entitle the holder thereof to a number of votes equal to the Adjustment Number on all matters submitted to a vote of the stockholders of the Corporation.

(B) Except as required by law and by Section 10 hereof, holders of Series A Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

(C) If, at the time of any annual meeting of stockholders for the election of directors, the equivalent of six quarterly dividends (whether or not consecutive) payable on any share or shares of Series A Junior Participating Preferred Stock are in default, the number of directors constituting the Board of Directors of the Company shall be increased by two. In addition to voting together with the holders of Common Stock for the election of other directors of the Company, the holders of record of the Series A Junior Participating Preferred Stock, voting separately as a class to the exclusion of the holders of Common Stock, shall be entitled at said meeting of stockholders (and at each subsequent annual meeting of stockholders), unless all dividends in arrears on the Series A Junior Participating Preferred Stock have been paid or declared and set apart for payment prior thereto, to vote for the election of two directors of the Company, the holders of any Series A Junior Participating Preferred Stock being entitled to cast a number of votes per share of Series A Junior Participating Preferred Stock as is specified in paragraph (A) of this Section 3. Each such additional director shall not be a member of Class I, Class II, or Class III of the Board of Directors of the Company, but shall serve until the next annual meeting of stockholders for the election of directors, or until his successor shall be elected and shall qualify, or until his right to hold such office terminates pursuant to the provisions of this Section 3(C). Until the default in payments of all dividends which permitted the election of said directors shall cease to exist, any director who shall have been so elected pursuant to the next preceding sentence may be removed at any time, without cause, only by the affirmative vote of the holders of the shares of Series A Junior Participating Preferred Stock at the time entitled to cast a majority of the votes entitled to be cast for the election of any such director at a special meeting of such holders called for that purpose, and any vacancy thereby created may be filled by the vote of such holders. If and when such default shall cease to exist, the holders of the Series A Junior Participating Preferred Stock shall be divested of the foregoing special voting rights, subject to re-vesting in the event of each and every subsequent like default in payments of dividends. Upon the termination of the foregoing special voting rights, the terms of office of all persons who may have been elected directors pursuant to said special voting rights shall

forthwith terminate, and the number of directors constituting the Board of Directors shall be reduced by two. The voting rights granted by this Section 3(C) shall be in addition to any other voting rights granted to the holders of the Series A Junior Participating Preferred Stock in this Section 3.

4. *Certain Restrictions.*

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Junior Participating Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Junior Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock;

(ii) declare or pay dividends on or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock, except dividends paid ratably on the Series A Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled; or

(iii) purchase or otherwise acquire for consideration any shares of Series A Junior Participating Preferred Stock, or any shares of stock ranking on a parity with the Series A Junior Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of Series A Junior Participating Preferred Stock, or to such holders and holders of any such shares ranking on a parity therewith, upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

5. *Reacquired Shares.* Any shares of Series A Junior Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired promptly after the acquisition thereof. All such shares shall upon their retirement become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to any conditions and restrictions on issuance set forth herein.

6. *Liquidation, Dissolution or Winding Up.*

(A) Upon any liquidation, dissolution or winding up of the Corporation, voluntary or otherwise, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Junior Participating Preferred Stock shall have received an amount per share (the "Series A Liquidation Preference") equal to the greater of (i) \$10.00 plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, or (ii) the Adjustment Number times the per share amount of all cash and other property to be distributed in respect of the Common Stock upon such liquidation, dissolution or winding up of the Corporation.

(B) In the event, however, that there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other classes and series of stock of the Corporation, if any, that rank on a parity with the Series A Junior Participating Preferred Stock in respect thereof, then the assets available for such distribution shall be distributed ratably to the holders of the Series A Junior Participating Preferred Stock and the holders of such parity shares in proportion to their respective liquidation preferences.

(C) Neither the merger or consolidation of the Corporation into or with another corporation nor the merger or consolidation of any other corporation into or with the Corporation shall be deemed to be a liquidation, dissolution or winding up of the Corporation within the meaning of this Section 6.

7. *Consolidation, Merger, Etc.* In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the outstanding shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Junior Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share equal to the Adjustment Number times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged.

8. *No Redemption.* Shares of Series A Junior Participating Preferred Stock shall not be subject to redemption by the Company.

9. *Ranking.* The Series A Junior Participating Preferred Stock shall rank junior to all other series of the Preferred Stock as to the payment of dividends and as to the distribution of assets upon liquidation, dissolution or winding up, unless the terms of any such series shall provide otherwise, and shall rank senior to the Common Stock as to such matters.

10. *Amendment.* At any time that any shares of Series A Junior Participating Preferred Stock are outstanding, the Certificate of Incorporation of the Corporation shall not be amended in any manner which would materially alter or change the powers, preferences or

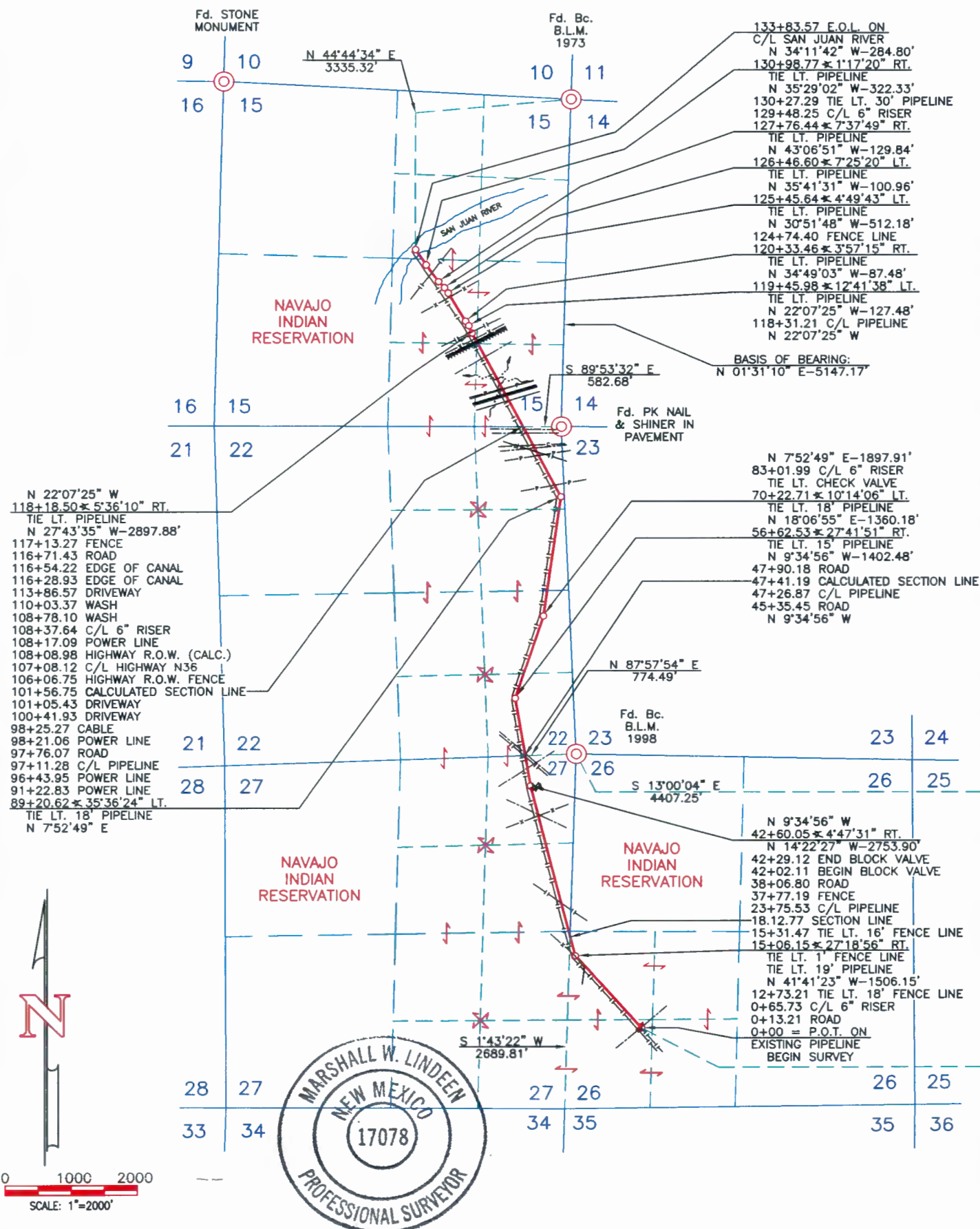
special rights of the Series A Junior Participating Preferred Stock so as to affect them adversely without the affirmative vote of the holders of two-thirds of the outstanding shares of Series A Junior Participating Preferred Stock, voting separately as a class.

11. *Fractional Shares* Series A Junior Participating Preferred Stock may be issued in fractions of a share that shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Junior Participating Preferred Stock.

XTO ENERGY, INC.

EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE

LOCATED IN SECTIONS 15, 22, 26 & 27, T-29-N, R-14-W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO



NOTES:

1. BASIS OF BEARING: AS MEASURED BETWEEN THE SOUTHWEST CORNER & THE NORTHWEST CORNER OF SECTION 14, T-29-N, R-14-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. BEARS: N 1°31'10" E - 5147.17'
2. ALL BEARINGS/DISTANCES SHOWN ARE NEW MEXICO STATE PLANE WEST, NAD 83 IN FEET. (COMBINED SCALE FACTOR: 0.999667)

I, MARSHALL W. LINDEEN, BEING A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION IN 2007 AND UPDATED IN 2015; AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Marshall W. Lindeen
MARSHALL W. LINDEEN P.S. #17078

9-7-16

DATE

OWNER	STATION	FEET/RODS/ACRES
NAVAJO INDIAN RESERVATION	0+00 TO 133+83.57	13383.57/811.125/9.217

 FARMINGTON, NEW MEXICO		 P.O. BOX 3861 FARMINGTON, NM 87489 OFFICE: (505) 334-0408	
SURVEYED:	02/03/15, 02/26/15	REV. DATE:	09/06/16
DRAWN BY:	C.B.	DATE DRAWN:	3/06/07
		APP. BY:	M.W.L.
		FILE NAME:	

LEGAL DESCRIPTION
OF
EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE
ACROSS THE
NAVAJO INDIAN RESERVATION
FOR
XTO ENERGY, INC.
SEPTEMBER 6, 2016

THE DESCRIPTION OF A 30 FOOT WIDE RIGHT-OF-WAY, FOR AN EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE, SITUATED IN SECTIONS 15, 22, 26 AND 27, TOWNSHIP 29 NORTH, RANGE 14 WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO, BEING 15 FEET ON EITHER SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT A POINT ON SAID EXISTING NATURAL GAS PIPELINE, LOCATED IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 26. SAID POINT BEARS SOUTH 13°00'04" EAST, 4407.25 FEET FROM A FOUND B.L.M. BRASS CAP FOR THE NORTHWEST CORNER OF SAID SECTION 26;

THENCE NORTH 41°41'23" WEST, 1506.15 FEET;

THENCE NORTH 14°22'27" WEST, 2753.90 FEET;

THENCE NORTH 9°34'56" WEST, 1402.48 FEET;

THENCE NORTH 18°06'55" EAST, 1360.18 FEET;

THENCE NORTH 7°52'49" EAST, 1897.91 FEET;

THENCE NORTH 27°43'35" WEST, 2897.88 FEET;

THENCE NORTH 22°07'25" WEST, 127.48 FEET;

THENCE NORTH 34°49'03" WEST, 87.48 FEET;

THENCE NORTH 30°51'48" WEST, 512.18 FEET;

THENCE NORTH 35°41'31" WEST, 100.96 FEET;

THENCE NORTH 43°06'51" WEST, 129.84 FEET;

THENCE NORTH 35°29'02" WEST, 322.33 FEET;

THENCE NORTH 34°11'42" WEST, 284.80 FEET TO THE **POINT OF TERMINUS**, SAID POINT BEING ON THE EXISTING CENTERLINE OF THE SAN JUAN RIVER, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 15. FROM SAID POINT A FOUND 1973 B.L.M. BRASS CAP AT THE NORTHEAST CORNER OF SAID SECTION 15, BEARS NORTH 44°44'34" EAST, 3335.32 FEET.

THE TOTAL LENGTH OF PIPELINE RIGHT-OF-WAY ACROSS THE NAVAJO INDIAN RESERVATION, AS DESCRIBED ABOVE, IS 13,383.57 FEET OR 811.125 RODS, CONTAINING 9.217 ACRES OF LAND, MORE OR LESS.

BEARINGS AND DISTANCES CONTAINED IN THIS DESCRIPTION ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983. BASIS OF BEARING BEING THE MONUMENTED WEST LINE OF SECTION 14, TOWNSHIP 29 NORTH, RANGE 14 WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. BEARS: NORTH 1°31'10" EAST A DISTANCE OF 5147.17 FEET.

I, MARSHALL W. LINDEEN, BEING A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS DESCRIPTION WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS DESCRIPTION ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.


MARSHALL W. LINDEEN P.S. #17078

9-7-16

DATE



REFERENCE DRAWING: 10936P01



THE NAVAJO NATION

RUSSELL BEGAYE **PRESIDENT**
JONATHAN NEZ **VICE PRESIDENT**



MEMORANDUM

To: SAS/DNR 164 Reviewers

From: Stevie Rae Hudson
Stevie Rae Hudson, Senior Office Specialist
General Land Development Department
DIVISION OF NATURAL RESOURCES

Date: December 28, 2017

Subject: DOC NO. 7566 – Land User Consent Requirement

Please be informed that the land user/grazing permittees consent is not required for this project because the land has been withdrawn previously. The XTO Energy ROW – Red Pepper has been disturbed and is an existing natural gas pipeline. Therefore, the consent by the land user/grazing permittee(s) is not needed or required.

If you should have any questions regarding this package, please contact our office directly at (928) 871-6447. Thank you!



Document No. 007566

Date Issued: 02/13/2017

EXECUTIVE OFFICIAL REVIEW

Title of Document: XTO Energy, ROW Red Pepper Pipeline Contact Name: YAZZIE, ELERINA B

Program/Division: DIVISION OF NATURAL RESOURCES

Email: michellehoskie@frontier.com Phone Number: 928-871-6447

☐ **Business Site Lease** Sufficient Insufficient

- | | | | |
|---|-------------|---|---|
| 1. Division: _____ | Date: _____ | □ | □ |
| 2. Office of the Controller: _____ | Date: _____ | □ | □ |
| (only if Procurement Clearance is not issued within 30 days of the initiation of the E.O. review) | | | |
| 3. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Business and Industrial Development Financing, Veteran Loans, (i.e. Loan, Loan Guarantee and Investment) or Delegation of Approving and/or Management Authority of Leasing transactions**

- | | | | |
|--|-------------|---|---|
| 1. Division: _____ | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Fund Management Plan, Expenditure Plans, Carry Over Requests, Budget Modifications**

- | | | | |
|---|-------------|---|---|
| 1. Office of Management and Budget: _____ | Date: _____ | □ | □ |
| 2. Office of the Controller: _____ | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Navajo Housing Authority Request for Release of Funds**

- | | | | |
|--|-------------|---|---|
| 1. NNEPA: _____ | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Lease Purchase Agreements**

- | | | | |
|--|-------------|---|---|
| 1. Office of the Controller: _____ | Date: _____ | □ | □ |
| (recommendation only) | | | |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Grant Applications**

- | | | | |
|---|-------------|---|---|
| 1. Office of Management and Budget: _____ | Date: _____ | □ | □ |
| 2. Office of the Controller: _____ | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Five Management Plan of the Local Governance Act, Delegation of an Approving Authority from a Standing Committee, Local Ordinances (Local Government Units), or Plans of Operation/Division Policies Requiring Committee Approval**

- | | | | |
|--|-------------|---|---|
| 1. Division: _____ | Date: _____ | □ | □ |
| 2. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Relinquishment of Navajo Membership**

- | | | | |
|--|-------------|---|---|
| 1. Land Department: _____ | Date: _____ | □ | □ |
| 2. Elections: _____ | Date: _____ | □ | □ |
| 3. Office of the Attorney General: _____ | Date: _____ | □ | □ |

☐ **Land Withdrawal or Relinquishment for Commercial Purposes**

Sufficient Insufficient

- | | | | | |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. Division: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☐ **Land Withdrawals for Non-Commercial Purposes, General Land Leases and Resource Leases**

- | | | | | |
|-------------|-------|-------------|--------------------------|--------------------------|
| 1. NLD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. F&W | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. HPD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Minerals | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. NNEPA | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. DNR | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. DOJ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☐ **Rights of Way**

- | | | | | |
|------------------------------------|-------|-------------|--------------------------|--------------------------|
| 1. NLD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. F&W | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. HPD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Minerals | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. NNEPA | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Office of the Attorney General: | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. OPVP | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☐ **Oil and Gas Prospecting Permits, Drilling and Exploration Permits, Mining Permit, Mining Lease**

- | | | | | |
|-------------|-------|-------------|--------------------------|--------------------------|
| 1. Minerals | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. OPVP | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. NLD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☐ **Assignment of Mineral Lease**

- | | | | | |
|-------------|-------|-------------|--------------------------|--------------------------|
| 1. Minerals | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. DNR | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. DOJ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |

☒ **ROW (where there has been no delegation of authority to the Navajo Land Department to grant the Nation's consent to a ROW)**

- | | | | | |
|-------------|-----------|---------------|-------------------------------------|--------------------------|
| 1. NLD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. F&W | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. HPD | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Minerals | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. NNEPA | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. DNR | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. DOJ (ic) | ✓ Blanket | Date: 1/4/18 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. OPVP | ✓ | Date: 1-16-18 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

☐ **OTHER:**

- | | | | | |
|----------|-------|-------------|--------------------------|--------------------------|
| 1. _____ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. _____ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. _____ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. _____ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. _____ | _____ | Date: _____ | <input type="checkbox"/> | <input type="checkbox"/> |



☐ RESUBMITTAL

NAVAJO NATION DEPARTMENT OF JUSTICE

DOCUMENT REVIEW REQUEST FORM



DOJ
12-18-17C 4:5p
DATE / TIME
<input type="checkbox"/> 7 Day Deadline
DOC #: 007566
SAS #:
UNIT: NM

*** FOR NNDJ USE ONLY - DO NOT CHANGE OR REVISE FORM. VARIATIONS OF THIS FORM WILL NOT BE ACCEPTED. ***

CLIENT TO COMPLETE

DATE OF REQUEST:	12/18/2017	DIVISION:	NATURAL RESOURCES
CONTACT NAME:	Michelle Hoskie or Stevie Hudson	DEPARTMENT:	GENERAL LAND DEVELOPMENT DEPARTMENT
PHONE NUMBER:	x 6447	E-MAIL:	steviehudson@frontier.com
TITLE OF DOCUMENT: XTO ENERGY - ROW RED PEPPER PIPELINE			

DOJ SECRETARY TO COMPLETE

DATE/TIME IN UNIT:	12.18.17 4:26p	REVIEWING ATTORNEY/ADVOCATE:	Jimie Chee 12.28.17
DATE TIME OUT OF UNIT:	1.4.18C 11am B		

DOJ ATTORNEY / ADVOCATE COMMENTS

- Document is now legally sufficient after a memo was drafted & attached by G.L.D.D. J.C. to indicate that the sponsors

REVIEWED BY: (Print)	Date / Time	SURNAMED BY: (Print)	Date / Time
Imma Hase	1/2/18	Blackhat	1/3/18 4:35 pm
Emailed DOJ Secretary Called: Michelle & Stevie for Document Pick Up on 1.4.18 at 10:30 By: B			

PICKED UP BY: (Print)	DATE / TIME:
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NNDJ/DRRF-July 2013

✓ are re-newing their ROW for their existing ROW for Natural Gas Pipeline.

IC.

COMPLETED

Tier 1 Document Voting Results

User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date	Signature
Eugenia Quintana EPA (Navajo Land Title Data System - Windowrock AZ)	Air and Toxics - Reviewer	Navajo Nation Environmental Protection Agency	Approved	no comments	No Reply	17-Feb-2017	
Lee Anna Martinez EPA (Navajo Land Title Data System - Windowrock AZ)	Water Quality - Reviewer	Navajo Nation Environmental Protection Agency	Approved	1. Please consult our office regarding your project crossing any waterways, ephemeral or perennial. A Clean Water Act Section 401 may be needed, for this project, especially being so close to the San Juan River. You may contact our office at 928-871-7690. Thank you.	1. No Reply	15-Feb-2017	
Pam Kyselka F&W (Navajo Land Title Data System - Windowrock AZ)	Technical Review	Fish and Wildlife	Approved	no comments	No Reply	16-Feb-2017	
Pam Maples EPA (Navajo Land Title Data System - Windowrock AZ)	Storage Tanks Program - Reviewer	Navajo Nation Environmental Protection Agency	Approved	no comments	No Reply	14-Feb-2017	
Patrick Antonio (Navajo Land Title Data System - Windowrock AZ)	Water Quality - Supervisor	Navajo Nation Environmental Protection Agency	Approved	1. Oil and gas field activities are exempt from the federal Construction General Permit for storm water discharges unless there is a release of a reportable quantity or	1. No Reply	15-Feb-2017	

there is a
violation of a
water
quality
standard.

Robert Allan Deputy DNR
DNR Director Administration
(Navajo Land DNR
Title Data
System -
Windowrock
AZ)

Approved 1.

Needs
Terms and
Conditions
Form

1. No
Reply

15-Feb-2017

Robert O. Allan

Yolanda Public Navajo Nation
Barney EPA Water Environmental
(Navajo Land System Protection
Title Data Supervision Agency
System - Program
Windowrock
AZ)

Approved

no
comments

No
Reply

14-Feb-2017

Yolanda

Tier 2 Document Voting Results

User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date	Signature
Bidtah N. Becker (FBFA)	FBFA Users	FBFA Action Team	Approved	no comments	No Reply	18-Dec-2017	
Ronnie Ben EPA (Navajo Land Control - Title Data System - Windowrock AZ)	Underground Injection Reviewer	Navajo Nation Environmental Protection Agency	Approved	1. Need to contact Navajo EPA's UIC Program for Class II activities and any release call the National Response Center.	1. No Reply	21-Feb-2017	
Sam Diswood (Navajo Land Review Title Data System - Windowrock AZ)	Technical	Fish and Wildlife	Approved	no comments	No Reply	17-Feb-2017	
Steven Prince (Navajo Land Title Data System - Windowrock AZ)	Technical Reviewer	Navajo Nation Minerals Management	Approved	1. Please include the uploaded Terms & Conditions document permanently with the approval documents. slp	1. No Reply	27-Nov-2017	
Tamara Billie (Navajo Land Title Data System - Windowrock AZ)	HPD NNHP Reviewer	Historic Preservation Department	Approved	1. HPD-15-322	1. No Reply	22-Feb-2017	
W. Mike Halona (Navajo Land Title Data System - Windowrock AZ)	Manager III Navajo Land Department	NLD Administration	Approved	no comments	No Reply	21-Feb-2017	



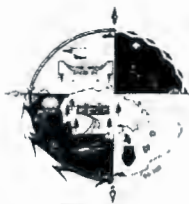
EXHIBIT "E"

NAVAJO NATION RIGHT-OF-WAY (ROW) TERMS AND CONDITIONS XTO ENERGY, INC. (GRANTEE) RED PEPPER AS-BUILT 6-5/8" OD STEEL PIPELINE

1. The term of the ROW shall be for twenty (20) years, beginning on the date the ROW is approved by the Navajo Nation.
2. The Grantee shall make a lump sum payment of \$259,200.99 within ten (10) days of approval of the ROW by the Navajo Nation.
3. The Grantee may develop, use, and occupy the 30' wide by 13,383.6' ROW for the purpose(s) of operating, and maintaining the 6-5/8" natural gas pipeline. The Grantee may not develop, use, or occupy the ROW for any other purpose, nor allow others to use or occupy the ROW for any other purpose, without the prior written approval of the Navajo Nation and the Secretary of the Interior. The approval of the Navajo Nation may be granted, granted upon conditions, or withheld at the sole discretion of the Navajo Nation. The Grantee may not develop, use, or occupy the ROW for any unlawful purpose.
4. In all activities conducted by the Grantee within the Navajo Nation, the Grantee shall abide by all laws and regulations of the Navajo Nation and of the United States, now in force and effect or as hereafter may come into force and effect, including but not limited to the following:
 - a. Title 25, Code of Federal Regulations, Part 169; subject to the terms of this ROW;
 - b. All applicable federal and Navajo Nation antiquities laws and regulations, with the following additional condition: In the event of a discovery, all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified immediately. As used herein, "discovery" means any previously unidentified or incorrectly identified cultural resources, including but not limited to archeological deposits, human remains, or location reportedly associated with Native American religious/traditional beliefs or practices;
 - c. The Navajo Preference in Employment Act, 15 N.N.C. §§ 601 *et seq.*, and the Navajo Nation Business Opportunity Act, 5 N.N.C. §§ 201 *et seq.*; and
 - d. The Navajo Nation Water Code, 22 N.N.C. §§ 1101 *et seq.* Grantee shall apply for and submit all applicable permits and information to the Navajo Nation Water Resources Department, or its successor.
 - e. The Navajo Nation Business and Procurement Act, 12 N.N.C. §§ 1501, *et seq.*
 - f. The Navajo Nation Tax Code, 24 N.N.C. and accompanying regulation.
5. The Grantee shall ensure that the air quality of the Navajo Nation is not jeopardized due to violation of applicable laws and regulations by its operations pursuant to the ROW.
6. The Grantee shall clear and keep clear the lands within the ROW to the extent compatible with the purpose of the ROW, and shall dispose of all vegetation and other materials cut, uprooted, or otherwise accumulated during any surface disturbance activities.

7. The Grantee shall reclaim all surface lands disturbed related to the ROW, as outlined in a restoration and revegetation plan, which shall be approved by the Navajo Nation Environmental Protection Agency (NNEPA) prior to any surface disturbance. The Grantee shall comply with all provisions of such restoration and revegetation plan and shall notify the Director of the NNEPA immediately upon completion of the surface disturbance activities so that a site inspection can be made.
8. The Grantee shall at all times during the term of the ROW and at the Grantee's sole cost and expense, maintain the land subject to the ROW and all improvements located thereon and make all necessary and reasonable repairs.
9. The Grantee shall obtain prior written permission to cross existing rights-of-way, if any, from the appropriate parties.
10. The Grantee shall be responsible for and promptly pay all damages when they are sustained.
11. The Grantee shall indemnify and hold harmless the Navajo Nation and the Secretary of the Interior and their respective authorized agents, employees, land users, and occupants, against any liability for loss of life, personal injury, and property damages arising from the development, use, or occupancy or use of ROW by the Grantee.
12. The Grantee shall not assign, convey, transfer, or sublet, in any manner whatsoever, the ROW or any interest therein, or in or to any of the improvements on the land subject to the ROW, without the prior written consent of the Navajo Nation and the Secretary of the Interior. Any such attempted assignment, conveyance, or transfer without such prior written consent shall be void and of no effect. The consent of the Navajo Nation may be granted, granted upon conditions, or withheld at the sole discretion of the Navajo Nation.
13. The Navajo Nation may terminate the ROW for violation of any of the terms and conditions stated herein. In addition, the ROW shall be terminable in whole or in part by the Navajo Nation for any of the following causes:
 - a. Failure to comply with any term or condition of the grant or applicable laws or regulations;
 - b. A non-use of the ROW for the purpose for which it is granted for a consecutive two-year period;
 - c. The use of the land subject to the ROW for any purpose inconsistent with the purpose for which the ROW is granted; and
 - d. An abandonment of the ROW.
14. At the termination of this ROW, the Grantee, shall peaceably and without legal process deliver up the possession of the premises, in good condition, usual wear and tear excepted. Upon the written request of the Navajo Nation, the Grantee shall provide the Navajo Nation, at the Grantee's sole cost and expense, with an environmental site assessment of the premises at least sixty (60) days prior to delivery of the said premises. This provision 12 shall not apply to the United States as Grantee.
15. Holding over by the Grantee after the termination of the ROW shall not constitute a renewal or extension thereof or give the Grantee any rights hereunder or in or to the land subject to the ROW or to any improvements located thereon.
16. The Navajo Nation and the Secretary of the Interior shall have the right, at any reasonable time during the term of the ROW, to enter upon the premises, or any part thereof, to inspect the same and any improvements located thereon.

17. By acceptance of the grant of ROW, the Grantee consents to the full territorial legislative, executive, and judicial jurisdiction of the Navajo Nation, including but not limited to the jurisdiction of the Navajo Nation, including but not limited to the jurisdiction to levy fines and to enter judgements for compensatory and punitive damages and injunctive relief, in connection with all activities conducted by the Grantee within the Navajo Nation or which have a proximate (legal) effect on persons or property within the Navajo Nation.
18. By acceptance of the grant of ROW, the Grantee covenants and agrees never to contest or challenge the legislative, executive, or judicial jurisdiction of the Navajo Nation on the basis that such jurisdiction is inconsistent with the status of the Navajo Nation as an Indian nation, or that the Navajo Nation government is not a government of general jurisdiction, or that the Navajo Nation government does not possess full police power (i.e., the power to legislate and regulate for the general health and welfare) over all lands, persons, and activities within its territorial boundaries, or on any other basis not generally applicable to a similar challenge to the jurisdiction of a state government. Nothing contained in this provision shall be construed to negate or impair federal responsibilities with respect to the land subject to the ROW or to the Navajo Nation.
19. Any action or proceeding brought by the Grantee against the Navajo Nation in connection with or arising out of the terms and conditions of the ROW shall be brought only in the Courts of the Navajo Nation, and no such action or proceeding shall be brought by the Grantee against the Navajo Nation in any court of any state.
20. Nothing contained herein shall be interpreted as constituting a waiver, express or implied, of the sovereign immunity of the Navajo Nation.
21. Except as prohibited by applicable federal law, the law of the Navajo Nation shall govern the construction, performance, and enforcement of the terms and conditions contained herein.
22. The terms and conditions contained herein shall extend to and be binding upon the successors, heirs, assigns, executors, administrators, employees, and agents, including all contractors and subcontractors, of the Grantee, and the term "Grantee," whenever used herein, shall be deemed to include all such successors, heirs, assigns, executors, administrators, employees, and agents.
23. There is expressly reserved to the Navajo Nation full territorial legislative, executive, and judicial jurisdiction over the ROW and all lands burdened by the ROW, including without limitation over all persons, including the public, and all activities conducted or otherwise occurring within the ROW; and the ROW and all lands burdened by the ROW shall be and forever remain Navajo Indian Country for purposes of Navajo Nation jurisdiction.
24. The Navajo Nation reserves the right to grant rights-of-way within the ROW referenced herein for utilities, provided that such rights-of-way do not unreasonably interfere with the Grantee's use of the ROW.



THE NAVAJO NATION
HISTORIC PRESERVATION DEPARTMENT
PO Box 4950, Window Rock, Arizona 86515
TEL: (928) 871-7198 FAX: (928) 871-7886

CULTURAL RESOURCE COMPLIANCE FORM

EXHIBIT

F

ROUTE COPIES TO:

☒ DRA

NNHPD NO.: HPD-15-322

OTHER PROJECT NO.: DRA156042-1

PROJECT TITLE: XTO Energy, Inc.'s Red Pepper As-built Pipeline Cultural Resources Survey, Upper Fruitland Chapter, San Juan County, New Mexico

LEAD AGENCY: BIA/NR

SPONSOR: Paul Lehrman, XTO Energy, Inc., 382 Road 3100, Aztec, New Mexico 87410

PROJECT DESCRIPTION: The proposed undertaking will involve a new gas lease for an existing pipeline. The pipeline measures 13,383-ft long in a 40-ft wide right-of-way. The area of effect is 12.29-acres.

LAND STATUS: Navajo Tribal Trust

CHAPTER: Upper Fruitland

LOCATIONS: T. 29 N, R. 14 W – Section 15, 22, 26, 27; Kirtland Quadrangle, San Juan County, New Mexico NMPM

PROJECT ARCHAEOLOGIST:

Julia M. Chavez

NAVAJO ANTIQUITIES PERMIT NO.:

B15067

DATE INSPECTED:

02/26/2015 – 03/11/2015

DATE OF REPORT:

05/07/2015

TOTAL ACREAGE INSPECTED:

43.56 – ac

METHOD OF INVESTIGATION:

Class III pedestrian inventory with transects spaced 15 m apart.

LIST OF CULTURAL RESOURCES FOUND:

(1) Site (NM-H-22-125); (2) Isolated Occurrences (IO)

LIST OF ELIGIBLE PROPERTIES:

(1) Site (NM-H-22-125);

LIST OF NON-ELIGIBLE PROPERTIES:

(2) IO

LIST OF ARCHAEOLOGICAL RESOURCES:

(1) Site (NM-H-22-125);

EFFECT/CONDITIONS OF COMPLIANCE: No Historic Properties affected with the following conditions:

Site NM-H-22-125:

1. In the event of future ground disturbing activities, a qualified archaeologist will flag the site prior to ground disturbing activities.

2. Site will be avoided by all ground disturbing activities by a minimum of 50-ft from the site boundary.

TCP: Will be avoided by all ground disturbing activities.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

FORM PREPARED BY: Tamara Billie

FINALIZED: June 23, 2015

Notification to Proceed

Recommended

Conditions:

☒ Yes ☐ No

☒ Yes ☐ No

The Navajo Nation
Historic Preservation Office

Date

Navajo Region Approval

☒ Yes ☐ No

BIA – Navajo Regional Office

Date

TEM 7.14.15



United States Department of the Interior
Navajo Region
P.O. Box 1060
Gallup, NM 87305



MC:620/Branch of Environmental Quality Act Review & Compliance

MAY 10 2016

Paul Lehrman, Sr. Land Surface Coordinator
XTO Energy Incorporated
San Juan Division
382 CR 3100
Aztec, NM 87410

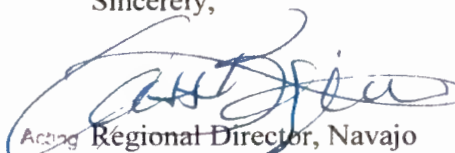
Subject: Finding of No New Significant Impact – Red Pepper Pipeline Project Existing Natural Gas Pipeline, Upper Fruitland Chapter, San Juan County, New Mexico
EA-16-13524

The Environmental Assessment (EA), *Environmental Assessment for XTO Energy, Incorporated (Existing Natural Gas Pipeline*, in Upper Fruitland, San Juan County, New Mexico, has been reviewed in the Branch of Environmental Quality Act Compliance & Review, Navajo Regional Office. XTO Energy, Incorporated, proposes to seek a right-of-way for an existing 6 5/8 inch outside diameter buried steel pipeline which is 13,383.6 feet (12.3) miles in length and contained within a 40-foot-wide corridor. The existing pipeline is located on Navajo Nation Trust lands and the Upper Fruitland Chapter concurred to the action. The project is sponsored by: XTO Energy, Inc., San Juan Division, 382 CR 3100, Aztec, New Mexico 87410.

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council of Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), the Bureau of Indian Affairs, Navajo Region finds that the Proposed Action is not a major federal action that will significantly impact the quality of the human environment. Therefore, an Environmental Impact Statement is not required for implementing the Proposed Action. This Finding of No Significant Impact (FONSI) is supported by the attached Environmental Assessment (EA) and supporting appendices and documents.

Should you have any questions, please contact Ms. Harrilene Yazzie, Supervisory Environmental Protection Specialist, at (505) 863-8287.

Sincerely,


Acting Regional Director, Navajo

**FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT, EA-16-13524
RED PEPPER PIPELINE (EXISTING NATURAL GAS PIPELINE)**

**XTO ENERGY, INCORPORATED
UPPER FRUITLAND CHAPTER, SAN JUAN COUNTY, NEW MEXICO**

**Location: Kirtland, NM, Quadrangle, USGS 7.5-Minute Series Map
Sections 15, 22, 26 & 27, T29N, R14W, New Mexico Prime Meridian**

Upper Fruitland Chapter, San Juan County, New Mexico

The proposed action is for the Bureau of Indian Affairs (BIA), Navajo Region to approve XTO's Red Pepper Pipeline grant of right-of-way for continued operation and maintenance of an existing 6 5/8 inch diameter buried steel pipeline which is 13,383.6 feet (12.3 miles) in length and contained with a 40-foot-wide corridor on Navajo Tribal Trust lands. Reconditioning or replacement of a portion or the entire Red Pepper Pipeline project is not planned at this time. The need for the proposed action is established by the BIA's authority under 25 CFR 169 to provide a ROW authorization for the continued used, maintenance, and operation of the existing pipeline. When the pipeline is no longer needed XTO will submit an abandonment plan to the BIA and the Navajo Nation for approval.

PROPOSED RIGHTS-OF-WAY			
Legal Location			
Kirtland, NM			
(New Mexico Principal Meridian)			
Owner	Quarter-Quarter	Section	Township & Range
Navajo Tribal Trust	SE¼ E½	15	Township 29 North Range 14 West
	E½ E½	22	
	W½ SW¼	26	
	E½ NE¼	26	
	NE¼ SE¼	27	

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council of Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), the Bureau of Indian Affairs, Navajo Region finds that the Proposed Action is not a major federal action that will significantly impact the quality of the human environment. Therefore, an Environmental Impact Statement is not required for implementing the Proposed Action. This Finding of No Significant Impact (FONSI) is supported by the attached environmental assessment and supporting appendices and documents.

The following issues that were addressed in the EA have been taken into consideration in BIA's deliberation whether a Finding of No New Significant Impact is appropriate, or an environmental impact statement should be prepared.

1. Beneficial and adverse environmental impacts: The EA demonstrates that there will be no significant adverse or beneficial impacts on the quality of the human environment including air, cultural, prime or unique farmlands, floodplains, invasive species, non-invasive species, vegetation, wildlife, geology, water, archaeological, topography, threatened and endangered species, resource use patterns, socioeconomics, and other values. Impacts to physical and biological resources will be localized and relatively minor.
2. Public health and safety: There will be low short- and long-term direct and indirect effects to public safety. There will be no disproportionately high and adverse human health effects on populations defined in Executive Order 12898 (Environmental Justice) or the general public. Controlled access to active work areas and appropriate hazardous material management and waste disposal associated with construction will minimize any potential risks to public health, safety, and the environment.
3. Unique characteristics of the geographic area: There would not be any short- and long-term effects to mineral resources and geology as the direct result of the existing pipeline. The project area is not unique within its geographical setting and is similar to many other areas of tribal land in the region. There are no prime farmlands, wild and scenic rivers, wilderness areas, refuges, park lands, unique ecological areas, or other unique or rare characteristics of the land and aquatic environs that will be significantly affected.
4. Degree to which the effects on the quality of the human environment are likely to be highly controversial: There are no known scientific controversies over the effects of the proposed project on the human environment.
5. Degree to which the effects are highly uncertain or involve unique or unknown risks: There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks. The project area is industrialized with oil and gas well development. The project is existing and there are no unknown or unique risks associated with the continued operation and maintenance.
6. Degree to which this action will establish a precedent for future action with significant effects: This project does not set a precedent for similar projects that may be implemented by the BIA or other agencies.
7. Relationship to other actions with cumulatively significant impacts: The area in general is industrialized with oil and gas wells. As permitting continues there will be an increase in long-term surface disturbance and fragmentation. Although there is continued development there are no known incremental effects of the action that become significant when added to other past, present, or reasonably foreseeable future actions that have affected, or will affect, the project area.
8. Degree to which the action may affect districts, sites, objects, or structures listed on, or eligible for, the National Register of Historic Places, or may cause loss of significant cultural resources: The Navajo Nation Historic Preservation Department (NNHPD) issued a Cultural Resources Compliance Form (NNHPD No. HPD-15-322) dated July 16, 2015, with conditions. All conditions shall be met.

In the event of a discovery of a previously unidentified or incorrectly identified cultural resource(s), all operations in the immediate vicinity of the discovery must cease, and the NNHPD must be notified.

9. Degree to which the action may affect threatened, endangered, or sensitive species or their habitat: Navajo Nation Department of Fish and Wildlife (NNDFW) issued a

Biological Resources Compliance Form (NNDFW Review No. 15NC-02) with Avoidance/Mitigation Measures and Conditions of Compliance. The Conditions of Compliance include: 1) Potential nesting habitat exists within the San Juan River corridor for the Yellow-billed Cuckoo (*Coccyzus americanus*) and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), two species listed for protection under the Endangered Species Act. Without formal protocol surveys, light to heavy maintenance activity shall not be allowed in the San Juan River corridor within a ¼ mile of riparian habitat during 01 May-31 Aug; 2) Light to heavy maintenance activity shall avoid the Burrowing Owl (*Athene cunicularia*) breeding season of 01 Mar – 15 Aug. If the breeding season cannot be avoided, pre-action surveys will be required. The survey area must include a ¼ mile buffer from the edge of disturbance. Activity will not be allowed within a ¼ mile of an active burrow until the young have fledged the nesting area.

10. Whether the action violates Federal or local laws or requirements imposed for the protection of the environment: The proposed project will not violate any Federal or tribal environmental laws or requirements.
11. Indian Trust Assets: The project would not potentially affect mineral resources.

CONCLUSION

The proposed action is the Preferred Alternative. It does not constitute a major federal action, which normally requires preparation of an environmental impact statement (EIS).

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.


Regional NEPA Coordinator

5/9/2016
Date

Dykeman Roebuck Archaeology Report No. DRA156042-1

**XTO Energy, Inc.'s Red Pepper As-built Pipeline Cultural
Resources Survey, Upper Fruitland Chapter, San Juan
County, New Mexico**

By

Julia M. Chavez

Navajo Nation Use Permit No.: B15067

Prepared for:

XTO Energy, Inc.
Attn: Paul Lehrman
382 Road 3100
Aztec, NM 87410

Submitted to:

Navajo Nation Historic Preservation Department
Cultural Resource Compliance Section
P.O. Box 4950
Window Rock, AZ 86515

Submitted by:

Dykeman Roebuck Archaeology, LLC
333 E. Main St.
Farmington, NM 87401

Report Date: May 7, 2015

Abstract

At the request of Paul Lehrman of XTO Energy, Inc., Dykeman Roebuck Archaeology, LLC conducted a cultural resources survey of the existing Red Pepper Pipeline. The project is located in Sections 15, 22, 26, and 27, T29N, R14W, NMPM, San Juan County, New Mexico. The project area is located on Navajo Tribal Trust lands. DRA surveyed 43.56 ac for cultural resources. Julia M. Chavez conducted fieldwork between February 26 and March 11, 2015. One previously recorded site and two isolated manifestations (IMs) were found in the project area. A traditional cultural property (TCP) is located north of the project area. Site NM-H-22-125 is evaluated as National Register eligible under criterion d, merits protection under the provisions of the Archaeological Resources Protection Act, and may merit protection under the American Indian Religious Freedom Act. The IMs do not merit protection under the existing legislation. No land modifications for the as-built pipeline are proposed at this time; therefore, no specific treatment recommendations are offered. In the event that land modifications are proposed in the future, the implementation of site protection measures is recommended. No further work is recommended for the IMs. Consideration of an undertaking relative to the identified TCP may be warranted. Cultural resources approval for the permit renewal is recommended.

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XTO Energy, Inc.'s Red Pepper As-built Pipeline Cultural Resources Survey, Upper Fruitland Chapter, San Juan County, New Mexico

Dykeman Roebuck Archaeology, LLC (DRA), conducted a cultural resources survey of the Red Pepper as-built pipeline between February 26 and March 11, 2015 under Navajo Nation Use Permit No. B15067.

The survey was conducted at the request of Paul Lehrman of XTO Energy. Julia M. Chavez performed the archaeological fieldwork for the project. The project was administered by Paul Roebuck, Ph.D, Principal Investigator, and Douglas D. Dykeman, Project Director.

Project Description and Location

XTO Energy has obtained ownership of an existing pipeline from Western Gas Resources. The project area was surveyed for XTO Energy to obtain a 25-year lease for the pipeline, which they call the Red Pepper, from the Navajo Nation. The pipeline to be permitted is 13,383 ft long in a ROW that is 40 ft wide. No land modifications are proposed at this time. Appendix A contains plats with the surveyor's official location of the undertaking.

DRA personnel surveyed the 40-ft-wide right-of-way (ROW) and 50-ft cultural buffer zones along each side of the corridor. Therefore, the width of the surveyed project area is 140 ft.

The Red Pepper Pipeline is within the Upper Fruitland Chapter, approximately 4 mi west of Farmington (Figure 1). The line begins at an existing pipeline on the mesa south of San Juan River and extends north to the river. The project area can be found on the Kirtland, New Mexico, USGS 7.5' quadrangle map. Table 1 presents the ROW and acres surveyed by land status. Table 2 presents UTM coordinates. Table 3 presents the legal description for the unplatted lands in this project to the level of accuracy provided by the land survey in Appendix A.

Table 1. Project Acreage by Land Status

Land Status	Project Component	Acres Surveyed*	Acres in ROW
Navajo Tribal Trust	Red Pepper Pipeline	43.56	12.29
Total		43.56	12.29

*calculated using map geometry

Table 2. Project Area Location (UTM)

UTM Point	UTM Zone	Easting	Northing
Beginning of Pipeline	12	742685	4064250
End of Pipeline	12	741501	4067959

Table 3. Legal Description of the Project Area

1/4	1/4	Section	Township	Range
W ½	SW	26	29N	14W
NE	SE	27	29N	14W
E ½	NE	27	29N	14W
E ½	SE	22	29N	14W
E ½	NE	22	29N	14W
SE	SE	15	29N	14W
NW	SE	15	29N	14W
SW	NE	15	29N	14W

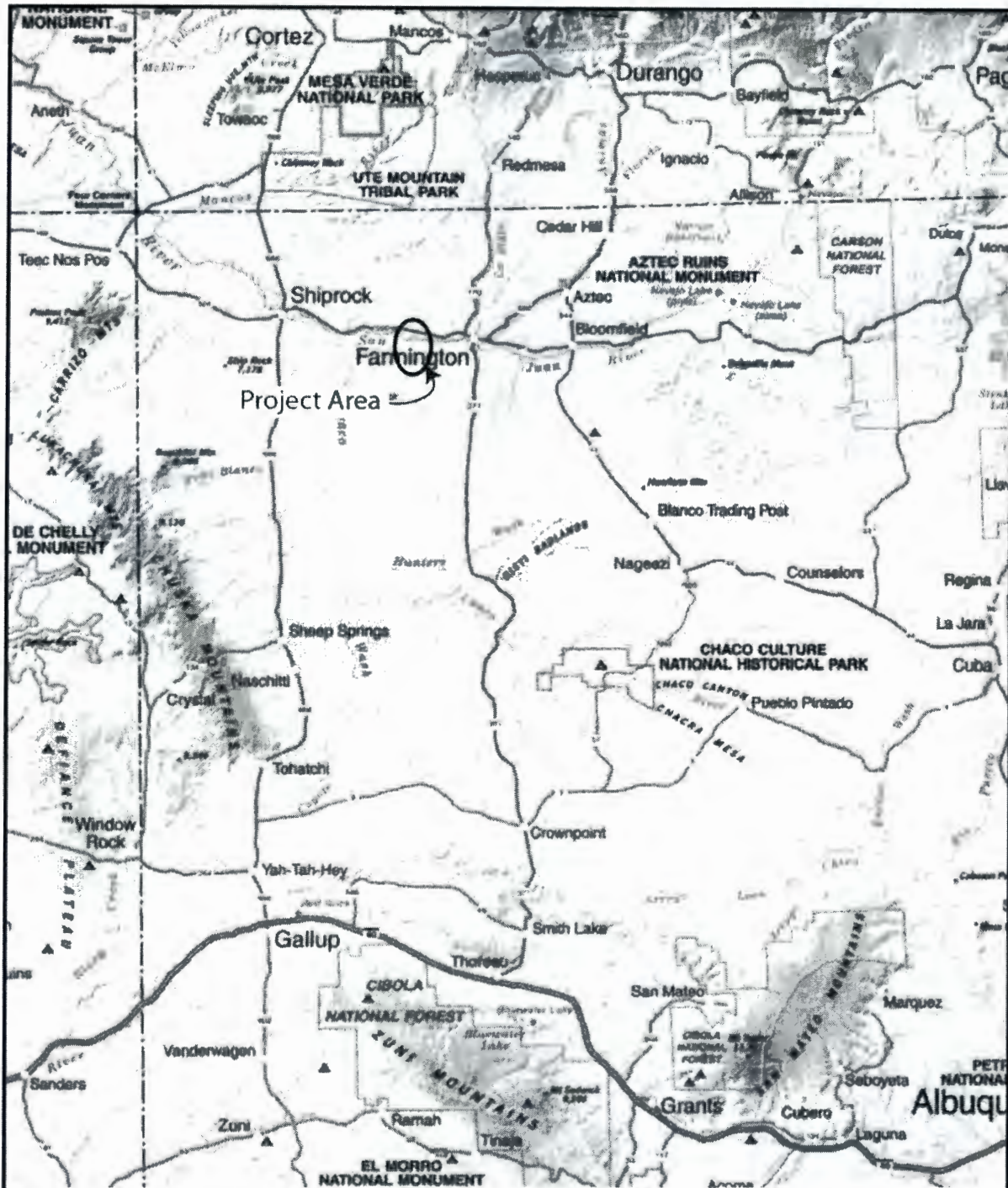
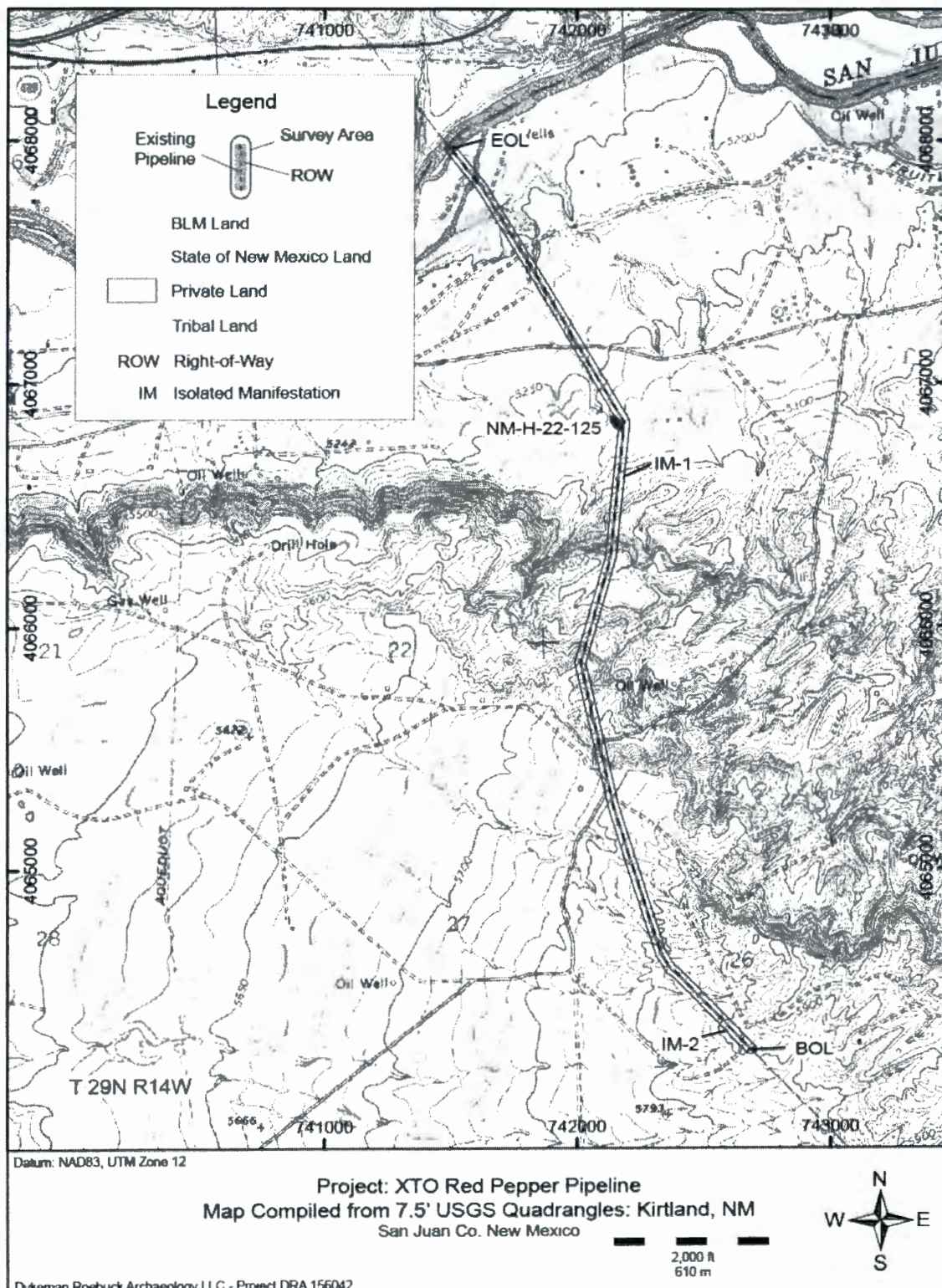


Figure 1. General vicinity map



Environmental Setting

The project begins on the mesa top above the San Juan River and extends north down onto the terraces and the valley floor of San Juan River, which marks the northern end of the project. Elevation ranges from 5190 to 5925 ft. Wind and water erosion are the dominant geomorphic processes shaping the topography in the area. In the river valley, the vegetation associations include agricultural land and desert scrubland. Agricultural lands consist of cottonwood and elm trees, alfalfa, and grasses. The desert scrubland consists of greasewood, rabbitbrush, four-wing saltbush, Russian thistle, cacti, and grasses. On the mesa, scrubland vegetation includes juniper trees, sagebrush, snakeweed, rabbitbrush, and grasses. Several intermittent drainages flow north to the San Juan River.

Project Methods

Records Check

On February 25, 2015 DRA conducted a records search at the Navajo Nation Historic Preservation Department office in Window Rock, Arizona. There have been numerous cultural resources inventory in the vicinity of the project area (>25). The majority of the previous surveys have been in the residential areas of the project area. Projects include residential housing, homesites, waterlines, power lines, the N36 road, and gas pipelines. One previously recorded site, NM-H-22-125, is located within 100 m of the project area; that site was updated during the current project. Records at the Navajo Nation Traditional Cultural Properties (TCP) office were also researched on February 25, 2015. A TCP search verification form is provided in Appendix B. A visit to the Upper Fruitland Chapter House was conducted to inform the chapter of the project and to gather ethnographic information regarding TCPs in the vicinity of the project area.

Survey Methods

The Red Pepper Pipeline was not staked prior to fieldwork. Because the pipeline is existing, pipeline markers and a global positioning system (GPS) track file provided the route. DRA personnel performed a systematic, pedestrian survey of 100 percent of the survey area, walking parallel transects with intervals not exceeding 15 m. This survey is an intensive field inventory: a continuous, intensive survey of an entire target area, aimed at locating and recording all cultural properties that have surface indications, by walking close-interval parallel transects until the area has been thoroughly examined. Field personnel used GPS devices to locate survey areas, preserve transects, and document field locations. Ground visibility in the project area is estimated to be 90-99 percent. Fieldwork was conducted under sunny skies with seasonal temperatures.

DRA uses the following procedures to document cultural resources. Isolated manifestations (IMs) are located by GPS measurements, described in detail, and measured as appropriate. Archaeological sites are recorded using GPS measurements and/or compass and tape; the best method(s) are determined by specific site morphology. Site boundaries are determined, sketch maps are drawn, field analysis of artifacts is conducted, and the site is photographed. For previously recorded sites, Navajo Nation update site forms are completed per NNHPD guidelines.

Cultural Resource Findings

The archaeological survey identified one previously recorded site and two IMs in the project area. The records search identified one TCP in the vicinity of the project area. Additional information on the archaeological site is contained in Appendix C.

Archaeological Sites

Site Number: NM-H-22-125 (Figure 3)

Land Owner/Manager: Navajo Nation

Site Type: Anasazi Pueblo II-III artifact scatter with features and undated (recent) Navajo cairn

Site Description: Site NM-H-22-125 is a multicomponent Anasazi and Navajo site that was originally recorded by the Navajo Nation Archaeology Department (Werito 1985) and updated by La Plata Archaeological Consultants (Harden 2003). The site consists of three features. Feature 1 is associated with the Navajo component with Features 2 and 3 affiliated with the Anasazi component.

The site boundary was re-established based on the current distribution of artifacts and differs somewhat from the 2003 recording. The site now measures 62 x 34 m and encompasses an area of 1,659 sq. m. A datum was established by placing a metal rebar with an aluminum tag marked with the site number near Feature 3. With the exception of site size and shape, the site remains as previously documented. The three features appeared as described and remain intact. Numerous artifacts were observed in the vicinity of the features. Updates to the site map include the new datum location, site boundary, drainage, and the current project area.

The site condition remains good. Natural erosion continues. There are piles of trash and ash/charcoal in the drainage west of the site.

NRHP Eligibility, Archaeological Resources Protection Act (ARPA), and American Indian Religious Freedom Act (AIRFA): The site was previously recommended eligible for the NRHP, evaluated as meriting protection under ARPA, and possibly meriting protection under AIRFA. Those recommendations and evaluations are maintained for the current project.

Project Impact Assessment: Site NM-H-22-125 is located within and adjacent to the as-built ROW. No land modifications are proposed at this time.

Treatment Recommendations: In the event that land modifications are proposed in the future, the implementation of site protection measures is recommended.

Isolated Manifestations

Two IMs were documented from the project area (Table 4). IM 1 is located in the pipeline cultural buffer zone (CBZ) and IM 2 is located within the ROW and CBZ.

Table 4. Isolated Occurrences

IM Number	Description	UTM Zone (NAD 13)	Easting	Northing
1	Quartzite cobble hammerstone; 9.8 x 8.3 x 3.8 cm	12	742193	4066608
2	1980s trash dump (14-x-8-m area) 1 tan chert core; 8.9 x 7.3 x 4.1 cm 1 tan chert secondary flake; 5.7 x 3.6 x 1.4 cm	12	742596	4064335

Ethnographic Data

Ms. Krystiana Tsosie, Acting Chapter Coordinator, had no knowledge of any TCPs or unmarked burials in the vicinity of the project area.

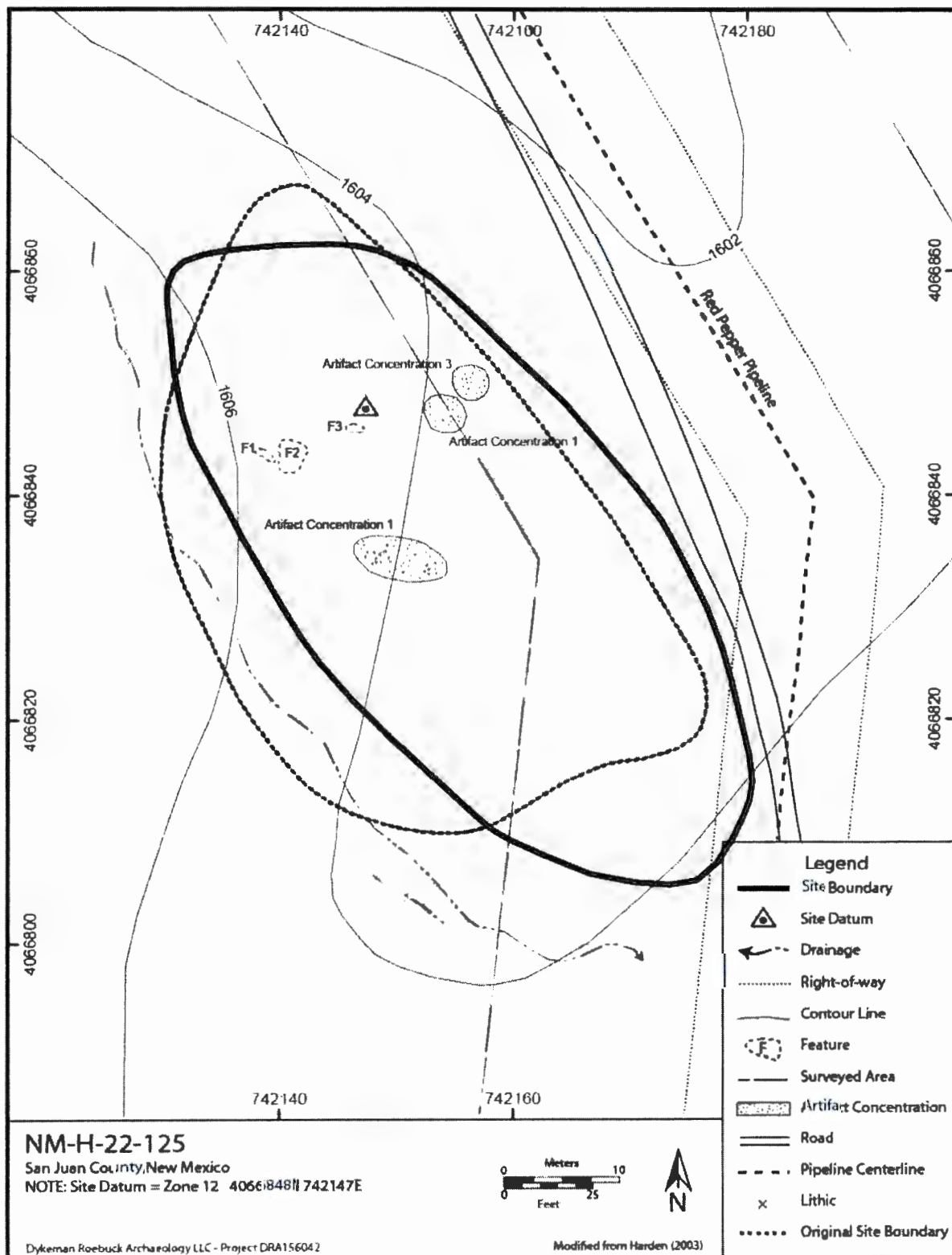


Figure 3. Plan map of NM-H-22-125.

Traditional Cultural Properties and Sacred Places

There is one TCP (343) in the vicinity of the project. The TCP is at the far northern end of the project area. According to Van Valkenburgh (1974), the nearest sacred place is Aztec Ruin, located 18 mi northeast of the project area.

Summary of Evaluations and Recommendations

Site NM-H-22-125 has previously been evaluated as National Register eligible and meriting protection under the provisions of ARPA. The site may merit protection under the provisions of AIRFA. Those recommendations are maintained for the current project. Neither of the two IMs merit protection under the pertinent regulations.

No land modifications are proposed for the Red Pepper as-built pipeline at this time; therefore, no specific treatment recommendations are offered. In the event that land modifications are proposed in the future, the implementation of site protection measures appropriate to the undertaking is recommended. No further work is recommended for the IMs. Consideration of an undertaking relative to TCP 343 may be warranted.

Cultural resources approval is recommended for the permit renewal.

References Cited

Harden, Fred

- 2003 *Richardson Operating Company Proposed NV Navajo 22-1 Well and Associated Well Tie Pipeline, Upper Fruitland, New Mexico*. Report LAC 2002-047e. La Plata Archaeological Consultants, Delores, Colorado.

Van Valkenburgh, Richard F.

- 1974 Navajo Sacred Places, ed. Clyde Kluckhohn. In *Navajo Indians III*, pp. 1-199, Garland Publishing, New York.

Werito, Clifford

- 1985 *An Archaeological Survey of the Proposed Upper Fruitland Housing and Commercial Tract Parcels A, B, and D, near Fruitland, New Mexico*. Report NNCRMP 85-294. Navajo Nation Cultural Resource Management Program, Window Rock, Arizona.





**PRESIDENT
RUSSELL BEGAYE
VICE PRESIDENT
JONATHAN NEZ**

NAVAJO FISH AND WILDLIFE P.O. BOX 1480 WINDOW ROCK, AZ 86515

19 October 2015

15NC-02

Sarah Griffin, Environmental Specialist
Nelson Consulting, Inc.
835 East 2nd Avenue
Suite 250
Durango, Colorado 81301

Dear Sarah,

The Navajo Nation Department of Fish and Wildlife (NNDFW) reviewed the Biological Evaluation for XTO Energy Inc.'s proposed **Red Pepper Pipeline Right-of-Way Renewal** located in the Upper Fruitland Chapter, New Mexico. The purpose of this letter is to inform you that we are granting the proposed project a Conditional Approval. The project is approved with the following conditions:

[1] Potential nesting habitat exists within the San Juan River corridor for the Yellow-billed Cuckoo (*Coccyzus americanus*) and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), two species listed for protection under the Endangered Species Act. Without formal protocol surveys, light to heavy maintenance activity shall not be allowed in the San Juan River corridor and within ¼ mile of riparian habitat during 01 MAY-31 AUG.

[2] Light to heavy maintenance activity shall avoid the Burrowing Owl (*Athene cunicularia*) breeding season of 01 MAR-15 AUG. If the breeding season cannot be avoided, pre-action surveys will be required. The survey area must include a 0.4 km (¼ mi) buffer from the edge of disturbance. Activity will be not allowed within a ¼ mile of an active nest burrow until the young have fledged the nesting area.

Please contact me at 928-871-7065 with any questions that you have concerning the review of this project.

Sincerely,

Pamela A. Kyselka, Wildlife Biologist
Navajo Natural Heritage Program

CONCURRENCE

Gloria Tom, Director
Department of Fish and Wildlife

Date

**BIOLOGICAL RESOURCES COMPLIANCE FORM
NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE
P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480**

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

PROJECT NAME & NO.: Red Pepper Pipeline Renewal

DESCRIPTION: XTO seeks the approval for the renewal of a ROW for the continued operation and maintainance of an existing natural gas pipeline. The pipeline is 13,383.6 ft. in length with a 40-ft. wide corridor. Total acreage is 12.3 acres.

LOCATION: Sections 15, 22, 26, & 27, T29N, R14W, NMPM, Upper Fruitland, San Juan County, New Mexico

REPRESENTATIVE: Sarah Griffin, Environmental Scientist, Nelson Consulting, Inc. for XTO Energy, Inc. (XTO)

ACTION AGENCY: Navajo Nation & Bureau of Indian Affairs

B.R. REPORT TITLE / DATE / PREPARER: Red Pepper Pipeline Renewal /SEP 2015/Nelson Consulting, Inc.

SIGNIFICANT BIOLOGICAL RESOURCES FOUND: Area 1 & 3. [1] Raptor Sensitive Area (RSA) onsite for HALE & AQCH; [2] Potential nesting habitat existing along the San Juan River for COAM & EMTREX. Surveys inconclusive.

POTENTIAL IMPACTS

NESL SPECIES POTENTIALLY IMPACTED: [1] Golden Eagle (*Aquila chrysaetos*) G3, GBENPR, BGEPA, MBTA; [2] Bald Eagle (*Haliaeetus leucocephalus*) G2, GBENPR, BGEPA, MBTA; [3] Ferruginous Hawk (*Buteo regalis*) G3, MBTA; [4] Burrowing Owl (*Athene cunicularia*) G4, MBTA; [5] San Juan Milkweed (*Asclepias sanjuanensis*), G4.

FEDERALLY-LISTED SPECIES AFFECTED: [1] Yellow-billed Cuckoo (*Coccyzus americanus*) G2, Threatened, MBTA; [2] Southwestern Willow Flycatcher (*Empidonax traillii extimus*) G2, Endangered, MBTA; [2] *Coccyzus americanus* (Yellow-billed Cuckoo)

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

AVOIDANCE / MITIGATION MEASURES: [1] The NNDFW concurs with the mitigation measures recommended in the BE; [2] During repairs and maintenance of the pipeline, avoid leaving trenches open during non-working hours and overnight to prevent injury to large ungulates and other mammals. The trench will be sloped to allow smaller species of wildlife to exit the trench safely.

CONDITIONS OF COMPLIANCE*: [1] Potential nesting habitat exists within the San Juan River corridor for the Yellow-billed Cuckoo (*Coccyzus americanus*) and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), two species listed for protection under the Endangered Species Act. Without formal protocol surveys, light to heavy

maintenance activity shall not be allowed in the San Juan River corridor and within ¼ mile of riparian habitat during 01 MAY-31 AUG: [2] Light to heavy maintenance activity shall avoid the Burrowing Owl (*Athene cunicularia*) breeding season of 01 MAR-15 AUG. If the breeding season cannot be avoided, pre-action surveys will be required. The survey area must include a 0.4 km (¼ mi) buffer from the edge of disturbance. Activity will be not allowed within a ¼ mile of an active nest burrow until the young have fledged the nesting area.

FORM PREPARED BY / DATE: Pamela A. Kyselka/19 OCT 2015

COPIES TO: (add categories as necessary)

☒ BIP ☐ _____

2 NTC § 164 Recommendation:

- ☐ Approval
☒ Conditional Approval (with memo)
☐ Disapproval (with memo)
☐ Categorical Exclusion (with request letter)
☐ None (with memo)

Signature

Date

 10/20/15
Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife

*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.

Representative's signature

 Date 10/21/15

ENVIRONMENTAL ASSESSMENT

for

**XTO Energy, Inc.
Red Pepper Pipeline
(Existing Natural Gas Pipeline)**

BIA EA No.: _____



**Prepared for:
Bureau of Indian Affairs – Navajo Region**

Prepared by:



August 2015

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**ENVIRONMENTAL ASSESSMENT
FOR
XTO ENERGY, INC.
RED PEPPER PIPELINE PROJECT – EXISTING NATURAL GAS PIPELINE**

1.0 Introduction

1.1 The Proposal

XTO Energy, Inc. (XTO) is planning to apply for a Right-Of-Way Grant (ROW) with the Bureau of Indian Affairs (BIA) and Navajo Nation for the Red Pepper Pipeline project. The project consist of an existing 6 5/8 inch outside diameter buried steel pipeline which is 13,383.6 feet (12.3 miles) in length and contained within a 40-foot-wide corridor (refer to the survey plat). The existing pipeline is assumed to be constructed as part of a pipeline system approved by the Bureau of Land Management (BLM) to El Paso Natural Gas Company in April 1960 with an existing ROW serialized as NM0061647. At that time, an environmental document was not completed because it was nearly a decade before passage of National Environmental Policy Act of 1969. Since this pipeline was constructed years ago, this Environmental Assessment (EA) will make assumptions at the beginning of pertinent sections to facilitate this analysis. The proposed action is for the BIA and Navajo Nation Environmental Protection Agency (EPA) to approve the Red Pepper Pipeline project ROW across Navajo Nation land.

The existing pipeline is located on Navajo Nation-managed surface. The northern terminus of this existing pipeline crosses Navajo Nation Road 36 (N-36), the Fruitland Irrigation Canal, and a populated area of apparent Navajo Nation issued home-site leases and other land use authorizations in the Upper Fruitland Chapter. Surface management is under the trust jurisdiction of the BIA. The pipeline ROW would be authorized by the BIA per Rights-of-way for all Purposes Across Any Indian Lands, 25USC 323. The Upper Fruitland Chapter concurrence is provided in Appendix A - Upper Fruitland Chapter Concurrence.

This EA describes the pre-existing environment in the project area and assesses the potential impacts of the project and any project alternatives. The effects of the project will be analyzed for site-specific direct and indirect impacts, as well as short- and long-term consequences. Impact analyses for residual impacts and cumulative impacts will be presented. Impact analyses are presented to identify potential significant impacts which may occur without the appropriate application of and compliance with mitigation measures and ROW stipulations. This EA is not a decision document, but provides information needed to determine whether the project or an alternative to the project would have significant potential effects and would require an Environmental Impact Statement.

1.2 Purpose and Need

The purpose of the proposed action is to grant a ROW to authorize XTO to operate, maintain, and abandon an existing natural gas pipeline Engineering Station 0+00 (refer to Appendix B – Plat) and exits the Navajo Nation at the center of the San Juan River 13,383.6 feet to the north while sustaining the health, diversity, and productivity of the Navajo Nation.

The need for the proposed action is established by the BIA's authority Under 25 CFR 169 to provide a ROW authorization for the project.

1.3 Conformance with Applicable Land Use Plan and Other Environmental Assessments

The action is located on Navajo Nation tribal land, therefore requiring review and a resolution for approval by the BIA from the Navajo Nation. The action does not conflict with or violate any federal, tribal, or local laws, regulations or land use plans. A site-specific EA is required prior to approving the ROW for the existing pipeline. During the EA process, environmental impacts are identified and management constraints are developed, which will mitigate impacts to the environment including public health and safety; cultural resources; and threatened, endangered, and sensitive species.

1.4 Federal, State, Tribal, or Local Permits, Licenses, or Other Consultation Requirements

The BIA grant of the ROW along with Navajo Nation concurrence would be required for the operation, maintenance, and final abandonment associated with the project. The action, any feasible alternatives, including the no action alternative would be evaluated out in compliance with applicable federal regulations. This EA is prepared under authority of the National Environmental Policy Act of 1969 (NEPA) (43 USC 4321-4347) and associated implementing regulations in 40 CFR 1500-1508 and 43 CFR 46, and supplemented by Indian Affairs Manual (IAM) at 59 IAM Chapter 3, Appendices 15 and 16. The BIA would authorize the project per 25 USC 323 and 25 CFR 169. Federal agencies maintain a trust responsibility and a fiduciary relationship with tribes and nations. XTO would comply with applicable Federal, State of New Mexico, and tribal guidance required for the operation, maintenance, and final abandonment associated with the project.

Many requirements regulating specific environmental elements are found in the appropriate elements sections of this EA (Chapters 3 and 4). Permits, licenses, consultations, or other requirements are discussed below.

1.4.1 Clean Water Act

Under Section 402 of the Clean Water Act, as amended (CWA, 33 USC 1251 et seq.), the U.S. Environmental Protection Agency (USEPA) regulates storm water discharges from industrial and construction activities under the National Pollution Discharge Elimination System (NPDES) program. Under 40 CFR 122.26, uncontaminated storm water discharge associated with oil and gas development is typically exempt from NPDES regulation. However, permits are required if discharge results in a reportable quantity for which notification is required (pursuant to 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6) or if the discharge contributes to a violation of a water quality standard.

Under Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands. The Section 404 program is administered by the USACE and USEPA. A Section 404 permit is required for projects that would result in discharged material into a water of the U.S.

Under Section 401 of the CWA, an applicant for a federal license or permit to conduct an activity that may result in a discharge into a water of the U.S. must provide the federal agency with a Section 401 certification declaring that the discharge would comply with the CWA. The certification would be granted by the New Mexico Environment Department (NMED) and Navajo Nation EPA.

1.4.2 Endangered Species Act & Consultation with Navajo Nation Department of Fish and Wildlife

Under Section 7 of the Endangered Species Act of 1973 (ESA, 16 USC 1531-1544), all federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service if they are proposing an action that may affect listed species or designated habitat. Consultation with the Navajo Natural Heritage Program's Navajo Nation Department of Fish and Wildlife (NNDFW), as required by Section 7 of the Endangered Species Act (ESA), addressed Species of Concern (Federally and Tribally listed species) and potential critical habitat within the project area. Review of current Species of Concern and an onsite evaluation of the habitat within the project area indicate no need for additional Section 7 consultation. The Biological Evaluation (BE) can be found in Appendix C of this document. The NNDFW Biological Resources Compliance Form (BRCF), indicating conditional approval of the project, can be found in Appendix D of this document.

1.4.3 Navajo Nation Historic Preservation Act

Compliance with the Navajo Nation Historic Preservation Act is adhered to by following the Navajo Nation and the BIA – New Mexico State Historic Preservation Office (SHPO) protocol agreement, which is authorized by the National Programmatic Agreement between the Navajo Nation and BIA, the Advisory Council on Historic Preservation, and the National Conference of Council of State Historic Preservation Officers. A cultural survey of the project area was conducted, and a cultural report was submitted to the Navajo Nation Historic Preservation Department (NNHPD). The NNHPD's Cultural Resources Compliance Form (CRCF), indicating approval of the project, can be found in Appendix E of this document.

1.4.4 Clean Air Act

The Clean Air Act of 1972, as amended (CAA, 42 USC 7401 et seq.), establishes national ambient air quality standards (NAAQS) to control air pollution. In New Mexico, the NMED has adopted most of the CAA into the New Mexico Administrative Code (NMAC). The NMED issues construction and operating permits for air quality and enforces air quality regulations and permit conditions.

2.0 Alternatives Including the Proposed Action

2.1 Alternative A - No Action

Under the No Action Alternative, the Red Pepper Pipeline ROW would not be approved. The current land and resource uses would continue to occur in the project area and any alternative locations. No mitigation measures would be required. XTO would be required to go through abandonment procedures for this section of pipeline. Additionally, a replacement for this pipeline would be required to provide a method of gathering natural gas from 35 producing natural gas wells now connected to it as illustrated on the pipeline survey plat.

2.2 Alternative B - Proposed Action

The proposed action is approval for XTO's Red Pepper Pipeline Grant of ROW.

Issuance of the ROW would result in the continued operation, maintenance, production, and abandonment of a natural gas pipeline. Continued operation of the pipeline project without a break in proceedings is planned. Reconditioning or replacement of a portion or the entire Red Pepper Pipeline project is not planned at this time.

2.2.1 Location of Project Area

The project area is located in San Juan County, New Mexico, approximately 5 miles southwest of Farmington on Navajo Nation land.

Terrain within the project area is characterized by flat low-lying sandy hills flowing into irregular slopes blending into the river bottom and into the San Juan River. Views are generally open to wide expanses of terrain except where a sandy hill may block views. There are slopes in excess of 25 percent on the southern mid-portion of the pipeline route project area; the Kirtland, New Mexico 7.5-minute U.S. Geological Survey quadrangle map depicts a general slope to the north. Elevation is 5,190 feet above sea level at the northern terminus to 5,925 feet at the southern terminus of the project.

Maps of the project area are located in Appendix F - Maps. The project area is plotted on a regional map (Figure A.1), the Kirtland quadrangle map (Figure A.2), and a 2011 San Juan County East aerial photo (Figure A.3).

The project area is within the following legal descriptions described in the table below:

Table 1. Legal Land Description for Project Features

Facility	Legal Location (New Mexico Principal Meridian)		
	Quarter-Quarter	Section	Township & Range
Pipeline Project	SE $\frac{1}{4}$ E $\frac{1}{2}$	15	Township 29 North Range 14 West
	E $\frac{1}{2}$ E $\frac{1}{2}$	22	
	W $\frac{1}{2}$ SW $\frac{1}{4}$;	26	
	E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	27	

2.2.2 Surface Disturbance

A survey plat of the as-built pipeline can be found in Appendix B - Plat. The maximum surface disturbance associated with the existing pipeline corridor is 13,383.6 feet in length and 40 feet in width resulting in 12.3 acres total. The majority of the existing pipeline is routed "across-country". At this time, no additional disturbance is planned.

2.2.3 Project Phases

2.2.3.1 Construction of the Existing Pipeline Assumptions

Since information on construction of this pipeline is unavailable, the following details are assumptions based on pipeline construction methods generally practiced at that time. The pipeline corridor was leveled by cutting and filling the work area to a point that permitted the trench to be excavated entirely in solid ground (not in fill soil). The trench for the existing pipeline corridor was excavated approximately two feet wide and three to four feet deep. The pipeline was "strung" on one side of the work area and bent to fit the contour of the trench bottom. The pipe joints were welded together and protected with a protective wrap. The pipeline was lowered into the trench and tie-ins to the pipeline were made. The pipeline was padded with soil and the excavated spoil was returned to the trench. Crossing the San Juan River was accomplished with an open trench and river weights were installed.

2.2.3.2 Construction for Potential Pipeline Repairs

Refer to Section 2.2.3.1. Construction of the Existing Pipeline Assumptions for original construction of the existing pipeline. Future pipeline repairs would be conducted using similar techniques with the exception of the San Juan River crossing.

2.2.3.3 Abandonment

When the pipeline is no longer needed, XTO will submit an abandonment plan to the BIA and the Navajo Nation and other appropriate agencies for approval.

2.3 Alternatives Considered but not Analyzed in Detail

Since the proposal is to authorize the ROW for the existing Red Pepper Pipeline project, which is an existing facility, no other alternatives were considered.

3.0 Description of Affected Environment

Chapter 3 of this EA describes elements of the environment that currently exist within and around the project area. Elements of the environment are listed in the table below. Those elements that have the potential to be affected by the project will be discussed in this chapter.

Site surveys of the project area were conducted by Nelson Consulting, Inc. (NCI) biologists on June 17 and 19, 2015. The description of existing resources within the affected environment is based on these surveys, other specialist surveys (as referenced), data available for the region (as referenced), and general knowledge of the region.

Table 2. Potential Elements within the Project Area

Elements	Further Analysis Presented in EA?	Basis for Determination
Air Resources	Yes [Sections 3.1, 4.1]	The project would not potentially affect air resources.
Cultural Resources	Yes [Sections 3.2, 4.2]	A site-specific analysis of effects to cultural resources is required for projects on tribal lands.
Environmental Justice	Yes [Sections 3.3, 4.3]	The regional population includes minority and low-income groups; but the proposal would not potentially affect these groups.
Farmlands, Prime and Unique	No	There are no prime or unique farmlands (as defined by 7 CFR 657.5) present within or near the project area.
Floodplains	Yes [Sections 3.4, 4.4]	The northern terminus of the project area enters the floodplains of the San Juan River (as defined by Executive Order No. 11988). An USACE permit will be required for any maintenance in wetlands areas.
Hazardous and/or Solid Wastes	Yes [Sections 3.5, 4.5]	Some wastes associated with the project may be generated by liquids that may be accumulated within the pipeline.
Invasive, Non-Native Species	Yes [Sections 3.6, 4.6]	The project could potentially introduce invasive, non-native species if maintenance activities are required.

Elements	Further Analysis Presented in EA?	Basis for Determination
Migratory Birds	Yes [Sections 3.7, 4.7]	The project would potentially cause low affects to migratory birds.
Mineral Resources/ Geology	Yes [Sections 3.8, 4.8]	The project would not potentially affect mineral resources.
Native American Religious Concerns	Yes [Sections 3.9, 4.9]	A site-specific analysis of effects to Native American religious concerns is required for all projects on tribal lands.
Noise	Yes [Sections 3.10, 4.10]	The project would potentially have low affect on noise levels in the area.
Public Health and Safety	Yes [Section 3.11, 4.11]	The project would potentially have low affect on public health and safety.
Soils	Yes [Sections 3.12, 4.12]	The project would potentially have low affect on soils if maintenance activities take place.
Species of Concern	Yes [Sections 3.13, 4.13]	A site-specific analysis of effects to NNHP-designated Species of Concern is required for all projects on tribal lands.
Vegetation	Yes [Sections 3.14, 4.143]	The project could potentially affect vegetation if maintenance activities take place.
Visual Resources	Yes [Sections 3.15, 4.15]	The project would potentially affect visual resources if extensive maintenance activities take place.
Water Resources – Surface & Ground	Yes [Sections 3.16, 4.16]	The project would not potentially affect surface and ground water resources.
Wetlands/ Riparian Zones	Yes [Sections 3.17, 4.17]	There are wetlands (as defined by 40 CFR 230.3 [t]) and the northern end of the project area and subsequent pipeline crosses riparian zones of the floodplains of the San Juan River. An USACE permit would be required if any soil is disturbed in this due to maintenance activities.
Wild and Scenic Rivers	No	There are no Wild and Scenic Rivers (as defined by 16 USC 1271-1287) within the project area (National Wild and Scenic Rivers Coordinating Council 2009).
Wild Horses and Burros	No	No wild horses or burros are known to occur in the general area. No Herd Areas (as defined in 43 CFR 4700.0-5[d]).
Wilderness	No	There are no Wilderness Areas (as defined in 16 USC 1131-1136) present within or near the project area (Wilderness.net 2011).
Wildlife	Yes [Sections 3.18, 4.18]	The project would potentially have low affect on wildlife due to the short-term nature of maintenance actions that may take place.

3.1 Air Resources

The project area is in San Juan County, New Mexico. Additional general information on air quality in the area is contained in Chapter 3 of the Farmington PRMP/FEIS. In addition, new information about greenhouse gases (GHGs) and their effects on national and global climate

conditions have emerged since this document was prepared. On-going scientific research has identified the potential impacts of GHG emissions such as carbon dioxide (CO₂) methane (CH₄); nitrous oxide (N₂O); water vapor; and several trace gases on global climate. Through complex interactions on a global scale, GHG emissions may cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably, and may contribute to overall climatic changes, typically referred to as global warming.

Much of the information referenced in this section is incorporated from the Air Resources Technical Report for BLM Oil and Gas Development in New Mexico, Kansas, Oklahoma, and Texas (herein referred to as Air Resources Technical Report; (U.S. Department of Interior Bureau of Land Management, 2014). This document summarizes the technical information related to air resources and climate change associated with oil and gas development and the methodology and assumptions used for analysis.

The USEPA has the primary responsibility for regulating air quality, including six nationally regulated ambient air pollutants (criteria pollutants). These criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂) and lead (Pb). EPA has established National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The NAAQS are protective of human health and the environment. EPA has approved New Mexico's State Implementation Plan and the state enforces state and federal air quality regulations on all public and private lands within the state, except for tribal lands and within Bernalillo County. Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology and terrain, and also includes applications of noise, smoke management, and visibility. Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. EPA has proposed or completed actions recently to implement Clean Air Act requirements for greenhouse gas emissions. Climate has the potential to influence renewable and non-renewable resource management.

3.1.1 Air Quality

The Air Resources Technical Report describes the types of data used for description of the existing conditions of criteria pollutants, how the criteria pollutants are related to the activities involved in oil and gas development, and provides a table of current National and state standards. The EPA's Green Book web page (U.S. Environmental Protection Agency, 2013) reports all counties in the Farmington Field Office area are in attainment of all National Ambient Air Quality Standards (NAAQS) as defined by the Clean Air Act. The area is also in attainment of all state air quality standards (NMAAQs). *The current status of criteria pollutant levels in the Farmington Field Office are described below.*

"Design Values" are the concentrations of air pollution at a specific monitoring site that can be compared to the NAAQS. The 2012 design values for criteria pollutants are listed table below. There is no monitoring for CO and lead in San Juan County, but because the county is relatively rural, it is likely that these pollutants are not elevated. PM10 design concentrations are not available for San Juan County.

Table 3. 2012 Criteria Pollutant Monitored Design Values in San Juan County

Pollutant	2012 Design Concentration	Averaging Time	NAAQS	NMAAQs
O ₃	0.071 ppm	8-hour	0.075 ppm ¹	
NO ₂	13 ppb	Annual	53 ppb ²	50 ppb
NO ₂	38 ppb	1-hour	100 ppb ³	
PM _{2.5}	4.7 µg/m ³	Annual	12 µg/m ^{3,4}	60 µg/m ^{3,6}
PM _{2.5}	14 µg/m ³	24 hour	35 µg/m ^{3,3}	150 µg/m ^{3,6}
SO ₂	19 ppb	1-hour	75 ppb ⁵	

Source: U.S. Environmental Protection Agency, 2014
¹ Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
² Not to be exceeded during the year
³ 98th percentile, averaged over 3 years
⁴ Annual mean, averaged over 3 years
⁵ 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
⁶ The NMAAQs is for Total Suspended Particulate (TSP)

In 2005, the EPA estimates that there was less than 0.01 ton per square mile of lead emitted in FFO counties, which is less than 2 tons total (U.S. Environmental Protection Agency, 2012). Lead emissions are not an issue in this area, and will not be discussed further.

Air quality in a given region can be measured by its Air Quality Index value. The air quality index (AQI) is reported according to a 500-point scale for each of the major criteria air pollutants, with the worst denominator determining the ranking. For example, if an area has a CO value of 132 on a given day and all other pollutants are below 50, the AQI for that day would be 132. The AQI scale breaks down into six categories: good (AQI<50), moderate (50-100), unhealthy for sensitive groups (100-150), unhealthy (>150), very unhealthy and hazardous. The AQI is a national index, the air quality rating and the associated level of health concern is the same everywhere in the country. The AQI is an important indicator for populations sensitive to air quality changes.

Mean AQI values for San Juan County were generally in the good range (AQI<50) in 2013 with 80% of the days in that range. The median AQI in 2013 was 42, which indicates “good” air quality. The maximum AQI in 2013 was 156, which is “unhealthy”. Although the AQI in the region has reached the level considered unhealthy for sensitive groups on several days almost every year in the last decade, there are no patterns or trends to the occurrences as seen in the table below. On 8 days in the past decade, air quality has reached the level of “unhealthy” and on two days, air quality reached the level of “very unhealthy”. In 2009 and 2012, there were no days that were “unhealthy for sensitive groups” or worse in air quality. In 2005 and 2013, there was one day that was “unhealthy” during each year. In 2010, there were five “unhealthy” days and two “very unhealthy days.”

Table 4. Number of Days classified as “unhealthy for sensitive groups” (AQI 101-150) or worse

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days	3	6	9	18	1	0	12	9	0	1

Source: U.S. Environmental Protection Agency, 2013a

3.1.2 Climate

Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing

concentrations of GHGs are likely to accelerate the rate of climate change. Global mean surface temperatures have increased nearly 1.0 degree Celsius (°C) (1.8 degree Fahrenheit [°F]) from 1890 to 2006 (GISS 2007). In 2007, the Intergovernmental Panel on Climate Change predicted a warming of about 0.2° C per decade for the next two decades, and then a further warming of about 0.1° C per decade (IPCC 2007b). The National Academy of Sciences supports these predictions, but has acknowledged that there are uncertainties regarding how climate change may affect different regions (2006). Computer model predictions indicate that increases in temperature will not be equally distributed, but are likely to be accentuated at higher latitudes. Warming during the winter is expected to be greater than during the summer, and increases in daily minimum temperatures are more likely than increases in daily maximum temperatures. Observations and predictive models indicate that average temperature changes are likely to be greater in the Northern Hemisphere than in the Southern Hemisphere.

A 2007 U.S. Government Accountability Office Report on Climate Change found that "federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring. These effects include the following: 1) physical effects such as droughts, floods, glacial melting, and sea level rise; 2) biological effects, such as increases in insect and disease infestations, shifts in species distribution, and changes in the timing of natural events; and 3) economic and social effects, such as adverse impacts on tourism, infrastructure, fishing, and other resource uses." It is not, however, possible to predict with any certainty regional or site-specific effects on climate relative to the project and subsequent projects.

In New Mexico, a recent study indicated that mean annual temperatures have exceeded global averages by nearly 50 percent since the 1970s (Enquist and Gori 2008). Similar to trends in national data, increases in mean winter temperatures in the Southwest have contributed to this rise. When compared to baseline information, periods between 1991 and 2005 show temperature increases in over 95 percent of the geographical area of New Mexico. Warming is greatest in the northwestern, central, and southwestern parts of the state.

3.2 Cultural Resources

The major emphasis of the BIA and the Navajo Nation cultural resources program is the protection, preservation, and enhancement of cultural resources for present and future generations. The cultural history of the region spans from the Paleo-Indian Period to the present. A few prehistoric, Archaic Period, Ancestral Puebloan Period (formally known as the Anasazi Period), and Navajo Period sites are found in the vicinity. In the 1870s, northern New Mexico was settled by Euro-Americans. Euro-American sites include farming and ranching sites, as well as towns that evolved to supply service needs of the settlers.

Dykeman Roebuck Archaeology (DRA) conducted a records search and a Class III cultural resource survey for the project area. Their findings were documented in archaeological report DRA 156042-1. During the site survey, one previously recorded site (NM-H-22-125) and two isolated manifestations were encountered within the project area. In the event land modifications are proposed in the future, implementation of site protection measures are recommended. The records search identified one Traditional Cultural Property (TCP) in the vicinity of the project. The Upper Fruitland Chapter Acting Coordinator had no knowledge of any TCPs or unmarked burials in the vicinity of the project. According to Van Valkenburgh (1974), the nearest sacred

place is Aztec Ruin, 18 miles northeast of the project. CRCF No. HPD-11-1100 indicating the NNHPD's concurrence with DRA's findings for the project area is provided in Appendix D.

3.3 Environmental Justice

3.3.1. Environmental Justice

Executive Order (EO) 12898 concerns federal actions to address environmental justice in minority and low-income populations. The purpose of the EO is to ensure that proposed federal actions will not cause disproportionately high or adverse environmental effects to minority or low-income populations.

The project area is on Navajo Nation land including a portion on the north end passing through a populated area of apparent Navajo Nation issued home-site leases and other land use authorizations in the Upper Fruitland Chapter (population 2010 census is 1,662 persons) with some living along the pipeline corridor. The Upper Fruitland Chapter that includes a portion of the project area includes statistically significant populations -Native Americans (93.1%), Hispanics (3.9%), mixed races (2.1%) and white Euro-Americans (1.0%). Some members of these populations are within financially low-income groups (estimated median household income in 2012: \$30,254).

In 2010, San Juan County had a higher minority population than the U.S. average, and a higher percentage of people living below the poverty level than the New Mexico and U.S. averages. The county had a 57.5-percent minority population (primarily Native American and Hispanic or Latino), while New Mexico and the U.S. had a 59.5- and 36.3-percent minority population, respectively. The percentage of people in San Juan County living below the poverty level was 27.1 percent, while the percentage of people in New Mexico and the U.S. living below the poverty level was 20.4 and 15.3 percent, respectively (U.S. Census Bureau 2010).

3.4 Floodplains

The northern terminus of the pipeline ends at the centerline of the San Juan River where it continues on off-Navajo Nation land. At this point on the River, floodplains extend approximately 400 feet to the south of the River. There are jurisdictional wetlands associated with the San Juan River and its floodplain.

3.5 Hazardous and/or Solid Wastes

The Resource Conservation and Recovery Act of 1976, as amended (RCRA, 42 USC 6901 et seq.) establishes a comprehensive program for managing hazardous wastes from the time they are produced until their disposal. USEPA regulations define solid wastes as any "discarded materials" subject to a number of exclusions. A "hazardous waste" is a solid waste that is (1) listed by the USEPA as a hazardous waste, (2) exhibits any of the characteristics of hazardous wastes (ignitability, corrosivity, reactivity, or toxicity), or (3) is a mixture of solid and hazardous waste. A 1980 amendment to RCRA conditionally exempted from regulation as hazardous wastes "drilling fluids, production waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas." On July 6, 1988, the USEPA determined that oil and gas exploration, development, and production (ED&P) wastes would not be regulated as hazardous wastes under RCRA. A simple rule of thumb was developed for determining if an ED&P waste is likely to be considered exempt or non-exempt from RCRA regulations. If (1) the waste came from down-hole or (2) the waste was generated by contact with the oil- and gas-

production stream during removal of produced water or other contaminants, the waste is most likely to be considered exempt by the USEPA.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA or Superfund, 43 USC 9615) deals with the release (spilling, leaking, dumping, accumulation, etc.) or threat of a release of hazardous substances into the environment. Despite many oil and gas constituent wastes being exempt from RCRA hazardous waste regulations, certain RCRA-exempt contaminants could be subject to regulations as hazardous substances under CERCLA.

In addition, this will be in accordance with the Navajo Nation regulations and/or any other Federal or State Agency regulations.

The project area is in a region that has existing natural gas wells. There may be oil and gas wastes in the general region that are regulated by RCRA and/or CERCLA. Some wastes associated with the project may be generated by liquids that may be accumulated within this existing pipeline.

3.6 Invasive, Non-Native Species

Management of invasive and non-native species is mandated under several pieces of legislation, including the Lacey Act, as amended (16 USC 3371-3378); the Federal Noxious Weed Act of 1974, as amended (7 USC 2801 et seq.); the New Mexico Noxious Weed Management Act of 1998; and EO 13112 regarding Invasive Species. Under EO 13112, federal agencies are ordered not to authorize or carry out actions that would cause or promote the introduction of invasive species.

BIA, Western Navajo Agency Acting Navajo Region Noxious Weed Coordinator Renee Benally stated the BIA is proceeding with a proposal for a Draft Integrated Weed Management Plan (DIWMP) with an Environmental Impact Statement for the entire Navajo Nation. Invasive and non-native species that are targeted in this DIWMP are divided into three classes, A, B, and C. The Class A rating invasive weed species are currently not present in Navajo Nation, or have limited distribution. Preventing new infestations of these species and eradicating infestations is the highest priority. These are priority invasive weeds. Potential for wide spread expansion is imminent. Emphasis will be placed on prevention, education, awareness, identification, monitoring, and treatment.

The Class B rating of invasive weed species are limited to portions of the Navajo Nation. In areas with severe infestations, management should be designed to contain the infestation and stop any further spread. These are non-native noxious weeds that have been problems within the BIA Navajo Region but have not been as serious as the high priority weeds. They may occur in isolated patches. Emphasis is placed on immediate control, prevention of seed spread and eradication. Education, awareness, identification, control and monitoring will be the priorities.

The Class C rating of invasive weed species are wide-spread in the Navajo Nation. Management decisions for these species should be determined at the local level, based on feasibility of control and level of infestation. These are weeds that are normally wide-spread and well-established. Control efforts are not a high priority

Weeds on the list include – Class A: Leafy spurge (*Euphorbia esula*), African rue (*Peganum harmala*), Tree of Heaven (*Ailantus altissima*), Ravenna grass (*Saccharum ravennae*),

Fountaingrass (*Pennisetum setaceum*), Yellow starthistle (*Centaurea solstitialis*), Japanese brome (*Bromus japonicus*), Blue mustard/crossflower (*Chorispora tenella* (Pall.) DC.), Squarrose knapweed (*Centaurea virgata*), Bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), Dalmatian toadflax/butter and eggs (*Linaria dalmatica*), Musk/nodding plumeless thistle (*Carduus nutans*), Perennial/hounds tongue/broadleaved/clasping pepperweed (*Lepidium latifolium*), Scotch thistle (*Onopordum acanthium*), Spotted knapweed (*Centaurea maculosa*), Whitetop (Hoary Cress) (*Cardaria draba*), Sahara/Asian/African mustard (*Brassica tournefortii*), Knapweed (*Centaurea species*), Uruguyan pampas grass (*Cortaderia sellonana*), yellow nutsedge (*Cyperus esculentus*), Scotch cottonthistle (*Onopordum acanthium*), sulphur cinquefoil (*Potentilla rect L.*), common Mediterranean grass (*Scismus barbatus*), five-stamen/smallflower tamarisk (Tamarisk species includes hybrids). Class B: Field sandbur (*Cenchrus incertus*), Halogeton (*Halogeton glomeratus*), Siberian elm (*Ulmus pumila*), Camelthorn (Alhagi camelorum), Tamarisk (*Tamarix sp.*), Saltcedar (*Tamarix chinensis*), Diffuse knapweed (*Centaurea diffusa*), Russian knapweed (*Acroptilon repens*), Russian olive (*Elaeagnus angustifolia*), Johnsongrass, Sorghum alnum (*Sorghum species, halepense (L.) Pers.*; Sorghum alnum, Parodi). Class C: Cheatgrass (*Bromus tectorum*), Field bindweed (*Convolvulus arvensis*), Jointed goatgrass (*Aegilops cylindrica*), Puncturevine (*Tribulus terrestris*), Rescuegrass (*Bromus catharticus*), Ripgut brome (*Bromus diandrus*), Smooth brome (*Bromus inermis*), Bald brome (*Bromus racemosus*), Red brome (*Bromus rubens*), Spreading wallflower (*Erysimum repandum*), Horehound (*Marrubium vulgare*), California burclover (*Medicago polymorpha*), Slender/Russian/prickly thistle (*Salsola species*), Field brome (*Bromus arvensis*), and Kochia (*Bassia scoparia*).

Navajo Nation listed noxious or invasive weed species were observed within the project area. They include cheatgrass (*Bromus tectorum*), field bindweed, halogeton, puncturevine, Russian knapweed, Russian olive, and tamarisk.

3.7 Migratory Birds

NCI sent a Data Request (DR) form to the Navajo Nation Department of Fish and Wildlife (NNDFW) on March 26, 2010. The NNDFW sent a species of concern list with the potential to occur within the 7.5-minute Kirtland, NM quadrangles on June 9, 2015. These species included birds that are listed under the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act (ESA). Some of the bird species provided in the MBTA list below are also included on the NN DFW species of concern with potential to occur on the 7.5-minute Kirtland, NM quadrangle(s). The species of concern list for NNDFW is located in Chapter 3.13 – Species of Concern.

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Executive Order 13186 (EO) was signed on January 10, 2001 directing executive departments and agencies of the Federal government to take certain actions to further implement the MBTA. Section 3 of the EO directed each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within two years, a Memorandum of Understanding (MOU) with the USFWS that shall promote the conservation of migratory bird populations. Section 3(c) of the EO states that the MOU shall recognize that the agency may not be able to implement some elements of the MOU until such time as the agency has successfully included the elements in that agency's formal planning process (such as revision of agency land management plans), including public participation and NEPA analysis as appropriate.

The Partners in Flight Bird Conservation Plan for the State of New Mexico and the USFWS's list of Birds of Conservation Concern include information regarding the Colorado Plateau physiographic area. The species listed in the below table have a known distribution in the area and may be affected by various types of perturbations. These species and a brief assessment of the effects of the project on their habitat are included in the following table.

Table 5: Potential for Priority Migratory Birds to Occur within Project Area

Species	Habitat	Potential to Occur in Project Area (PPA)
Bendire's thrasher (<i>Toxostoma bendirei</i>)	Brushy desert, especially areas of tall vegetation, cholla cactus, creosote bush, and yucca.	DOES NOT OCCUR: No brushy desert areas with appropriate vegetation found within PPA.
Black-throated sparrow (<i>Amphispiza bilineata</i>)	Xeric desert habitats dominated by shrubs with bare, open ground.	UNLIKELY: No xeric desert habitat dominated by shrubs within PPA.
Brewer's sparros (<i>Spizella breweri</i>)	Sagebrush, preferring dense stands broken up with grassy areas	POTENTIAL: Shrubland within PPA may provide habitat.
Gray vireo (<i>Vireo vicinior</i>)	Found in desert scrub, juniper or juniper-piñon pine and oak scrub associations, and chaparral, in hot, arid mountains and high plains scrubland.	DOES NOT OCCUR: Desert scrub, juniper or juniper-piñon pine and oak scrub associations, and chaparral habitat is absent from the PPA.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	Relatively xeric habitats dominated by shrubs and grasses.	UNLIKELY: The shrubs and grasses within the PPA and vicinity are too sparse and low-lying to attract this species.
Mountain bluebird (<i>Sialia currucoides</i>)	Seek open areas with a mix of short grasses, shrubs, and trees. They gravitate toward prairie edges, meadows, sagebrush flats, hillsides, and pastures.	DOES OCCUR: This habitat is present in the PPA.
Mourning dove (<i>Zenaidura macroura</i>)	Seek open woodland, forest edge, cultivated lands with scattered trees and bushes, parks and suburban areas, arid and desert country.	POTENTIAL: Open woodland near PPA is present.
Sage sparrow (<i>Amphispiza belli</i>)	Sagebrush-grassland.	UNLIKELY: A major sagebrush component is absent from the PPA and vicinity.
Sage thrasher (<i>Oreoscoptes montanus</i>)	Sagebrush plains.	DOES NOT OCCUR: Sagebrush plains are absent from the PPA and vicinity.
Scaled quail (<i>Callipepla squamata</i>)	Brushy arroyos, cactus flats, sagebrush or mesquite plains, desert grasslands, Plains grasslands, and agricultural areas.	POTENTIAL: Shrubland within the PPA provide potential habitat.
Swainson's hawk (<i>Buteo swainsoni</i>)	Breeds and forages in grasslands; shrublands; small, open woodlands; and agricultural areas.	POTENTIAL: Shrubland within the PPA could provide potential foraging habitat.
Vesper sparrow (<i>Pooecetes gramineus</i>)	Open habitats, including old fields, shrub-steppe, grasslands, and cultivated croplands.	UNLIKELY: The shrubs and grasses within the PPA and vicinity are too sparse and low-lying to attract this species.

Turkey Vultures (*Carthus Aura.*) were visually detected during the site survey of the project area. No nests were observed during the June 2015 biological surveys of the project area.

3.8 Mineral Resources/Geology

The San Juan Basin holds the second largest accumulation of natural gas in the country in Upper Cretaceous sandstone reservoirs of the Pictured Cliff, Mesa Verde Group, Gallup, and Dakota sandstone. These Cretaceous formations deposited in marine environments in the Western Interior Seaway are conventional sources of natural gas, and range in depth from 2500 to 8000 feet throughout the basin. Most wells permitted in the New Mexico portion of the basin are conventional. New Mexico alone provides approximately 95 percent of the San Juan Basin production.

Coal-bed methane is a more recent development of an unconventional source of natural gas, in that the natural gas is methane associated with coal beds found in the Upper Cretaceous Fruitland Formation. The Fruitland and overlying Kirtland Formations both contain coal beds that are mined for coal-fired power plants. Coal-bed methane wells tend to be shallower, especially along the northeastern edge of the basin, and thus extract large amounts of produced water during production. Coal seam sources contribute more than 60 percent of the basin total output, with New Mexico accounting for approximately 53 percent of the volume.

The geology of the project area is Ojo Alamo Sandstone. The Ojo Alamo Sandstone of Paleocene age can be found throughout the San Juan Basin, with the exception of the northernmost portion of the basin. This geologic formation is located within McKinley, Rio Arriba, Sandoval, and San Juan Counties, New Mexico (Anderson, et al. 1997; Fassett No Date). The Ojo Alamo Formation is composed of sandstone, shale, and conglomerate rock (Anderson, et al. 1997), and “consists of a series of overlapping, disconnected, channel-sandstone lenses interbedded with mudstone” (Fassett No Date). This formation is approximately 250 feet thick, and is bounded by the Tertiary Nacimiento Formation and Cretaceous Kirtland Shale/Farmington Sandstone below the formation (BLM 2003).

3.9 Native American Religious Concerns

Traditional Cultural Properties is a term that has emerged in historic preservation management and the consideration of Native American religious concerns. TCPs are places having cultural values that transcend the values of scientific importance normally ascribed to cultural resources, such as archaeological sites. The National Park Service (NPS) has defined TCPs as properties that are eligible for the National Register of Historic Places because of their association with cultural practices or beliefs of a living community that are rooted in that community’s history. These sites are important in maintaining the continuing cultural identity of that community (Parker and King 1998).

Native American cultural associations are the “communities” most likely to identify TCPs, although TCPs are not restricted to this group. Some TCPs are well known, others may be known to a small group of traditional practitioners, and some may be vaguely known.

There are several pieces of legislation or EOs that should be considered when evaluating Native American religious concerns. These govern access and use of sacred sites, possession of sacred items, protection and treatment of human remains, and protection of archaeological resources ascribed with religious or historic importance. The legislation or EOs include the following:

- The American Indian Religious Freedom Act of 1978 (AIRFA) (42 USC 1996):
 - Possession of sacred items
 - Performance of ceremonies
 - Access to sites
- EO 13007 (Indian Sacred Sites; issued May 24, 1996):
 - Access and use of sacred sites
 - Integrity of sacred sites
- The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 USC 3001):
 - Protection, ownership, and disposition of:
 - Human remains
 - Associated funerary objects
 - Unassociated funerary objects
 - Sacred objects
 - Objects of cultural patrimony
- The Archaeological Resources Protection Act of 1979 (ARPA) (16 USC 470):
 - Protection of archaeological resources on Federal and Indian lands

As described in Section 3.2, Cultural Resources, a records search identified one TCP in the vicinity of the project. The Upper Fruitland Chapter Acting Coordinator had no knowledge of any TCPs or unmarked burials in the vicinity of the project. According to Van Valkenburgh (1974), the nearest sacred place is Aztec Ruin, 18 miles northeast of the project.

3.10 Noise

The rural region surrounding the project area is generally quiet. US Highway 64, N-36, scattered natural gas wells, pipeline corridors, and access roads are located in the region surrounding the project area. Very few residences, if any, are located on the southern portion of the pipeline. The northern end of the existing pipeline corridor crosses a populated area of apparent Navajo Nation issued home-site leases and other Navajo Nation land use authorizations in the Upper Fruitland Chapter.

3.11 Public Health and Safety

The general region has been developed by the oil and gas industry for over six decades, which contributes to public health and safety concerns in the area. Vehicles associated with the oil and gas industry utilize the developed highway and county road systems. In addition, the oil and gas industry constructs and utilizes dirt access roads in the area. These roads, most of which are accessible by the public, are often hazardous, particularly during and following periods of inclement weather.

This existing pipeline is assumed to be constructed as part of a pipeline system approved in April 1960 (55 years ago). A portion of this pipeline crosses inhabited areas in the Upper Fruitland Chapter of the Navajo Nation. This pipeline is exposed where it crosses the Fruitland Irrigation Canal, in two places where it crosses washes, and in one place where erosion has exposed it. Transportation issues are a primary safety concern. Additional safety concerns in the region include oil and gas facility leakage or rupture; moving equipment (such as pump jacks); oil and gas explosions; and the handling, storage, and disposal of wastes, chemicals, or condensate. Hazardous and solid wastes are discussed in Section 3.4 (Hazardous and/or Solid Wastes).

Worker safety is regulated under the Occupational Safety and Health Act of 1970, as amended (29 USC 651). Additional safety regulations found in Pipeline Safety Programs and Rulemaking Procedures (49 CFR 190) and Transportation of Natural and Other Gas by Pipeline: Minimal Federal Safety Standards (40 CFR 192) apply to natural gas pipelines.

3.12 Soils

The Natural Resources Conservation Service (NRCS) has mapped the soils in the project area. Complete soil information is available in the NRCS's *Soil Survey of San Juan County, New Mexico: Eastern Part* (2009). Within the project area, nine soil map units are present: Avalon sandy loam (2-5 percent slopes), Badland-Rock outcrop – Persayo complex (extremely steep), Blackston-Farb complex (moderately steep), Farb-Persayo-Rock complex (moderately steep), Haplargids-Blackston-Torriorthents complex (very steep), Riverwash, Sheppard-Badland complex (very steep), Sheppard-Mayqueen-Shiprock complex (0- to 8-percent slopes), Stumble-Fruitland association (gently sloping) (NRCS 2009).

3.12.1 Avalon sandy loam (2-5 percent slopes)

This soil is considered a deep, well-drained soil. Permeability of Avalon sandy loam is moderate to a depth of 53 inches and moderately rapid below this depth. Available water capacity for this soil is high. This soil type has a slight potential for water erosion and moderate to severe potential for wind erosion. Effective rooting depth is 60 inches or more.

A typical soil profile for Avalon sandy loam (2-5 percent slopes) is fine sandy loam from 0 to 14 inches. The substratum to a depth of 111 inches is sandy clay loam and gravelly sandy clay loam. Avalon fine sandy loam (2- to 5-percent slopes) is derived from sandstone and shale typically found on mesas and plateaus. The potential plant community for this soil type is grass (NRCS 2009).

3.12.2 Badlands-Rock outcrop-Persayo complex

This soil is on 30-70 percent slopes on hills, ridges, and breaks. This soil is 35 percent Badlands (30-50 percent slopes), 30 percent Rock outcrop (30-70 percent slopes), and 20 percent Persayo clay loam (30-40 percent slopes). Farb soil makes up the other 15 percent. Persayo is considered a shallow, well-drained soil. Permeability of Persayo soil is moderately slow. Available water capacity for this soil is very low. Runoff is rapid. This soil type has a severe potential for water erosion and a severe potential for wind erosion. Effective rooting depth is 10-20 inches. The soil is slightly saline.

A typical soil profile for Persayo is two inches of clay loam and silty clay loam to a depth of 12 inches and shale. Badlands consist of barren shale uplands dissected by deep drainages and gullies. Rock outcrop consist of barren sandstone on ridges, benches, and escarpments. Persayo is derived from shale typically found on mesas and plateaus. The potential plant community for this soil type is mainly piñon, juniper, and grass (NRCS 2009).

3.12.3 Blackston Farb complex, moderately steep

This soil is on 0-25 percent slopes on terraces, ridges, and breaks. This soil is 50 percent Blackston loam (0-8 percent slopes), and 30 percent Farb sandy loam (5-25 percent slopes). Avalon and Persayo soil makes up about 20 percent. Blackston soil is considered deep and well-drained. Permeability of Blackston soil is moderate to a depth

of 39 inches and rapid below that depth. Available water capacity for this soil is moderate. Runoff is rapid. This soil type has a slight potential for water erosion and a moderate potential for wind erosion. Effective rooting depth is 60 inches or more. The soil is slightly saline.

Blackston soil is considered deep and well-drained. Permeability of Blackston soil is moderate to a depth of 39 inches and rapid below that depth. Available water capacity for this soil is moderate. Runoff is rapid. This soil type has a slight potential for water erosion and a moderate potential for wind erosion. Effective rooting depth is 60 inches or more. The soil is slightly saline. The potential plant community for this soil type is mainly Indian ricegrass (*Achnatherum hymenoides*).

Farb soil is considered very shallow to shallow and excessively well-drained. Permeability of Farb soil is moderately rapid. Available water capacity for this soil is very low. Runoff is medium. This soil type has a moderate potential for water erosion and a severe potential for wind erosion. Effective rooting depth is 5-20 inches or more.

A typical soil profile for Farb is seven inches of sandy loam in the surface layer. Subsoil is 10 inches thick and is loamy sand with sandstone at 10 inches deep.

Farb is formed in residuum derived dominantly from sandstone. The potential plant community for this soil type is oneseed juniper (*Juniperus monosperma*), piñon pine (*Pinus edulis*), antelope bitterbrush (*Purshia tridentata*), and Indian ricegrass (NRCS 2009).

3.12.4 Farb-Persayo-Rock complex, moderately steep

This soil is on 3-30 percent slopes on hills and breaks. This soil is 40 percent Farb fine sandy loam (3-30 percent slopes), 30 percent Farb Persayo clay loam (3-30 percent slopes), and 20 percent Rock outcrop (10-30 percent slopes). Stumble and Doaks soil makes up about 10 percent.

Farb soil is considered shallow to very shallow and excessively well-drained. Permeability of Blackston soil is moderately rapid. Available water capacity for this soil is very low. Runoff is rapid. This soil type has a severe potential for water erosion and a severe potential for wind erosion. Effective rooting depth is 5-20 inches. The soil is slightly saline. The native vegetation is piñon pine, juniper, and grass.

Persayo soil is considered shallow and well-drained. Permeability of Persayo soil is slow. Available water capacity for this soil is moderate. Runoff is rapid. This soil type has a high potential for water erosion and a high potential for wind erosion. Effective rooting depth is 10-20 inches. This soil is slightly saline.

Persayo soil is formed in residuum derived dominantly from shale. A typical soil profile for Persayo soil is two inches of clay loam in the surface layer. Subsoil is 15 inches thick and is silty clay loam with shale at 15 inches deep.

Rock outcrop is barren sandstone one benched, ridges, and breaks.

The potential plant community for Farb and Persayo soil types are oneseed juniper, piñon, antelope bitterbrush, and Indian ricegrass. (NRCS 2009).

3.12.5 Haplargids-Blackston-Torriorthents complex (very steep)

This soil is on 8-50 percent slopes on terraces, mesas, and plateaus. The native vegetation is scattered piñon, juniper, and grass. This soil unit is 45 percent Haplargids (8-50 percent slopes), 30 percent Blackston gravelly loam (8-40 percent slopes), 20 percent Torriorthents (8-50 percent slopes). Rock outcrop soil makes up about 5 percent.

Haplargids soil is considered deep and well-drained to excessively well-drained. Permeability of Haplargids soil is moderate to moderately slow. Available water capacity for this soil is low to high. Runoff is rapid. This soil type has a slight to severe potential for water erosion and a slight potential for wind erosion. Effective rooting depth is 14-60 inches. A typical soil profile for Haplargids soil is seven inches of sandy cobbly loam in the surface layer. Subsoil is 19 inches thick and is cobbly sandy clay loam. The substratum to a depth of 60 inches or more is cobbly sandy clay loam and loam.

Blackston soil is considered deep and well-drained. Permeability of Blackston soil is moderately slow to a depth of 26 inches and rapid below that depth. Available water capacity for this soil is low. Runoff is slow. This soil type has a slight potential for water erosion and a moderate potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Blackston soil is two inches of gravelly loam in the surface layer. Subsoil is 9 inches thick and is gravelly loam. The upper 17 inches of the substratum is gravelly clay loam and the lower part to a depth of 60 inches is gravelly sand.

Torriorthents soil is considered shallow to deep and well-drained. Permeability of Torriorthents soil is moderately rapid to slow. Available water capacity for this soil is low to high. Runoff is slow to rapid. This soil type has a slight to severe potential for water erosion and a slight potential for wind erosion. Effective rooting depth is 10-60 inches. A soil profile for Torriorthents soil is three inches of cobbly loam in the surface layer. Substratum to a depth of 15 inches is clay loam where there is shale.

Rock outcrop is barren sandstone one benched, ridges, and breaks.

The potential plant community for Blackston soil is New Mexico feather-grass, four-wing saltbush (*Atriplex canescens*), Indian ricegrass, and galleta sp. (NRCS 2009).

3.12.6 Riverwash

Riverwash consists of areas of unstabilized sandy, silty, clayey or gravelly sediment on floodplains, streambeds or riverbeds and in arroyos. These areas support little or no vegetation. The slope is zero to three percent.

3.12.7 Sheppard-Badland complex (very steep)

This soil is on 8-50 percent slopes on breaks, mesas, and plateaus. The native vegetation is mainly grass. This soil unit is 75 percent Sheppard loamy fine sand and 25 percent Badland.

Sheppard soil is considered deep and somewhat excessively drained. Permeability of Sheppard soil is rapid. Available water capacity for this soil is low. Runoff is slow.

This soil type has a slight potential for water erosion and a very severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Sheppard soil is two inches of loamy fine sand. The underlying layer to a depth of 60 inches or more is loamy fine sand and sand.

The potential plant community for Sheppard soil is needle-and-thread, alkali sacaton (*Sporobolus airoides*), giant dropseed (*Sporobolus giganteus*), and, Indian ricegrass. (NRCS 2009).

Badland is nonstony, barren shale that is dissected by drainages and gullies.

3.12.8 Sheppard-Mayqueen-Shiprock complex (0-8 percent slopes)

This soil complex is on mesas and plateaus. This unit is 45 percent Sheppard fine loamy sand (5-8 percent slope), 30 percent Mayqueen loamy fine sand (2-8 percent slope), and 20 percent Shiprock sandy loam (0-5 percent slope). Avalon soil makes up about 5 percent.

Shepherd soil is considered deep and somewhat excessively well-drained. Effective rooting depth is 60 inches or more. Permeability is rapid. Available water capacity is low. Runoff is slow. This soil type has a slight potential for water erosion and a very severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Shepherd soil is one inch of loamy fine sand in the surface layer. Subsoil to a depth of 62 inches is loamy fine sand and fine sand.

Mayqueen soil is considered deep and somewhat excessively well-drained. Effective rooting depth is 60 inches or more. Permeability is rapid. Available water capacity is moderate. Runoff is slow. This soil type has a slight potential for water erosion and a very severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Shepherd soil is one inch of loamy fine sand in the surface layer. Subsoil to a depth of 62 inches is loamy fine sand and fine sand. A typical soil profile for Mayqueen soil is one inch of loamy fine sand in the surface layer. Subsoil to a depth of nine inches is fine sandy loam. The substratum to a depth of 60 inches or more is loamy fine sand and loamy sand.

Shiprock soil is considered deep and well-drained. Effective rooting depth is 60 inches or more. Permeability is moderately rapid. Available water capacity is moderate. Runoff is slow. This soil type has a slight potential for water erosion and a severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Shepherd soil is one inch of loamy fine sand in the surface layer. Subsoil to a depth of 62 inches is loamy fine sand and fine sand. A typical soil profile for Mayqueen soil is one inch of loamy fine sand in the surface layer. Subsoil to a depth of nine inches is fine sandy loam. The substratum to a depth of 60 inches or more is loamy fine sand and loamy sand (NRCS 2009).

3.12.9 Stumble-Fruitland association (gently sloping)

This soil association is on fans and valley slopes. This unit is 40 percent Stumble loamy sand and 30 percent Fruitland sandy loam. Turley and Blancot soils make up about 30 percent.

Stumble soil is considered deep and somewhat excessively well-drained. Effective rooting depth is 60 inches or more. Permeability is rapid. Available water capacity is

low. Runoff is very slow. This soil type has a slight to no potential for water erosion and a very severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Stumble soil is six inches of loamy sand and sand in the surface layer. The upper 23 inches of subsoil is loamy sand and sand. Below that to a depth of 60 inches is gravelly sand.

Fruitland soil is considered deep and well-drained. Effective rooting depth is 60 inches or more. Permeability is moderately rapid. Available water capacity is moderate. Runoff is slow. This soil type has a slight to no potential for water erosion and a severe potential for wind erosion. Effective rooting depth is 60 inches or more. A typical soil profile for Stumble soil is seven inches of sandy loam in the surface layer. The underlying layer to a depth of 60 inches or more is sandy loam.

3.13 Species of Concern

“Species of Concern” include species listed by the NNDFW, USFWS, EPS, and MBTA. Species of Concern are protected, candidate, rare, or otherwise sensitive species, including native species and species of economic or cultural significance. For each species the following tribal and federal statutes are indicated: Navajo Endangered Species List (NESL), ESA, MBTA, and Eagle Protection Act. No legal protection is afforded species with only ESA candidate or NESL, Group 4 status, refer to the footnote in the following table.

The project area is located within Wildlife Areas 1 and 3. Area 1 (San Juan River Corridor) contains the best habitat for endangered and rare plants, animal and game species, and the highest concentration of these species on the Navajo Nation. The purpose of this area is to protect these valuable and sensitive biological resources to the maximum extent practical.

Area 3 has low sensitivity wildlife resources with a low, fragmented concentration of Species of Concern. Species in this area may be locally abundant on “islands” of habitat, but islands are relatively small, limited in number and well-spaced across the landscape.

The NNDFW provided a list of Species of Concern known to occur on the 7.5 minute Kirtland, NM Quadrangle with the potential to occur within the project area, refer to the table below. A biological survey was conducted on June 17 and 19, 2015. During the biological survey, a habitat analysis was conducted to determine the potential for each Species of Concern to occur. The project area provides potential habitat for the Species of Concern noted on the table below. No Species of Concern or associated sign were observed during the survey of the project area.

Refer to the BE in Appendix C for details regarding Species of Concern and the biological survey. The NNDFW concurred with the BE’s findings in BRCF No. 11NC04 (Appendix C).

Table 6: Species of Concern with a Potential to Occur within Project Area

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
American Dipper (<i>Cinclus mexicanus</i>)	G3	Live almost solely on rushing, unpolluted waters and can be found in mountain, coastal, or even desert streams of the West.	MBTA	UNLIKELY: The San Juan River would neither provide the water speed nor the required water cleanliness.

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
Aztec Gilia (<i>Aliciella formosa</i>)	G4	Salt desert scrub communities in soils of the Nacimiento Formation.	----	POTENTIAL: May be salt desert scrub habitat within PPA.
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	G2	Forested habitats for nesting and roosting, expanses of shallow fresh or salt water for foraging; nesting habitat in densely forested areas of mature trees isolated from human disturbance.	MBTA	POTENTIAL: The San Juan River and riparian zone would provide habitat.
Belted Kingfisher (<i>Ceryle alcyon</i>)	G4	Bodies of water for feeding, and vertical earthen banks for nesting; hunt unclouded water that allows them to see prey below the surface; most common habitats are streams, rivers, ponds, lakes, estuaries, and calm marine waters.	MBTA	DOES NOT OCCUR: habitat is not present in the PPA.
Black-footed Ferret (<i>Mustela nigripes</i>)	G2	Black-tailed prairie dog colonies.	ESA Endangered	POTENTIAL: Prairie dog burrows are present and seemed to be active within the vicinity of the PPA.
Bluehead Sucker (<i>Catostomus discobolus</i>)	G4	Rocky riffles and runs of small to large rivers; rarely lakes; a range of fluvial habitats ranging from cold, clear mountain streams to warm, turbid streams; adults are almost always in moderate to fast flowing water above rubble-rock substrate; young prefer quiet shallow areas near shorelines.	----	POTENTIAL: Habitat may be present in the PPA.
Brack Hardwall Cactus (<i>Sclerocactus cloveriac ssp. Breckii</i>)	G4	Desert scrub and scattered juniper communities; on sandy clay hills of the Nacimiento Formation at 5000 to 6000feet.	----	POTENTIAL: Desert scrub and scattered juniper communities are present in the PPA.
Burrowing Owl (<i>Athene cunicularia</i>)	G4	Open grasslands or desert scrub; presence of suitable nest burrow is critical prerequisite (often prairie dog burrows).	MBTA	POTENTIAL: There was no evidence of burrowing owls, but prairie dog burrows present and seemed to be active within the vicinity of the PPA

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
				may provide potential nesting sites.
Colorado Pikeminnow (<i>Ptychocheilus lucius</i>)	G2	Warm rivers and requires uninterrupted passage and a hydrologic cycle characterized by large spring peaks of snowmelt runoff and lower, relatively stable base flows.	ESA Endangered	POTENTIAL: This habitat is provided by the San Juan River in the PPA.
Ferruginous Hawk (<i>Buteo regalis</i>)	G3	Open country, primarily prairies, plain and badlands, breeding in trees near streams or on steep slopes, sometimes on mounds in open desert.	MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Golden Eagle (<i>Aquila chrysaetos</i>)	G3	Open and semi-open country featuring native vegetation; avoids developed areas and uninterrupted stretches of forest; primarily in mountains up to 12,000 feet, canyon lands, rimrock terrain, and riverside cliffs and bluffs; nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas.	MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Kit Fox (<i>Vulpes macrotis</i>)	G4	Arid climates, desert scrub, chaparral, and grasslands, common habitats are sagebrush and saltbrush; urban and agricultural areas; elevations of 1,300 to 6,200 feet above sea level.	----	POTENTIAL: This habitat is present within the vicinity of the PPA.
Mancos milk-Vetch (<i>Astragalus humillimus</i>)	G2	Within piñon-juniper woodland and desert scrub communities, with populations occurring in the Colorado Plateau subdivision of the Great Basin Desert of northwestern New Mexico and southwestern Colorado.	ESA Endangered	POTENTIAL: This habitat is present within the vicinity of the PPA.
Mesa Verde Cactus (<i>Sclerocactus mesae verdae</i>)	G2	Known populations are restricted to the Mancos and Fruitland Shale formations at the eastern edge of the "Navajoan	ESA Threatened	POTENTIAL: This habitat is present within the vicinity of the PPA.

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
		Desert"; formations erode to form badlands with soils that are highly alkaline, gypsum-rich, and prone to swelling upon exposure to water; on the tops or the slopes of these sparsely vegetated badlands.		
Mountain Plover (<i>Charadrius montanus</i>)	G4	Breeds on open plains at moderate elevations; winters in short-grass plains and fields, plowed fields, and sandy deserts.	ESA Threatened; MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Mottled Sculpin (<i>Cottus bairdi</i>)	G4	Found in gravel bottoms and sandy riffles of small headwaters, streams, and small rivers or in rocky shoreline areas of lakes; type of bottom may be less important than the presence of cover, which can be gravel, stones, or submerged vegetation; seem to prefer depths of 0.1 to 0.5 meters and cold, clear water.	----	DOES NOT OCCUR: These types of habitat components are absent from the PPA.
Northern Leopard Frog (<i>Lithobates pipiens</i>)	G2	Near streams, ponds, lakes, meadows, fields, rivers, marshes, and slow moving water and abundance of vegetation; in summer often found in open grassy meadows, pastures, or fields, can be far from water.	----	POTENTIAL: This habitat is present within the vicinity of the PPA.
Peregrine Falcon (<i>Falco peregrinus</i>)	G4	Breed in open landscapes with cliffs for nest sites; nesting at elevations up to 12,000 feet, as well as along rivers; migration and wintering Peregrine Falcons are in nearly any open habitat, but likelihood is along barrier islands, mudflats, coastlines, lake edges, and mountain chains.	MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Razorback Sucker	G2	Inhabit a diversity of areas from mainstream channels	ESA Endangered	DOES OCCUR: This habitat is present within

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
<i>(Xyrauchen texanus)</i>		to backwaters of medium and large streams or rivers; prefer to live over sand, mud, or gravel bottoms; feed on algae, insect larvae, plankton, and detritus.		the vicinity of the PPA.
Roundtail Chub <i>(Gila robusta)</i>	G2	Cool to warm water over a wide range of elevations in rivers and streams throughout the Colorado River basin, often occupying open areas of the deepest pools and eddies of mid-sized to larger streams; often associated with areas of cover in the form of boulders, overhanging cliffs, undercut banks, or vegetation.	ESA Candidate Species	POTENTIAL: This habitat is present within the vicinity of the PPA.
San Juan Milkweed <i>(Asclepias sanjuansensis)</i>	G4	Sandy loam soils, usually in disturbed sites, in juniper savanna and Great Basin desert scrub - 5,000-5,500 feet.	----	POTENTIAL: This habitat is present within the vicinity of the PPA.
Sora <i>(Porzana carolina)</i>	G4	Fresh marshes, wet meadows; in winter, - salt marshes; a variety of marshy situations, from extensive river marshes to grassy edges of small ponds; damp meadows and tall grass fields away from water; breeds in freshwater habitat with large stands of cattails; moves into salt marshes especially in winter.	MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Southwestern Willow Flycatcher <i>(Empidonax traillii extimus)</i>	G2	Breeds in dense riparian habitats along rivers, streams, or other wetlands; vegetation can be dominated by dense growths of willows (<i>Salix</i> sp.), or other shrubs and medium-sized trees; may be an overstory of cottonwood, tamarisk, or other large trees; one of the most important	ESA Endangered; MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.

Species	NESL Status ¹	Habitat	Federal Status and/or MBTA	Potential to Occur in Project Area (PPA)
		characteristics of the habitat appears to be the presence of dense vegetation, usually throughout all vegetation layers present; breeding habitats are within close proximity (less than 20 yards) of water or very saturated soil.		
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	G2	Wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes; in the Southwest, Yellow-Billed Cuckoos are rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed.	ESA Candidate Species; MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
Yellow-billed Warbler (<i>Dendroica petechia</i>)	G4	Breed in shrubby thickets and woods, particularly along watercourses and in wetlands; common trees include willows, alders, and cottonwoods; up to 9,000 feet in the West; in winter they mainly occur in mangrove forests of Central and South America.	MBTA	POTENTIAL: This habitat is present within the vicinity of the PPA.
¹ NAVAJO ENDANGERED SPECIES LIST - Resources Committee Resolution - No. RCS-41-08 September 10, 2008 GROUP 1: Those species or subspecies that no longer occur on the Navajo Nation. GROUP 2 (G2) & GROUP 3 (G3): "Endangered" -- Any species or subspecies whose prospects of survival or recruitment within the Navajo Nation are in jeopardy or are likely within the foreseeable future to become so. G2: A species or subspecies whose prospects of survival or recruitment are in jeopardy. G3: A species or subspecies whose prospects of survival or recruitment are likely to be in jeopardy in the foreseeable future. GROUP 4: Any species or subspecies for which the Navajo Nation Department of Fish and Wildlife NNDFW does not currently have sufficient information to support their being listed in G2 or G3 but has reason to consider them. The Navajo Nation Department of Fish and Wildlife will actively seek information on these species to determine if they warrant inclusion in a different group or removal from the list.				

3.14 Vegetation

Habitat within the southern portion of the project area and within the general region consists of wide expanses of desert grassland with scattered low-lying shrubs. There are denser stands of

grass, farm fields, and trees within the Upper Fruitland Chapter area of the northern terminus of the project area.

Dominant species, including Navajo Nation (BIA) listed invasive and non-native species, are Bottlebrush squirreltail (*Elymus elymoides*), Cheatgrass *Bromus tectorum*, cottonwood (*Populus* sp.), Curlycup gumweed (*Grindelia squarrosa*), Field bindweed *Convolvulus arvensis* L.), Four-wing saltbush (*Atriplex canescens*), Greasewood (*Sarcobatus vermiculatus*), Hairy false goldenaster (*Heterotheca villosa*), Halogeton (*halogeton glomeratus*), Indian ricegrass *Oryzopsis hymenoides*), Longflower rabbitbrush (*Chrysothamnus depressus*), Milkweed (*Asclepias* sp.), Narrowleaf yucca (*Yucca angustissima*), Needle and thread grass (*Hesperostipa comata*), Nightshade (*Solanum* sp.), Oxeye daisy (*Leucanthemum vulgare*), Pigweed (*Amaranthus* sp.), Plantain (*Plantago* sp.), Puncturevine, red stem filaree (*Erodium cicutarium*), Rock goldenrod (*Petradoria pumila*), Rocky Mountain beeplant (*Cleome serrulata*), Rubber rabbitbrush (*Ericameria nauseosa*), Russian knapweed (*Centaurea repens* L.), Russian Olive (*Elaeagnus angustifolia* L.), Russian thistle (*Salsola tragus*), Scarlet globemallow (*Sphaeralcea coccinea*), Shadscale (*Atriplex confertifolia*), Spinystar (*Escobaria vivipara*), Tamarisk (*Tamaricaceae*, Sp.), Western wheatgrass (*Pascopyrum smithii*), Wild sunflower (*Helianthus* sp.), Willow (*Salix* sp.), Winterfat (*Krascheninnikovia lanata*), Yellow rabbitbrush (*Chrysothamnus viscidiflorus*).

Ground cover (including litter) varies from approximately 5 to 75 percent on the southern terminus of the project area to approximately 90 percent on the northern terminus of the project area.

3.15 Visual Resources

The project area is located within a rural setting. Fairly dense producing and abandoned natural gas wells, pipeline corridors, and access roads are located in the region surrounding the project area. The northern portion of the project crosses through home-site and field areas in the Upper Fruitland Chapter with numerous structures and driveways. Visibility of the project is at a distance to some people, but very visible to people that are local to the project. Residences in the Fruitland Chapter of the Navajo Nation can see the project. A portion of the project area is visible at a distance from Farmington, NM, at a distance from US Highway 64 and accompanying commercial areas, and from N-36 passing through the project. A portion of the project may be visible from the Navajo Nation's Northern Edge Casino located approximately two miles east of the project on N-36. There are no designated recreation areas within one mile of the project area; however, the Dunes Recreation Area and the Head Canyon Off the Road Vehicle Competition Area are located on BLM administered land two and one-half and three and one-half miles east, respectively. These two BLM areas addressed are not visible from the project area due to topography.

Visual representations of existing visual impacts in the area are illustrated in Appendix F - Figure A.2, Project Area Map and Figure A.3, Aerial Map.

3.16 Water Resources - Surface and Ground

3.16.1 Surface Water

The project area is within the Middle San Juan Watershed. There are numerous unnamed ephemeral washes within the project area. The major wash in the area is the Ojo Amarillo Canyon several miles to the west of the project area. These washes drain into the San Juan River. The project area ends on the north end at the centerline of the San Juan River.

The San Juan River is a significant tributary of the Colorado River in the southwestern United States, about 383 miles (616 km) long. The river drains an area of about 24,600 square miles (64,000 km²) in southwestern Colorado, northwestern New Mexico, southeastern Utah, and a small part of northeastern Arizona.

The San Juan drains an arid region of North America, and along its length it is very often the only significant source of fresh water. The San Juan River is the only significant stream in parts of the Navajo Nation that lie in New Mexico, Colorado, and Utah. Aside from Lake Powell, the only large impoundment of water along the San Juan River is at Navajo Reservoir, formed by the Navajo Dam in eastern San Juan County, New Mexico. Significant towns located along the San Juan River are Pagosa Springs, Colorado, the head waters of the San Juan and Farmington, New Mexico.

3.16.2 Groundwater

Colorado Plateau sandstone aquifers and unconsolidated sand and gravel aquifers underlie the San Juan Basin. The primary Colorado Plateau aquifers underlying the majority of the region are the Uinta-Animas and Mesa Verde Aquifers, both of which are sandstone. Where groundwater is available, the yield of most water wells in the area is low. The quality of groundwater in the San Juan Basin ranges from poor to fair (2003).

The Northern Edge Casino (approximately two miles east of the project) obtains its water from the Navajo Tribal Utility Authority (NTUA) who purchases the water from the City of Farmington. Conversation with the NTUA Shiprock District Office Water Forman revealed no information on ground water depth or water wells in the area, but revealed that NTUA also provides water for the Upper Fruitland Chapter. A staff person at Upper Fruitland Chapter said there is one water well in the Chapter, but provided no information on depth to ground water. There are no known water wells within a one-mile radius of the project area. There no known cathodic wells in the vicinity of the project area.

3.17 Wetlands/Riparian Zones

Wetlands along the San Juan River in this area are approximately 400 feet wide. Riparian habitat is dominated by cottonwoods (*Populus* spp.) and willows, saltcedar, and Russian olive. These riparian communities are associated with the San Juan River (April 2007).

3.18 Wildlife

The project area is located on Navajo Nation land. The Wildlife Law Enforcement Section of the NNDFW is responsible for the preservation of Navajo Nation's fish, wildlife, and plant resources on a full time basis through the enforcement of all fish and wildlife laws or regulations as established by the Resources Committee of the Navajo Nation Council or the Navajo Nation Council and certain federal laws that apply to the Navajo Nation with the assistance of the USFWS.

The project is in Navajo Nation Hunting Unit 13 which offers licenses to "take" deer, elk, and mountain lion.

Hunting and fishing permits issued by the New Mexico Department of Game and Fish (NMDGF) are not valid within the boundary of the Navajo Nation. However, the NMDGF monitors big

game population trends in the region. Depending on winter weather conditions and snow depths, mule deer (*Odocoileus hemionus*) and elk (*Cervus elaphus*) migrate to their winter ranges from high elevations during late November and December, and migrate back to summer ranges in March or April. Twenty-five years of NMDGF aerial survey information for this area indicates that mule deer and elk winter populations have fluctuated over the years, but no evident trend seems apparent in the project area. Deer numbers counted appear to be most strongly linked with the severity of winter conditions. The data does not appear to support any cause or effect relationship between wintering deer populations and the level of oil and gas development.

Although Navajo Nation Hunting Unit 13 offers licenses for deer, elk, and mountain lion, these animals would be assumed to be farther south in the Unit and away from the project with the possible exception of deer along the San Juan River. The reason for this would include the density of human population in the Upper Fruitland Chapter (crossed by the project) and the availability of forage and other habitat amenities provided by the Navajo Agriculture Products fields to the south and southwest of the project. Other wildlife occurring in the project area includes Desert Cottontail (*Sylvilagus audubonii*), Prairie Dog (*Cynomys* sp.), and Whiptail Lizard (*Aspidoscelis uniparens*).

4.0 Environmental Consequences

It is to be noted that this pipeline was assumed to be constructed approximately five and one-half decades (55 years) ago. It is assumed to be constructed with as part of a pipeline system approved on BLM land to El Paso Natural Gas Company with a ROW serialized by BLM as NM0061647 in April 1960. This chapter is written as though whether or not to approve the grant is a future decision to align with the NEPA if that law and subsequent regulations and processes had been in place at that time. It should also be noted that some of the references as to laws, studies, other pertinent information, organizations and land designations, have much more recent dates than when the original application was processed.

Chapter 4 discusses the effects and/or impacts to the environment that would result from implementation of Alternative B; Alternative A will not be further analyzed. Mitigation to reduce detrimental effects is also discussed.

Effects can be beneficial or detrimental, and can be long-term (permanent or residual) or short-term (incidental or temporary). Short-term effects impact the environment for a limited period of time; the environment rapidly reverts to pre-project conditions. Long-term effects are substantial alterations to the pre-project environment; these effects would remain for many years or for the life of the project.

For the purposes of this EA, potential effects have been divided into three categories:

- **High:** As defined in Council on Environmental Quality (CEQ) guidelines (40 CFR 1500-1508), effects that are substantial in severity and, therefore, should receive the greatest attention in decision-making.
- **Moderate:** Effects that cause a degree of change that is easy to detect, but that do not meet the criteria for significant impacts.
- **Low:** Effects that cannot be easily detected and cause little change in the existing environment.

Alternative A - No Action

Under the No Action Alternative, Alternative B would not be implemented. The No Action Alternative would result in the continuation of the current land and resource uses in the area. The No Action Alternative would result in no effect to each resource discussed within this section. No mitigation would be required.

As an assumption, XTO would be required to go through abandonment procedures for this section of existing pipeline.

Alternative B – Proposed Action

Under this alternative, all project activities listed, including site-specific mitigation measures would occur. For a complete description of the project, see Sections 2.1 through 2.3. This alternative would result in 12.3 acres of continued surface use. It is assumed all the disturbed area was reclaimed.

4.1 Air Resources

4.1.1 Direct and Indirect Effects

4.1.1.1 Air Quality

Air quality would temporarily be directly impacted by pollution from exhaust emissions, chemical odors, and dust from construction equipment if any major maintenance activities take place. Most dust dissemination would discontinue when construction is completed. Air pollution from construction equipment would discontinue when reclamation is complete. The winds that frequent northwestern New Mexico generally disperse odors and emissions. Other factors that currently affect air quality in the area include dust from livestock-herding activities, recreational use, and vehicle use on roads.

Potential impacts of the pipeline repairs could include increased airborne soil particles generated from road use, and construction and reclamation activities, and exhaust emissions from construction equipment and vehicles, and potential releases of GHGs, nitrogen oxides (NO_x), and volatile organic compounds (VOCs) during these activities. The amount of increased emissions cannot be quantified at this time, since it is unknown what types of equipment was used.

When compared to total national or global emissions, the amount released as a result of this construction would not have a measurable effect on climate change due to uncertainty and incomplete and unavailable information. Therefore, it is not possible to determine the effects on climate change on a regional, national, or global scale.

Consumption of gas developed from the product this pipeline would transport is expected to produce GHGs, NO_x and VOCs. Consumption is driven by a variety of complex interacting factors, including energy costs, energy efficiency, availability of other energy sources, economics, demography, and weather or climate. Regional and global transportation, metropolitan traffic, fires (including wildfires, controlled burns, and use of domestic fireplaces), and power plant emissions from the west are also parts of the equation. In August 2006, regional air quality modeling conducted for the Northern San Juan Basin Coal Bed Methane Final Environmental Impact Statement (EIS) Project determined that potential cumulative visibility impacts to Federal Prevention of Significant Deterioration (PSD) Class I Areas (Mesa Verde National Park and the Wenimuche Wilderness Area) could occur at some unspecified time in the future.

The NAAQS are set for the most common and widespread pollutants. The standards are concentrations of air pollution above which the USEPA has determined that serious health and welfare consequences could occur. If the concentrations are below the NAAQS, there are no expected adverse effects to humans and the environment.

4.1.1.2 Climate

The assessment of GHG emissions and climate change is in its formative phase. It is currently not feasible to know with certainty the net impacts from the project on climate. The inconsistency in results of scientific models used to predict climate change at the global scale, coupled with the lack of scientific models designed to predict climate change on regional or local scales, limits the ability to quantify potential future impacts of decisions made at this level.

4.1.2 Mitigation

Four Corners Air Quality Task Force (FCAQTF) monitors air quality issues in the Four Corners region. The FCAQTF is comprised of a broad base of representatives including federal, state, Indian, and local governments; industry; interest groups; and concerned community members. The FCAQTF has several working groups, which worked on the development of a mitigation options report (completed December 2007) to serve as a resource and guide to the regulatory agencies. The responsible agencies may use the report as the basis for developing air quality management plans for the region. This may include developing new regulations, revising existing regulations, supporting new legislation, developing new outreach and information programs, and developing and/or expanding voluntary programs for emission reductions.

The NMAQB has determined that the 2007 – 2009 ozone design value for San Juan County is 0.070 ppm. The design value for the county must be greater than the revised eight-hour ozone standard of 0.075 ppm for a nonattainment designation.

The USEPA's inventory data describes "Natural Gas Systems" and "Petroleum Systems" as the two major categories of U.S. sources of GHG gas emissions. The inventory identifies the contributions of natural gas and petroleum systems to total CO₂ and CH₄ emissions (natural gas and petroleum systems do not produce noteworthy amounts of any of the other GHGs). Within the larger category of Natural Gas Systems, the USEPA identifies emissions occurring during distinct stages of operation, including field production, processing, transmission and storage, and distribution. Petroleum Systems sub-activities include production field operations, crude oil transportation, and crude oil refining.

Best Management Practices (BMPs) are designed to reduce impacts to air quality by reducing all emissions from oil and gas field production and operations. Typical measures may include flaring hydrocarbons and gases at high temperatures in order to reduce emissions of incomplete combustion, requiring that vapor recovery systems be maintained and functional in areas where petroleum liquids are stored, ensuring that compressor engines 300 horsepower or less have NO_x emissions limited to 2 grams per horsepower hour, revegetating areas not required for production facilities to reduce the amount of dust, and watering dirt roads during periods of high use in order to reduce fugitive dust emissions. The significant threshold for particulate matter of 35 ug/m³ daily PM_{2.5} NAAQS is not expected to be exceeded under the proposal.

The USEPA data shows that improved practices, improved technology, and changing economics have reduced emissions from oil and gas exploration and development (USEPA 2009). One of the factors in this improvement is the adoption by industry of the BMPs proposed by the USEPA's Natural Gas Energy Star program

4.2 Cultural Resources

4.2.1 Direct and Indirect Effects

Effects to cultural resources are expected to be low for the short- and long-term. Direct effects normally include alterations to the physical integrity of a cultural resource. If a cultural resource is significant for other than its scientific information, direct effects may also include the introduction of audible, atmospheric, or visual elements that are out of character for the cultural site. A potential indirect effect from the project is the increase in human activity or access to the area with the increased potential of unauthorized

removal or other alteration to cultural resources in the area. Based on a review of the archaeological reports and the assessment of the undertaking in this area, the NNHPD has determined that, with mitigation, the project, with mitigation, would have no effect on cultural resources (CRCF, Appendix E).

4.2.2 Mitigation

In the event of future ground disturbing activities, a qualified archaeologist will flag site NM-H-22-125 prior to ground disturbing activities. Site NM-H-22-125 will be avoided by all ground disturbing activities by a minimum of 50 feet from the site boundary.

All employees, contractors, and sub-contractors of the project would be informed by the project proponent that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment, and that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 USC 470aa-mm).

In the event of a new discovery during construction, if that is required during major maintenance activities, XTO would immediately stop all construction activities in the immediate vicinity of the discovery and immediately notify the NNHPD. Should a discovery be evaluated as significant (e.g., eligible for the National Register of Historic Places, NAGPRA, or ARPA), it would be protected in place until mitigating measures can be developed and implemented according to guidelines set by the NNHPD.

4.3 Environmental Justice

4.3.1 Direct and Indirect Effects

The project would potentially impact local residents of the Navajo Nation Upper Fruitland Chapter living along the pipeline corridor, if that is required during major maintenance activities. The potential impacts would be construction noise from pipeline repair to the existing pipeline and dust and the potential hazards associated with construction equipment including trucks and trailers hauling equipment, and operation of the pipeline.

Local and regional companies may be employed during construction and operation of pipeline facilities. This employment would result in an economic benefit to the local and regional community.

4.3.2 Mitigation

No mitigation is required.

4.4 Floodplains

4.4.1 Direct and Indirect Effects

The project would have moderate short-term effects on floodplains.

The project crosses Colorado pike minnow and Razorback sucker critical habitat. Possible pipeline repairs of the existing pipeline could result in pipeline being modified

within the 100-year floodplain of the San Juan River resulting in temporary disturbance of less than one acre of riparian habitat.

Ground disturbance associated with construction within the floodplain has the potential to increase sediments reaching the San Juan River. Additionally, accidental fuel, lubrication or other hazardous material spills in the construction zone, depending upon the size, has potential to reach the San Juan River and adversely impact localized fisheries and/or downstream habitats

4.4.2 Mitigation

The existing pipeline currently crosses the San Juan River. If there are potential replacements of, or repairs to the existing pipeline, it should be performed by using horizontal directional drilling (HDD). This HDD should be from outside the floodplain and riparian areas associated with the River.

4.5 Hazardous and Solid Wastes

4.5.1 Direct and Indirect Effects

Direct and indirect waste impacts are expected to be low for the short- and long-term. Typical wastes associated with the project would include solid wastes with potential pipeline repairs (such as woody material generated by initial clearing, trash and human waste).

4.5.2 Mitigation

During potential pipeline repairs, a trash receptacle and chemically treated portable toilets would be located on the project site. Wastes would be disposed of in a proper manner as required by Navajo Nation and/or federal, state, and county laws.

4.6 Invasive, Non-Native Species

4.6.1 Direct and Indirect Effects

Effects from invasive, non-native species would be low for the short- and long-term.

Increased vehicle traffic within and to the project area, especially any interstate traffic, could result in the establishment and/or spread of invasive, non-native weeds. Additionally, the existing disturbance and barren surfaces created by the project has allowed for weed establishment and spread. However, the reclamation of native species seems effective according to NCI biologist during the biological surveys on June 17 and 19, 2015.

4.6.2 Mitigation

It would be XTO's responsibility to monitor, control, and eradicate all invasive, non-native plant species within the project area throughout the life of the project. XTO would contact the Navajo Nation regarding acceptable weed-control methods. The use of any pesticides or herbicides would comply with Navajo Nation and/or federal and State laws. Pesticides and herbicides would be used only in accordance with their registered use and limitations. The operator would contact the Navajo Nation prior to using these chemicals.

If out-of-state construction companies are used to accomplish major maintenance activities, vehicles and equipment would be washed before they enter and after they exit the project area. A Navajo Nation-specified weed-free seed mixture would be used during reclamation of potential pipeline repairs.

4.7 Migratory Birds

4.7.1 Direct and Indirect Effects

There could be low short- and long-term effects to migratory birds as a result of the project.

For the short-term, activities associated with the project (including potential pipeline repairs and reclamation) may deter migratory birds and/or their prey from utilizing the project area and the immediate vicinity.

For the long-term, if potential pipeline repairs were to occur during migratory breeding season (spring through summer), it is possible that nests within the project area could be destroyed, although mitigation would minimize the possibility of this occurrence. If potential pipeline repairs and reclamation were to occur during migratory bird breeding season, it is possible that nests adjacent to the project area could be abandoned.

It is difficult to predict the effects of the project on migratory birds. The increased activity, noise, and disturbed vegetation associated with the project could result in the increased usage of the immediate area by some migratory bird species, while decreasing usage by other species. Studies have shown mixed impacts of oil and gas development on nesting migratory birds. According to a study by Ortega and Francis, the presence of oil and gas compressors affected bird species differently; however, there was no difference in overall nest density on plots with and without compressors (2007). A study by King and Holmes found that the sage sparrow had lower nest survival in an area with ongoing gas development; however, the Brewer's sparrow had higher nest survival rates in a developed gas field when compared with populations in an undeveloped control area (2003).

4.7.2 Mitigation

Following potential pipeline repairs and reclamation, any new surface disturbance would be reclaimed.

XTO would attempt to conduct vegetation removal activities outside of the migratory bird breeding season (April 15 through August 15). If construction cannot be avoided during that time, a pre-construction survey for active nests would be conducted. If an active nest is discovered within 165 feet of the construction boundaries, construction would not commence until after August 15 or until the nestlings have fledged and a subsequent pre-construction survey has determined that there are no active nests within 165 feet of the construction boundaries. If postponement is not an option, the NNFWS would be notified and/or a nest take permit would be obtained from the USFWS for the removal of the nest, eggs, and/or nestlings by a federally permitted migratory bird rehabilitator. The birds would be raised artificially in a federally permitted migratory bird rehabilitation center. However, it is unlikely that XTO would operate during the

migratory bird breeding season and potential pipeline repairs would be minimal in nature as not to affect any migratory birds.

4.8 Mineral Resources/Geology

4.8.1 Direct and Indirect Effects

There would not be any short- and long-term effects to mineral resources and geology as a direct result of this existing pipeline.

4.8.2 Mitigation

No mitigation is recommended.

4.9 Native American Religious Concerns

4.9.1 Direct and Indirect Effects

There would be no effect to Native American religious concerns. The existing pipeline is not known to physically threaten the integrity of any TCPs, prevent access to sacred sites, prevent the possession of sacred objects, or interfere or otherwise hinder the performance of traditional ceremonies and rituals pursuant to AIRFA or EO 13007. There are currently no known threats to remains that fall within the purview of NAGPRA or ARPA.

4.9.2 Mitigation

No mitigation is recommended.

4.10 Noise

4.10.1 Direct and Indirect Effects

Effects as a result in an increase in area noise are expected to be low for the short-term and long-term.

During any potential pipeline repairs and reclamation of the project, sound levels would be elevated above pre-existing levels. Noise associated with the project could be heard from the residences at the north end in the Upper Fruitland Chapter.

Access to the project area is provided by existing roads which travel to existing natural gas facilities and other rural residences. Traffic and subsequent noise on these roads would increase slightly as a result of any potential pipeline repairs.

4.10.2 Mitigation

Requiring use of properly operating equipment equipped with properly operating mufflers.

4.11 Public Health and Safety

4.11.1 Direct and Indirect Effects

As a result of the project, short-term and long term effects to public safety would be low.

The project could potentially affect transportation. During potential pipeline repairs and reclamation, the project could result in increased traffic on area roads; some vehicles could be hauling construction equipment and pipe. Therefore, there could be an increased potential for traffic accidents. Dust associated with potential pipeline repair activities or travel on dirt access roads may result in poor visibility in the area. The increased use of dirt access roads during muddy conditions may worsen the roads' conditions. Following potential pipeline repairs and reclamation, traffic levels would be similar to current levels; long-term effects on transportation would be low.

During the operation of the pipeline, a rupture could represent a remote potential danger to the public.

4.11.2 Mitigation

The hauling of equipment and materials for the project on public roads would comply with the Navajo Nation and/or the Department of Transportation (DOT) regulations. XTO would notify the public of potential hazards by posting signage, as necessary.

XTO would adhere to company safety policies, Navajo Nation Regulations, COAs, Occupational Safety and Health Administration (OSHA) regulations, DOT regulations (if required), and pipeline safety regulations (per 49 CFR 190 and 192).

Liquid and solid wastes would be disposed of at an appropriate waste-disposal site. The project area would be maintained in a sanitary condition. If hazardous substances were to be found, they would be handled and disposed of according to federal law, as discussed in Section 4.4.2 (Hazardous and/or Solid Wastes: Mitigation).

4.12 Soils

4.12.1 Direct and Indirect Effects

The project would result in low short-term and long-term effects to soils.

Potential pipeline repairs activities could result in the mixing, displacement, and compaction of soils within the project area. Most of the soils within the project area have a low to moderate potential for water erosion and a moderate to high potential for wind erosion (NRCS 2009). The removal of vegetation within the project area from potential pipeline repairs could result in increased soil erosion during construction activities. The degree of erosion would be dependent upon precipitation and wind. However, following potential pipeline repairs, the compaction of soils, reclamation of portions of the project area, and implementation of erosion-control measures would limit soil impacts due to erosion.

4.12.2 Mitigation

During potential pipeline repairs, the top six inches of topsoil would be stockpiled separately from the spoil material for use during reclamation. The entire potential pipeline repair area would be reclaimed. Following potential pipeline repairs, vehicles would be restricted to existing roads.

4.13 Species of Concern

4.13.1 Direct and Indirect Effects

Direct and indirect effects to Species of Concern are anticipated to be moderate for the short- and long-term.

The project area provides potential habitat for Aztec Gilia, Bald Eagle, Black-footed Ferret, Bluehead Sucker, Brack Hardwall Cactus, Colorado Pikeminnow, Ferruginous Hawk, Golden Eagle, Kit Fox, Mancos Milk-vetch, Mesa Verde Cactus, Mountain Plover, Northern Leopard Frog, Peregrine Falcon, Razorback Sucker, Roundtail Chub, San Juan Milkweed, Sora, Southwestern Willow Flycatcher, Yellow-billed Cuckoo, and Yellow-billed Warbler. Burrowing Owls may use available Prairie Dog burrows within the vicinity of the project area for nesting and the associated areas for foraging. The potential pipeline repairs could result in the short-term removal of approximately 12.3 acres of potential habitat. During periods of potential pipeline repairs or other heavy human activity within the project area, these species would be unlikely to utilize the general vicinity. During production, some of these species may also avoid the immediate area due to increased human activity. However, it is unlikely that potential pipeline repairs will disturb a significant amount of acreage.

The potential pipeline repairs would comply with the Bald and Golden Eagle Protection Act (16 USC 668-668c). The project would not disturb eagles or their nests.

4.13.2 Mitigation

All potential pipeline repair activities would be confined to permit areas only. Wildlife hazards associated with construction and operation would be fenced or contained in storage tanks. During reclamation of the potential pipeline repairs, any disturbance would be reseeded. Cover reestablishment would minimize impacts to wildlife. A Navajo Nation-approved weed-free seed mixture would be used during reclamation of any potential pipeline repairs.

If potential pipeline repairs would occur between March 1 and August 15, a Burrowing Owl and raptor survey would be conducted. Surveys would take place between March 1 and July 31. If Burrowing Owl or other raptor nest(s) are detected during these surveys, no construction activity would be permitted within 0.25 mile of the active nest burrow from March 1 through August 15; no habitat alteration would be permissible year-round within 0.25 mile of the nest site (NNDFW 2012). If other Species of Concern, such as Mountain Plovers, are detected during these surveys, appropriate measures would be taken to protect those species per NNDFW protocol and recommendations.

4.14 Vegetation

4.14.1 Direct and Indirect Effects

The project would have low short-term effects on area vegetation.

The existing pipeline would not result in the removal of vegetation within approximately 12.3 acres of essentially desert grassland and riparian vegetation unless potential pipeline repairs are needed. Following reclamation of the potential pipeline repairs, re-establishment of vegetation is expected to take three to five growing seasons, depending on precipitation.

4.14.2 Mitigation

If there are any potential pipeline repairs, a Navajo Nation-approved seed mixture would be used to seed reclaimed areas.

4.15 Visual Resources

4.15.1 Direct and Indirect Effects

The project created visual scars on the landscape in an area that is relatively undeveloped. A portion of the project area is visible from some residences in the Upper Fruitland Chapter, at a distance from Farmington, NM, at a distance from US Highway 64 and accompanying commercial areas, from N-36 passing through the project, and from the Northern Edge Casino.

4.15.2 Mitigation

Potential pipeline repairs and reclamation would decrease the period of greatest visual impact. Using surface equipment painted an earth-tone color would lessen visual impacts. The goal of reclamation would be to return the project to pre-construction ground surface contours if there are potential pipeline repairs.

4.16 Water Resources – Surface and Ground

4.16.1 Direct and Indirect Effects

4.16.1.1 Surface Water

Low short- and long-term effects to surface waters would be expected as a result of the project.

No washes presently carrying water would be directly affected by the project.

As a result of soil erosion, temporary, indirect effects to surface waters could be possible. For the short-term, the project would result in soil disturbance from any potential pipeline repairs and vegetation removal for the potential pipeline repairs. Effects from water erosion are expected to be low.

4.16.1.2 Groundwater

Short- and long-term effects to groundwater would not be expected.

4.16.2 Mitigation

During reclamation, all disturbances from potential pipeline repairs would be reseeded.

4.17 Wetlands/Riparian Zones

4.17.1 Direct and Indirect Effects

The project would have no effect on wetlands but moderate short-term effects on riparian zones from potential pipeline repairs.

The potential pipeline repairs could result in the removal of less than one acre of riparian vegetation. Following reclamation of potential pipeline repairs, re-establishment of vegetation is expected to take three to five growing seasons, depending on precipitation.

4.17.2 Mitigation

The potential pipeline repairs that require HDD crossing at the San Juan River should be from outside the wetlands and riparian areas associated with the San Juan River. If the ROW is approved, and major repairs are required, XTO would obtain a letter from the USACE in accordance with the Clean Water Act stating jurisdictional verification for waters of the U.S. and/or wetlands/riparian zones within the project area and the need or not of a Nation Wide or Individual Permit.

4.18 Wildlife

4.18.1 Direct and Indirect Effects

With implementation of mitigation measures, direct and indirect wildlife effects are anticipated to be low for the short-term and long-term.

Wildlife habitat removal and fragmentation could result from potential pipeline repairs. The potential pipeline repairs could result in the disturbance within the approximate 12.3 acres long existing pipeline corridor of mostly previously disturbed desert grassland and riparian habitat.

During potential pipeline repairs and reclamation activities, increased noise and dust from vehicular traffic, earth-disturbing equipment, and human activity could also disturb wildlife. The potential exists for wildlife to be hit and killed by vehicles on surrounding roads. Site visits could represent a slight increase in human and vehicle activity in the area, as compared to present levels.

Some wildlife species react positively to certain oil and gas activities, some react negatively, and some show no reaction at all. Species would continue to inhabit the area or conversely move out of the area, and populations may increase or decrease depending on the available adjacent forage and habitat present.

Effects to wildlife Species of Concern are discussed in Section 4.12.1 (Species of Concern – Direct and Indirect Effects).

4.18.2 Mitigation

All potential pipeline repair activities would be confined to permit areas only. During reclamation of new disturbance associated with potential pipeline repairs would be reseeded. A weed-free, Navajo Nation-approved seed mixture would be used during reclamation of potential pipeline repairs.

For mitigation regarding wildlife refer to Section 4.6.2 (Migratory Birds - Mitigation) and Section 4.12.2 (Species of Concern – Mitigation)

4.19 Residual Effects

The effects of the project that remain after mitigation are residual impacts. Residual impacts of the project include effects to local air quality by increased combustion emissions, changes in site topography, changes in soil constitution, and changes in vegetation composition. Combustion emissions and dust may increase during the production phase of the project. An unquantified amount of increased soil loss, erosion, sedimentation, and degradation of surface water quality and quantity would result. Additionally, the potential for the loss of cultural materials exists,

primarily as a result of indirect human actions. The potential repairs of the project could alter the landscape and increase visual scarring in the area. Noise in the vicinity of the pipeline could increase for the short-term. To keep all impacts below the level of significance, implementation of recommended mitigation would be necessary.

4.20 Cumulative Effects

The area of the project has been industrialized with oil and gas well development. For each project that has been permitted, there has been an increase in long-term surface disturbance and fragmentation. As wells become unproductive, well pads and access roads are reclaimed. Thus, cumulative impacts fluctuate with the construction and reclamation of well pads, facilities, and pipelines. Preserving as much land as possible and applying appropriate mitigation measures would alleviate the cumulative impacts.

The project, with 12.3 acres of existing disturbance, would not increase long-term disturbance in the region. Currently existing within one-mile on either side of the pipeline route there are two miles of Navajo Nation Route 36 with a permanent disturbance width of 60 feet (driving surface and shoulders) for 72.7 acres, two miles of the Fruitland Irrigation Canal with an estimated permanent disturbance width of 25 feet for 6.1 acres, and an electric transmission line that parallels (one-half mile away) the existing pipeline on the east side for its length for less than approximately one-half acre of permanent disturbance. There are approximately 31 producing natural gas wells (and 32 non-productive wells) and associated roads and well-tie pipelines within approximately one mile of the project, and pipelines and access roads are located in the region surrounding the project area. It should be noted the Farmington Resource Management Plan (RMP) and Final EIS (March 2003) assumes each well access road and well-tie pipeline will disturb one acre. Producing gas wells would cause approximately 38.2 acres of long-term disturbance (assuming 1.2 acres permanent disturbance per well pad), approximately 15.5 acres roads of long-term disturbance (assuming one-half acre per well road) as provided in the Farmington RMP – used as an example for permanent disturbance calculations. Many areas (uncalculated acres) of permanent disturbance in the area of the project are caused by driveways, dwellings and other facilities relating to the Upper Fruitland Chapter. Magnitude of the existing disturbance involved is illustrated in Appendix F – Maps (Figure A.2 Project Area Map and Figure A.3 Aerial Map).

Due to the absence of regulatory requirements to measure GHG emissions and the variability of oil and gas activities on Federal and Indian minerals, it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of approving this ROW application.

The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts. However, potential impacts to natural resources and plant and animal species due to climate change are likely to be varied, including those in the southwestern United States. For example, if global climate change results in a warmer and drier climate, increased particulate matter impacts could occur due to increased windblown dust from drier and less stable soils. Cool season plant species' spatial ranges are predicted to move north and to higher elevations, and extinction of endemic threatened/endangered plants may be accelerated.

Due to loss of habitat or competition from other species whose ranges may shift northward, the population of some animal species may be reduced or increased. Less snow at lower elevations would likely impact the timing and quantity of snowmelt, which, in turn, could impact water resources and species dependent on historic water conditions. Forests at higher elevations in New

Mexico, for example, have been exposed to warmer and drier conditions over a ten year period. Should the trend continue, the habitats and identified drought sensitive species in these forested areas and higher elevations may also be more affected by climate change.

The short-term use of the area for the project is not expected to adversely impact or limit the long-term productivity of the land, or nearby lands. There is no irreversible or irretrievable commitment of surface resources that would occur from the project.

5.0 Consultation/Coordination

The following agencies and individuals contributed to the preparation of this document:

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XTO – Paul Lehrman and James McDaniel

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APPENDIX A - Navajo Nation Chapter Concurrence

The Navajo Nation
Upper Fruitland Chapter
PO BOX 1257
Fruitland, New Mexico 87416
(505) 960-5032/9811
Fax (505) 960-0614



LoRenzo Bates, Council Delegate
Hubert Harwood, President
Leon Williams, Vice-President
Faye Muehly, Secretary/Treasurer
Robert Harris, Farm Board
Laurence Bekins, Grazing Representative

**RESOLUTION OF THE NAVAJO NATION UPPER FRUITLAND CHAPTER
SUPPORTS AND APPROVES THE RESOLUTION FOR XTO ENERGY INC. RENEWAL OF A
PREVIOUSLY EXISTING NATURAL GAS PIPELINE RIGHT-OF-WAY KNOWN AS RED
PEPPER PIPELINE**

WHEREAS:

1. Pursuant to 26 N.N. C. § 3(A), the Upper Fruitland Chapter is a certified Chapter of the Navajo Nation as listed under 11 N.N.C., Part 1, P10; and.
2. Pursuant to 26 N.N.C. § 1(B), the Upper Fruitland Chapter is delegated the governmental authority to make decisions over local matters consistent with Navajo Law, Custom, and Tradition and under 11 N.N. C. Part, P10 and also delegated authority to make local decisions in the best interest and welfare of the community members; and.
3. Pursuant to 26 N.N.C. § 102(A); Upper Fruitland Chapter met the requirements under the Five Management System Policies & Procedures and.
4. Pursuant to 26 N.N.C. § 103(d) (1), the Resources and Development Committee certified Upper Fruitland Chapter as Governance Certified who shall exercise authorities pursuant to 26 N.N.C., Section 103, with exceptions of Land Administration Authority beginning February 28, 2012; and.
5. Upper Fruitland Chapter supports and approves XTO Energy Incorporated's application to renew their existing 6 5/8 O.D. natural gas pipeline right-of-way, 40 feet in width in sections 15, 22, 26 & 27, Township 29 North Range 14 West, NMPM, known as Red Pepper pipeline, within the Navajo Nation, San Juan County, New Mexico and.
6. Upper Fruitland Chapter acknowledges the existence of the pipeline since 1955, that the pipeline is in a north south direction, passing below or near the new Navajo Housing Authority residential area, up to and through the NAPI property, which is within Upper Fruitland community.

NOW THEREFORE BE IT RESOLVED THAT:

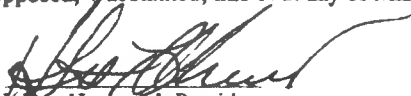
The Upper Fruitland Chapter supports and approves the resolution for XTO Energy Inc. renewal of a previously existing natural gas pipeline right-of-way known as Red Pepper Pipeline.

CERTIFICATION

WE HEREBY CERTIFIED that the foregoing resolution was approved by the Upper Fruitland Chapter at a duly called meeting held at Upper Fruitland Chapter (Navajo Nation), N.M. A motion to approve was

FRUI 03-15- 167

made by Lucy Bekis and seconded by Alvis Kee and the same was passed by a vote of 18 in favor, 0 opposed, 7 abstained, this 19th day of March, 2015.



Hubert Harwood, President



Faye BlueEyes, Secretary/Treasurer



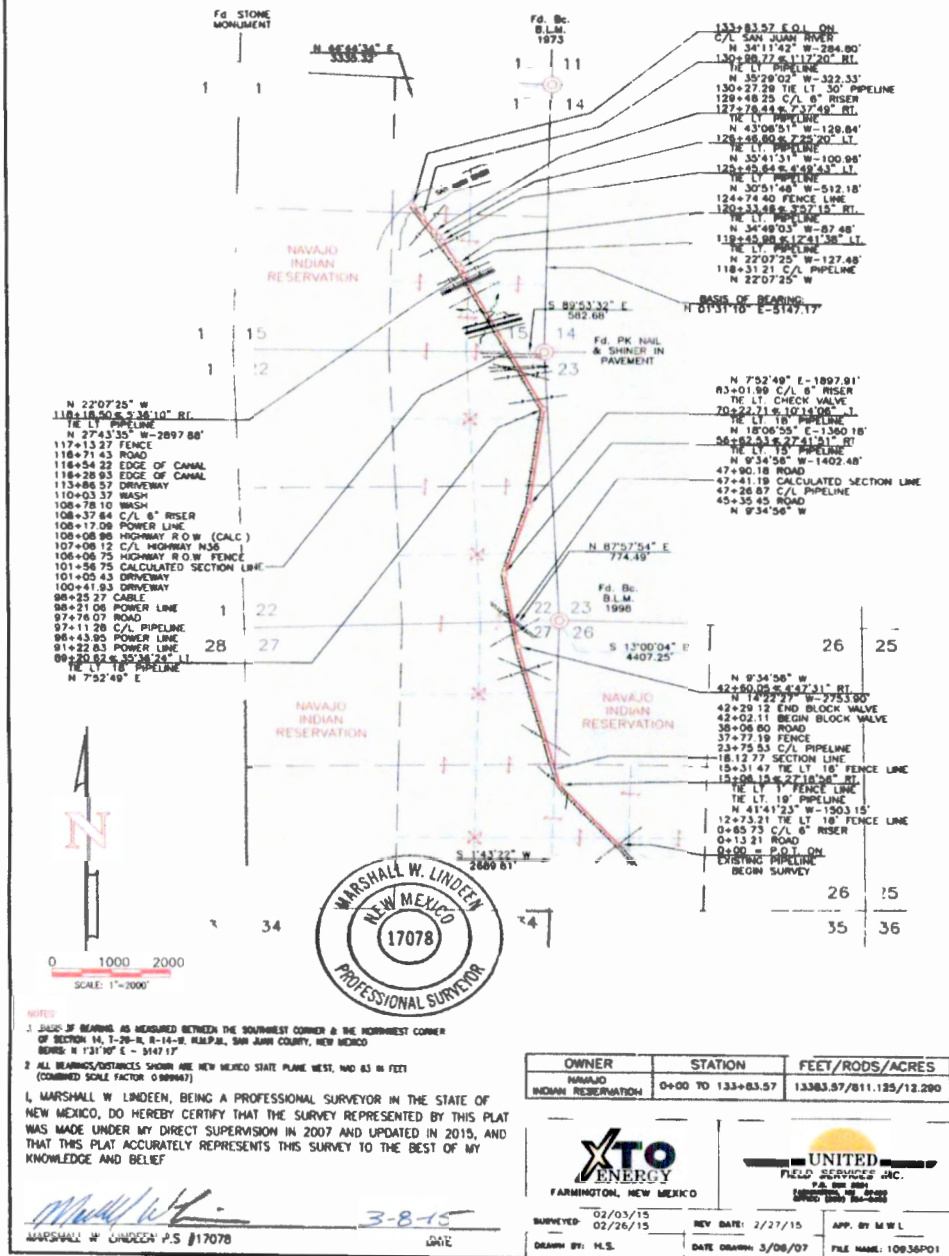
Lenora Williams, Vice-President

Absent

LoRenzo Bates, Council Delegate

APPENDIX B - Plat

XTO ENERGY, INC
EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE
 LOCATED IN SECTIONS 15, 22, 26 & 27, T-29-N, R-14-W, N.M.P.M.,
 SAN JUAN COUNTY, NEW MEXICO



**LEGAL DESCRIPTION
OF
EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE
ACROSS THE
NAVAJO INDIAN RESERVATION
FOR
XTO ENERGY, INC.
FEBRUARY 27, 2015**

THE DESCRIPTION OF A 40 FOOT WIDE RIGHT-OF-WAY, FOR AN EXISTING 6 5/8" O.D. NATURAL GAS PIPELINE, SITUATED IN SECTIONS 15, 22, 26 AND 27, TOWNSHIP 29 NORTH, RANGE 14 WEST, N M P M, SAN JUAN COUNTY, NEW MEXICO, BEING 20 FEET ON EITHER SIDE OF THE FOLLOWING DESCRIBED CENTERLINE

BEGINNING AT A POINT ON SAID EXISTING NATURAL GAS PIPELINE, LOCATED IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 26 SAID POINT BEARS SOUTH 13°00'04" EAST, 4407.25 FEET FROM A FOUND 3 1/4" BRASS CAP FOR THE NORTHWEST CORNER OF SAID SECTION 26,
THENCE NORTH 41°41'23" WEST 1506.15 FEET
THENCE NORTH 14°22'27" WEST, 2753.90 FEET;
THENCE NORTH 9°34'56" WEST, 1402.48 FEET,
THENCE NORTH 18°06'55" EAST, 1360.18 FEET,
THENCE NORTH 7°52'49" EAST, 1897.91 FEET,
THENCE NORTH 27°43'35" WEST, 2897.88 FEET,
THENCE NORTH 22°07'25" WEST, 127.48 FEET,
THENCE NORTH 34°49'03" WEST 87.48 FEET,
THENCE NORTH 30°51'48" WEST, 512.18 FEET,
THENCE NORTH 35°41'31" WEST, 100.96 FEET,
THENCE NORTH 43°06'51" WEST, 129.84 FEET,
THENCE NORTH 35°29'02" WEST 322.32 FEET,
THENCE NORTH 34°11'42" WEST, 284.80 FEET TO THE POINT OF TERMINUS, SAID POINT BEING ON THE EXISTING CENTERLINE OF THE SAN JUAN RIVER, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 15 FROM SAID POINT A 1973 B L M BRASS CAP AT THE NORTHEAST CORNER OF SAID SECTION 15, BEARS NORTH 44°44'34" EAST, 3335.32 FEET

THE TOTAL LENGTH OF PIPELINE RIGHT-OF-WAY ACROSS THE NAVAJO INDIAN RESERVATION, AS DESCRIBED ABOVE, IS 13383.57 FEET OR 811.125 RODS, CONTAINING 12.290 ACRES OF LAND, MORE OR LESS

BEARINGS AND DISTANCES CONTAINED IN THIS DESCRIPTION ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 BASIS OF BEARING BEING THE MONUMENTED WEST LINE OF SECTION 14, TOWNSHIP 29 NORTH, RANGE 14 WEST N M P M, SAN JUAN COUNTY, NEW MEXICO
BEARS NORTH 1°31'10" EAST A DISTANCE OF 5147.17 FEET

I, MARSHALL W. LINDEEN, BEING A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS DESCRIPTION WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS DESCRIPTION ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF


MARSHALL W. LINDEEN P.S. #17078

3-8-15
DATE



REFERENCE DRAWING 10936P01

APPENDIX C – Biological Evaluation

APPENDIX D - Biological Resources Compliance Form



NAVAJO NATION
Department of Fish & Wildlife
Navajo Natural Heritage Program
P.O. Box 1480
Window Rock, AZ 86515



Phone: 928.871.6472 • Fax: 928.871.7603 • <http://nnhp.nndfw.org>

Russell Begaye, President

Jonathan Nez, Vice-President

09 June 2015

File#15NC-02

John Leonhart
Nelson Consulting, Inc.
835 E. Second Ave.
Suite 250
Durango, CO 81301

NAVAJO ENDANGERED SPECIES LIST (NESL) INFORMATION FOR:

PROJECT: XTO ENERGY INC.'s RED PEPPER PIPELINE PROJECT
LOCATED AT:
BEGINNING: 36.693420°N & 108.284023°W (NAD 83)
12S 742651E & 4064300N
ENDING: 36.726784°N & 108.296213°W
12S 741466E & 4067982N
SAN JUAN COUNTY, NM

Mr. Leonhart:

The following information on species of concern¹ is provided in response to your 19 March 2015 request concerning the subject project, which consists of XTO Energy existing Red Pepper Natural Gas Pipeline. The project is approximately 2.5 miles and is located in San Juan County, NM.

Species of concern known to occur on or near the project site(s) include:

1. *Aquila chrysaetos*
2. *Cottus bairdi*

All or parts of this project currently are within areas protected by the Raptor Electrocution Prevention Regulations; consult with NNDFW Zoologist, Chad Smith and/or Wildlife Biologist, Pamela Kyselka for more information and recommendations.

¹"Species of concern" include protected, candidate, and other rare or otherwise sensitive species, including certain native species and species of economic or cultural significance. For each species, the following tribal and federal statuses are indicated: Navajo Endangered Species List (NESL), federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Eagle Protection Act (EPA). No legal protection is afforded species with only ESA candidate or NESL group 4 status; please be aware of these species during surveys and inform the NFW of observations. Documentation that these species are more numerous or widespread than currently known, and addressing these species in project planning and management is important for conservation and may contribute to ensuring they will not be uplisted in the future. Species without ESA or NESL legal protection (e.g., NESL group 4 species) are only included in responses on a regular basis and may not be included in this response. Please refer to the NESL for a list of group 4 species; contact me if you need a copy.

Known to occur within three miles of the project site:

1. *Asclepias sanjuansensis*

Species of concern with potential to occur on the 7.5-minute *Kirtland, NM* quadrangle(s) containing the project boundaries include the following. Potential is based primarily on quadrangle-wide coarse habitat characteristics and species range information. Your project biologist should determine habitat suitability at the project site(s).

	SCIENTIFIC NAME	COMMON NAME	NESL STATUS	FEDERAL STATUS AND/OR *MBTA
1.	<i>Aliciella formosa</i>	Aztec Gilia	G4	
2.	<i>Aquila chrysaetos</i>	Golden Eagle	G3	MBTA
3.	<i>Astragalus humilimus</i>	Mancos Milk-vetch	G2	ESA Endangered
4.	<i>Asclepias sanjuansensis</i>	San Juan Milkweed	G4	
5.	<i>Athene cucularia</i>	Burrowing Owl	G4	MBTA
6.	<i>Buteo regalis</i>	Ferruginous Hawk	G3	MBTA
7.	<i>Catostomus discobolus</i>	Bluehead Sucker	G4	
8.	<i>Ceryle alcyon</i>	Belted Kingfisher	G4	MBTA
9.	<i>Charadrius montanus</i>	Mountain Plover	G4	ESA Proposed Threatened; MBTA.
10.	<i>Cinclus mexicanus</i>	American Dipper	G3	MBTA
11.	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	G2	ESA Candidate species; MBTA.
12.	<i>Cottus bairdi</i>	Mottled Sculpin	G4	
13.	<i>Dendroica petechia</i>	Yellow Warbler	G4	MBTA
14.	<i>Empidonax traillii eximius</i>	Southwestern Willow Flycatcher	G2	ESA Endangered; MBTA.
15.	<i>Falco peregrinus</i>	Peregrine Falcon	G4	MBTA
16.	<i>Gila robusta</i>	Roundtail Chub	G2	ESA Candidate Species
17.	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G2	MBTA
18.	<i>Mustela nigripes</i>	Black-footed Ferret	G2	ESA Endangered
19.	<i>Porzana carolina</i>	Sora	G4	MBTA
20.	<i>Ptychocheilus lucius</i>	Colorado Pikeminnow	G2	ESA Endangered
21.	<i>Sclerocactus cloveriae</i> ssp. <i>bractii</i>	Brack Hardwall Cactus	G4	
22.	<i>Sclerocactus mesae-verdae</i>	Mesa Verde Cactus	G2	ESA Threatened

23.	<i>Lithobates pipiens</i>	Northern Leopard Frog	G2	
24.	<i>Vulpes macrotis</i>	Kit Fox	G4	
25.	<i>Xyrauchen texanus</i>	Razorback Sucker	G2	ESA Endangered

*MBTA Migratory Bird Treaty Act

AREA 1 of the Biological Resource Land Clearance Policies & Procedures

AREA 1-Highly Sensitive Wildlife Resources: This area contains the best habitat for endangered and rare plant, animal and game species, and the highest concentration of these species on the Navajo Nation. The purpose of this area is to protect these valuable and sensitive biological resources to the maximum extent practical (For detailed information regarding "Area 1" please refer to our website at nndfw.org).

AREA 3 of The Biological Resource Land Clearance Policies & Procedures

Area 3-Low Sensitivity Wildlife Resources: This area has a low, fragmented concentration of species of concern. Species in this area may be locally abundant on 'islands' of habitat, but islands are relatively small, limited in number and well spaced across the landscape. (For detailed information regarding "Area 3" please refer to our website at nndfw.org).

Potential for the black-footed ferret should be evaluated if prairie dog towns of sufficient size (per NFWD guidelines) occur in the project area.

Potential for *Puccinellia parishii* should be evaluated if wetland conditions exists that contain white alkaline crusts.

Biological surveys need to be conducted during the appropriate season to ensure they are complete and accurate please refer to NN Species Accounts.⁴ Further questions pertaining to surveys should be referred to Species Account. Surveyors on the Navajo Nation must be permitted by the Director, NFWD. Contact Jeff Cole at (928) 871-6595 for permitting procedures. Questions pertaining to surveys should be directed to the NFWD Zoologist (Chad Smith) for animals at 871-7070 and Botanist (Andrea Hazelton) for plants at (928)523-3221. Questions regarding biological evaluations should be directed to Pamela Kyselka, Wildlife Biologist at 871-7065.

Any settling or evaporation pits that could hold contaminants should be lined and covered. Covering pits, with a net or other material, will deter waterfowl and other migratory bird use. Lining pits will protect ground water quality.

Potential impacts to wetlands should also be evaluated. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) maps should be examined to determine whether areas classified as wetlands are located close enough to the project site(s) to be impacted. In cases where the maps are inconclusive (e.g., due to their small scale), field surveys must be completed. For field surveys, wetlands identification and delineation methodology contained in the 'Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. NWI maps are available for examination at the NFWD's Natural Heritage Program (NHP) office, or may be purchased

⁴ Available free of charge on our website at <http://nnhp.navajofishandwildlife.org/>

through the U.S. Geological Survey (order forms are available through the NHP). The NHP has complete coverage of the Navajo Nation, excluding Utah, at 1:100,000 scale; and coverage at 1:24,000 scale in the southwestern portion of the Navajo Nation.

The information in this report was identified by the NFWD's biologists and computerized database, and is based on data available at the time of this response. If project planning takes more than two (02) years from the date of this response, verification of the information provided herein is strongly recommended. It should not be regarded as the final statement on the occurrence of any species, nor should it substitute for on-site surveys. Also, because the NFWD's information is continually updated, any given information response is only wholly appropriate for its respective request.

For a list of sensitive species on the Navajo Nation in addition to the species listed on the Navajo Endangered Species List (NESL) please refer to our website at www.nndfw.org.

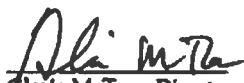
An invoice for this information is attached.

If you have any questions I may be reached at (928) 871-6472.



Sonja Detsel, Wildlife Tech.
Natural Heritage Program
Department of Fish and Wildlife

CONCURRENCE



Gloria M. Tom, Director
Department of Fish & Wildlife
Division of Natural Resources

xc: file/chrono

APPENDIX E - Cultural Resources Compliance Form



THE NAVAJO NATION
HISTORIC PRESERVATION DEPARTMENT
PO Box 4950, Window Rock, Arizona 86515
TEL: (928) 871-7198 FAX: (928) 871-7886

CULTURAL RESOURCE COMPLIANCE FORM

ROUTE COPIES TO:

☒ DRA

NNHPD NO.: HPD-15-322

OTHER PROJECT NO.: DRA156042-1

PROJECT TITLE: XTO Energy, Inc.'s Red Pepper As-built Pipeline Cultural Resources Survey, Upper Fruitland Chapter, San Juan County, New Mexico

LEAD AGENCY: BIA NR

SPONSOR: Paul Lehrman, XTO Energy, Inc., 382 Road 3100, Aztec, New Mexico 87410

PROJECT DESCRIPTION: The proposed undertaking will involve a new gas lease for an existing pipeline. The pipeline measures 13,383-ft long in a 40 ft wide right-of-way. The area of effect is 12.29-acres.

LAND STATUS: Navajo Tribal Trust

CHAPTER: Upper Fruitland

LOCATIONS: T. 29 N, R. 14 W - Section 15, 22, 26, 27; Kirtland Quadrangle, San Juan County, New Mexico NMPM

PROJECT ARCHAEOLOGIST:

Julia M. Chavez

NAVAJO ANTIQUITIES PERMIT NO.:

B15067

DATE INSPECTED:

02/26/2015 - 03/11 2015

DATE OF REPORT:

05/07/2015

TOTAL ACREAGE INSPECTED:

43.56 - ac

METHOD OF INVESTIGATION:

Class III pedestrian inventory with transects spaced 15 m apart.

LIST OF CULTURAL RESOURCES FOUND:

(1) Site (NM-H-22-125); (2) Isolated Occurrences (IO)

LIST OF ELIGIBLE PROPERTIES:

(1) Site (NM-H-22-125);

LIST OF NON-ELIGIBLE PROPERTIES:

(2) IO

LIST OF ARCHAEOLOGICAL RESOURCES:

(1) Site (NM-H-22-125);

EFFECT/CONDITIONS OF COMPLIANCE: No Historic Properties affected with the following conditions:

Site NM-H-22-125:

1. In the event of future ground disturbing activities, a qualified archaeologist will flag the site prior to ground disturbing activities.

2. Site will be avoided by all ground disturbing activities by a minimum of 50-ft from the site boundary.

TCP: Will be avoided by all ground disturbing activities.

In the event of a discovery ("discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices), all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

FORM PREPARED BY: Tamara Billie

FINALIZED: June 23, 2015

Notification to Proceed

Recommended

Conditions:

☒ Yes No

☒ Yes No

The Navajo Nation
Historic Preservation Office

6/30/15
Date

Navajo Region Approval

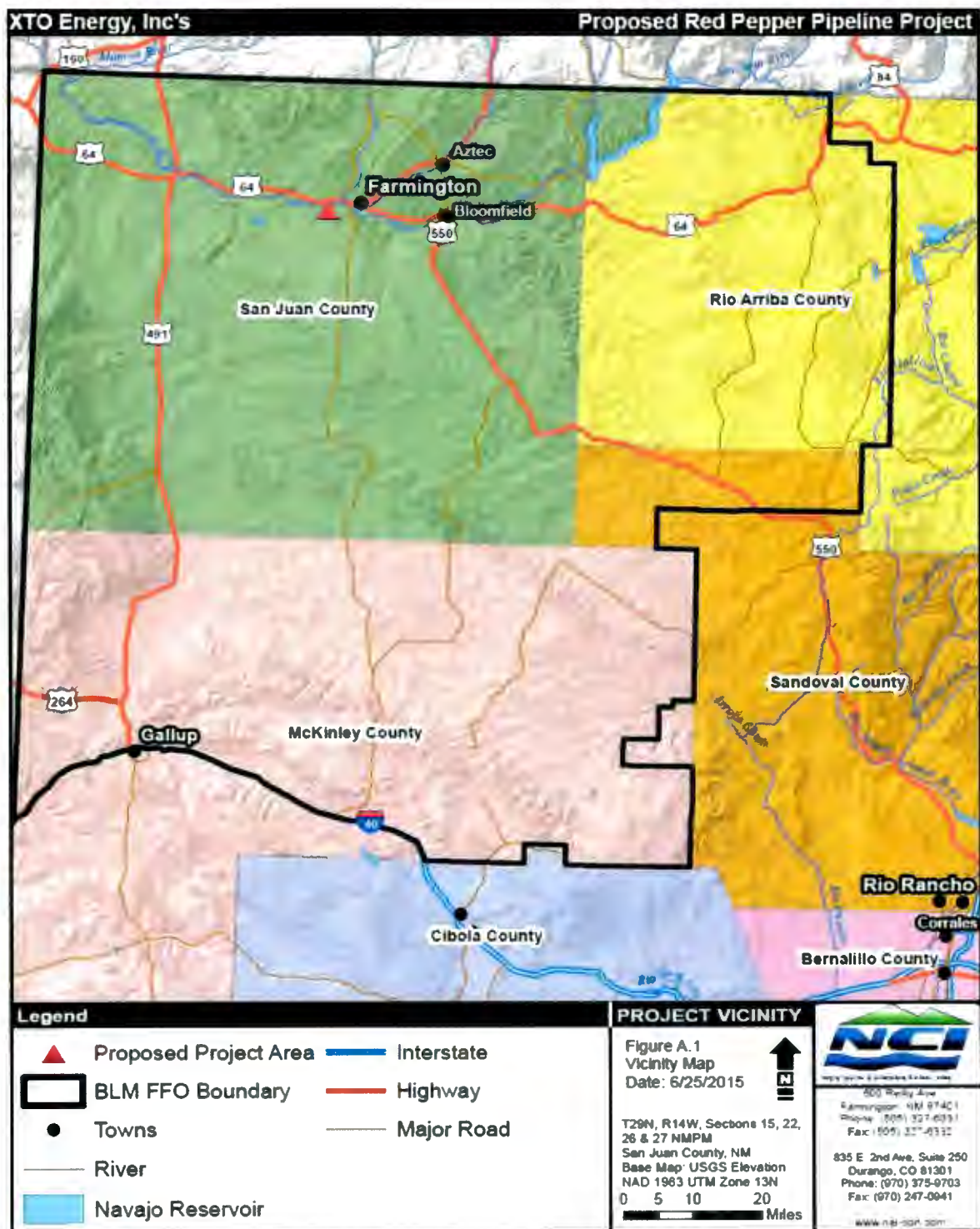
☒ Yes No

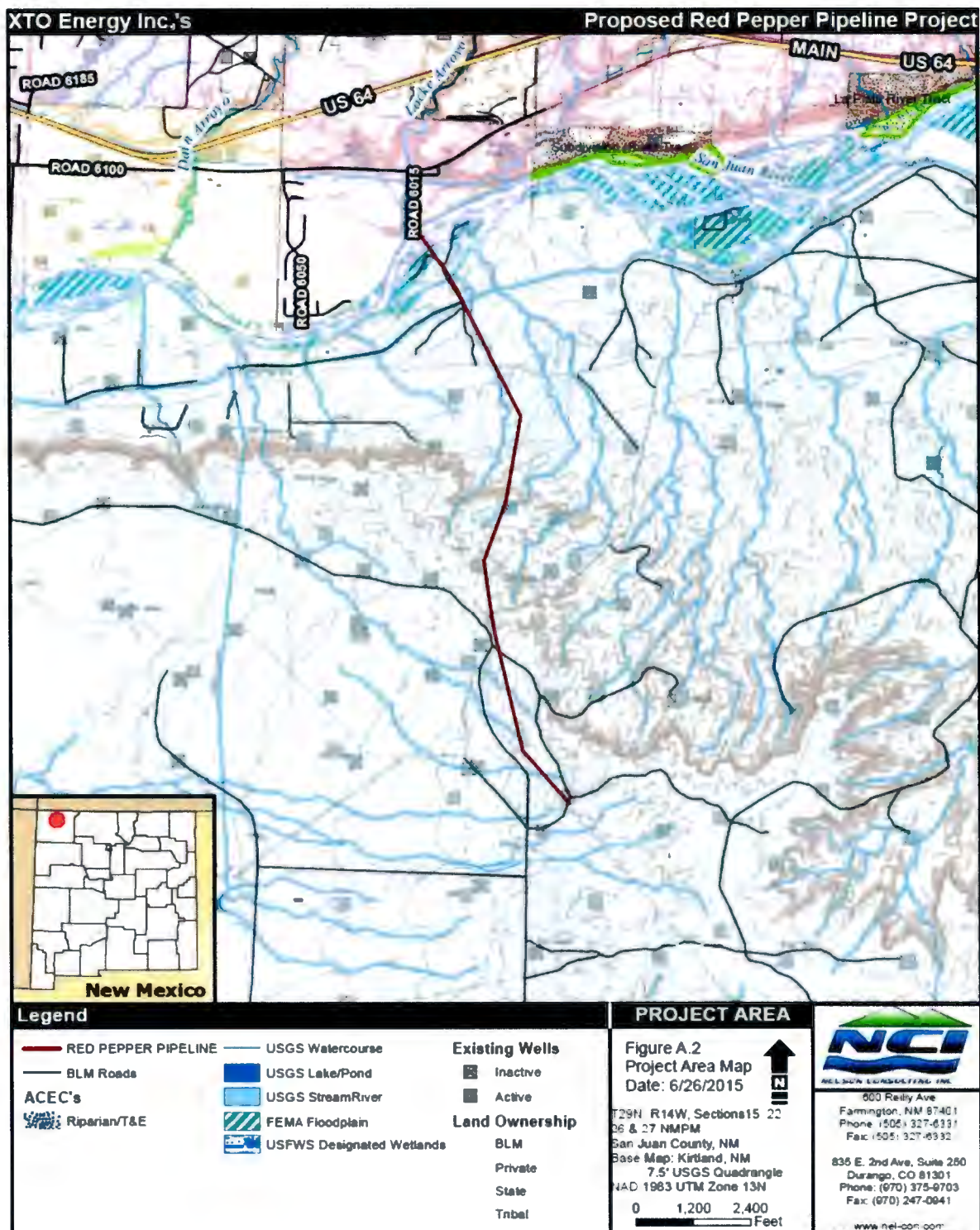
BIA - Navajo Regional Office

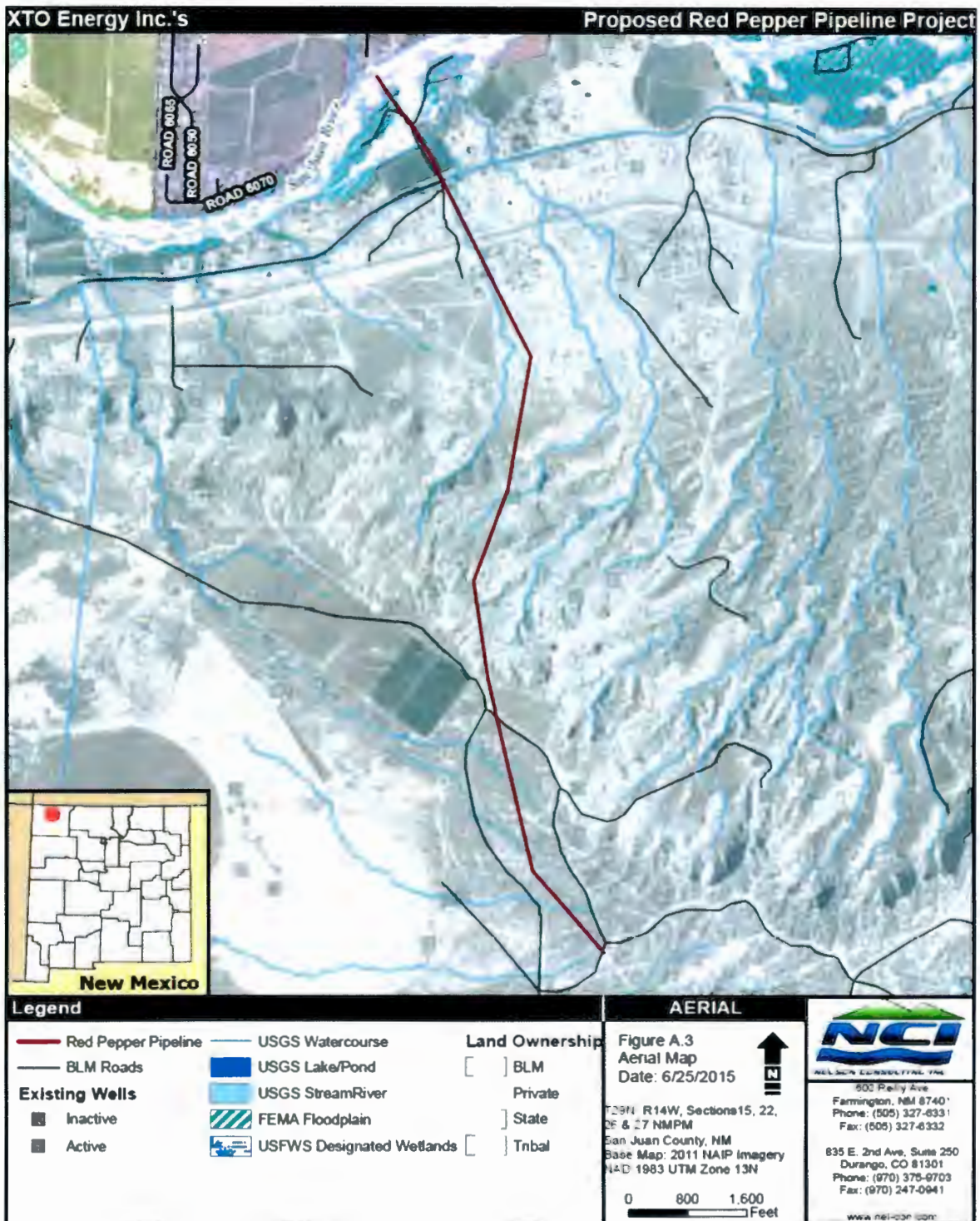
Date

TLM 7/14/15

APPENDIX F – Maps







APPENDIX G – Photos



Existing Pipeline: View from E.O.L (northern terminus), looking southwestward toward alignment, San Juan River



Existing Pipeline: View from San Juan River near E.O.L., looking west, northwestward



Existing Pipeline: View from San Juan River near E.O.L., looking southward



Existing Pipeline: View of representative habitat near first stake near San Juan River and E.O.L., looking northeastward



Existing Pipeline: Tamarisk located within the pipeline corridor



Existing Pipeline: Wetland located on the east side of the existing pipeline corridor near E.O.L., looking eastward



Existing Pipeline: Wetland on west side of the existing pipeline corridor near E.O.L., looking westward



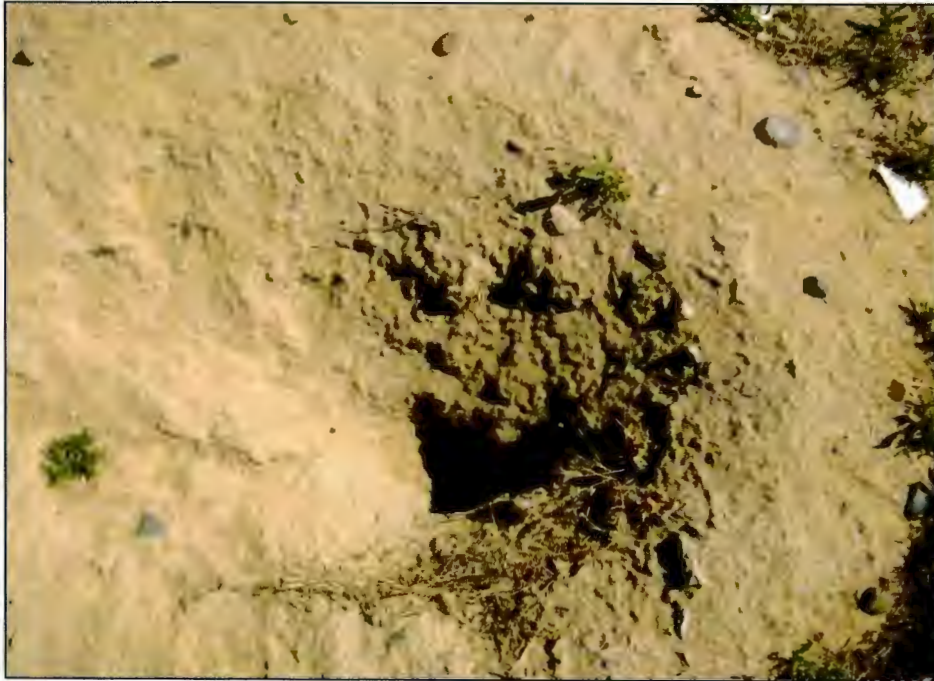
Existing Pipeline: Wetland located in the center of the existing pipeline corridor near E.O.L., looking southeastward



Existing Pipeline: Fence near existing pipeline corridor and E.O.L., looking southeastward



Existing Pipeline: Existing pipeline corridor paralleling existing 2-track near E.O.L., looking southeastward



Existing Pipeline: Prairie dog mound within existing pipeline corridor near E.O.L.



Existing Pipeline: Irrigation ditch crossing existing pipeline corridor, looking southeastward



Existing Pipeline: Existing pipeline corridor at N-36, looking southeastward



Existing Pipeline: Existing pipeline corridor at N-36 near residential area, looking southeastward



Existing Pipeline: Existing pipeline corridor, representative desert saltbush habitat, looking southeastward



Existing Pipeline: Existing pipeline corridor near the existing pipeline tie, looking northwestward



Existing Pipeline: Existing pipeline spanning the ephemeral wash, looking northwestward



Existing Pipeline: Where existing pipeline spans the ephemeral wash, upstream, looking westward



Existing Pipeline: Where existing pipeline spans the ephemeral wash, downstream, looking northeastward



Existing Pipeline: Existing pipeline corridor, dense population of halogeton, looking northward



Existing Pipeline: Existing pipeline corridor, near 2-track, looking northwestward



Existing Pipeline: Existing pipeline corridor, exposed pipeline



Existing Pipeline: Representative habitat on existing pipeline corridor near B.O.L., looking southeastward



Existing Pipeline: Existing pipeline corridor at pipeline tie, looking northwestward



Existing Pipeline: Existing pipeline corridor near B.O.L., looking northwestward



Existing Pipeline: Existing pipeline at B.O.L. near existing well pad, looking northwestward

The Navajo Nation
Upper Fruitland Chapter
PO BOX 1257
Fruitland, New Mexico 87416
(505) 960-5032/9811
Fax (505) 960-0614



LoRenzo Bates, Council Delegate
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**RESOLUTION OF THE NAVAJO NATION UPPER FRUITLAND CHAPTER
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6. Upper Fruitland Chapter acknowledges the existence of the pipeline since 1955, that the pipeline is in a north south direction, passing below or near the new Navajo Housing Authority residential area, up to and through the NAPI property, which is within Upper Fruitland community.

NOW THEREFORE BE IT RESOLVED THAT:

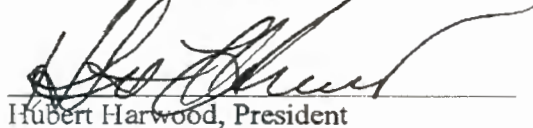
The Upper Fruitland Chapter supports and approves the resolution for XTO Energy Inc. renewal of a previously existing natural gas pipeline right-of-way known as Red Pepper Pipeline.

CERTIFICATION


WE HEREBY CERTIFIED that the foregoing resolution was approved by the Upper Fruitland Chapter at a duly called meeting held at Upper Fruitland Chapter (Navajo Nation), N.M. A motion to approve was

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made by Lucy Bekis and seconded by Alvis Kee and the same was passed by a vote of 18 in favor, 0 opposed, 7 abstained, this 19th day of March, 2015.


Hubert Harwood, President


Faye BlueEyes, Secretary/Treasurer


Lenora Williams, Vice-President


LoRenzo Bates, Council Delegate

RESOURCES AND DEVELOPMENT COMMITTEE
Regular Meeting
April 25, 2018

ROLL CALL
VOTE TALLY SHEET:

Legislation # 0120-18: An Action Relating to Resources and Development; Approving the Grant of Right-of-Way to XTO Energy, Inc., for the Red Pepper As-Built 6-5/8" OD Steel Pipeline Located On Navajo Nation Trust Lands in Upper Fruitland Chapter, Navajo Nation (San Juan County, NM). *Sponsor: Honorable LoRenzo C. Bates; Co-Sponsor: Honorable Davis Filfred*

MAIN MOTION: Benjamin Bennett S: Walter Phelps V: 4-0-1 (CNV)

ROLL CALL VOTE TALLY:

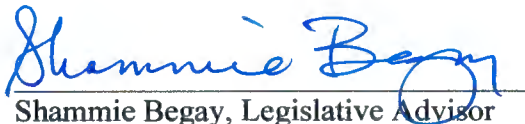
YEAS: Benjamin Bennett, Davis Filfred; Leonard H. Pete and Walter Phelps

NAYS: NONE

EXCUSED: Jonathan Perry



Alton Joe Shepherd, Chairperson
Resources and Development Committee



Shammie Begay, Legislative Advisor
Resources and Development Committee