



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Great Plains Regional Office  
115 Fourth Avenue S.E.  
Aberdeen, South Dakota 57401

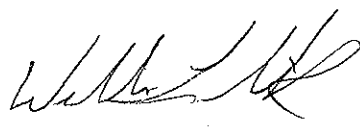


IN REPLY REFER TO:  
DESCRM  
MC-208

JAN 14 2011

## MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Regional Director, Great Plains Region 

SUBJECT: Environmental Assessment Addendum and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, for an Addendum to Environmental Assessment to Authorize Land Use for Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Lines on the Fort Berthold Reservation, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA Addendum, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (1506.6(b)). Please post the attached notice of availability at the Agency and Tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

### Attachment

cc: Tex Hall, Chairman, Three Affiliated Tribes (with attachment)  
Elgin Crows Breast, Tribal Historic Preservation Officer (with attachment)  
Roy Swalling, Bureau of Land Management (with attachment)  
Jonathon Shelman, Corps of Engineers (with attachment)  
Jeff Hunt, One Stop Shop, Fort Berthold Agency

**Finding of No Significant Impact  
Arrow Pipeline, LLC**

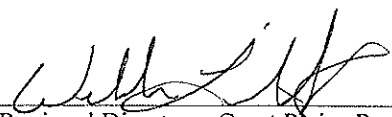
**Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines  
Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8 and Huntsmedicine  
#24x-8 Gathering Lines**

The U.S. Bureau of Indian Affairs (BIA) received a proposal for an Addendum to the Environmental Assessment for Gathering Pipelines Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Lines to authorize Arrow Pipeline to construct and install oil, gas, and water gathering pipelines on tribal land originating from the east side of the well pad, approximately 14 miles northeast of Mandaree, North Dakota, in the NW¼ NE¼ of Section 12, Township (T) 149 North (N), Range (R) 92 West (W), 5<sup>th</sup> Prime Meridian (P.M.), Dunn County, North Dakota, and terminating in the NW¼ SW¼ of Section 17, T149N, R91W, 5<sup>th</sup> P.M., Dunn County, North Dakota. All construction disturbances would occur within a 100-foot temporary right-of-way (ROW) and permanent surface disturbance would occur within a 50-foot ROW between the FBIR WalterPacksWolf #31x-12 well pad to the Beaks #24x-8 and Huntsmedicine #24x-8 gathering pipeline. Associated federal actions by BIA include determinations of effect regarding cultural resources and approvals of leases, rights-of-way and easements.

Potential of the proposed action to impact the human environment is analyzed in the attached Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed addendum to the EA, I have determined the proposed project will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement was solicited and environmental issues related to the proposal were identified.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, water resources, and cultural resources. The potential for impacts was disclosed for both the proposed action and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed action was designed to avoid adverse effects to historic, archaeological, cultural, and traditional properties, sites, and practices. The Tribal Historic Preservation Officer has concurred with BIA's determination that no historic properties will be affected.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed project will improve the socioeconomic condition of the affected Indian community.

  
\_\_\_\_\_  
Regional Director – Great Plains Regional Office

1/14/11  
Date

**ENVIRONMENTAL ASSESSMENT  
Addendum**

**United States Bureau of Indian Affairs**

**Great Plains Regional Office  
Aberdeen, South Dakota**



**Arrow Pipeline, LLC**

**Addendum to Environmental Assessment to Authorize Land Use for Gathering  
Pipelines Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8  
and Huntsmedicine #24x-8 Gathering Lines**

**Fort Berthold Indian Reservation**

**January 2011**

For information contact:  
Bureau of Indian Affairs, Great Plains Regional Office  
Division of Environment, Safety and Cultural Resources Management  
115 4th Avenue SE, Aberdeen, South Dakota 57401  
(605) 226-7656

**TABLE OF CONTENTS**

	<u>Page</u>
1. Purpose and Need for the Proposed Action .....	1
2. Authorities.....	1
3. Legal Land Description for Proposed Action .....	1
4. Scope of Work for Proposed Action .....	1
5. Surveys.....	2
6. Potential Effects .....	2
7. Applicable National Environmental Policy Act (NEPA) Document(s).....	3
8. Other Relevant Documentation.....	3
9. NEPA Adequacy Criteria.....	3

**LIST OF FIGURES**

<u>Figure</u>	<u>Page</u>
1 Proposed FBIR WalterPacksWolf #31x-12 gathering lines and associated well pad. ....	4

**LIST OF APPENDICES**

**Appendix**

A Pipeline Layout and Pipeline Right-of-Way for FBIR WalterPacksWolf #31x-12 gathering lines

## **1. Purpose and Need for the Proposed Action**

XTO Energy (XTO) is drilling an exploratory oil and gas well on the Fort Berthold Indian Reservation to evaluate and possibly develop the commercial potential of natural resources. Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota. The Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The BIA also holds title to subsurface mineral rights. The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offers substantial economic benefits to the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members.

The purpose of the proposed action is to authorize the land use by Arrow Pipeline, LLC (Arrow) for the construction and installation of three gathering pipelines: one oil line, one gas line, and one water line, all of which will not individually exceed a diameter of 8 inches. The proposed gathering pipelines would transport oil, gas, and produced water from productive wells to markets and disposal facilities. A buried electrical line may be installed in the future.

## **2. Authorities**

Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 United States Code [USC] 396a, et seq.), the Indian Mineral Development Act of 1982 (25 USC 2101, et seq.), and the Energy Policy Act of 2005 (42 USC 15801, et seq.).

## **3. Legal Land Description for Proposed Action**

The FBIR WalterPacksWolf #31x-12 gathering lines would be located on tribal land originating from the east side of the well pad, approximately 14 miles northeast of Mandaree, North Dakota, in the NW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 12, Township (T) 149 North (N), Range (R) 92 West (W), 5<sup>th</sup> Prime Meridian (P.M.), Dunn County, North Dakota, and terminating in the NW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 17, T149N, R91W, 5<sup>th</sup> P.M., Dunn County, North Dakota.

## **4. Scope of Work for Proposed Action**

Arrow proposes to construct and install oil, gas, and water gathering pipelines on tribal land originating from the east side of the FBIR WalterPacksWolf #31x-12 well pad and joining the existing Arrow Beaks #24x-8 and Huntsmedicine #24x-8 gathering pipeline. Oil, gas, and water pipelines would be buried in either two 2.5-foot-wide trenches, spaced 5.0 feet apart, or one 5.0-foot-wide trench. Oil and gas pipelines would be no larger than 8 inches in diameter and constructed of steel. The water pipeline would also be no larger than 8 inches in diameter and constructed of Fiberspar<sup>®</sup> or similar material. Approximately 11,402 feet of oil, gas, and water line would be needed to connect the FBIR WalterPacksWolf 31x-12 well pad to the Beaks #24x-8 and Huntsmedicine #24x-8 gathering pipeline (Appendix A). All construction disturbances would occur within a 100-foot temporary right-of-way (ROW) and permanent surface disturbance would occur within a 50-foot ROW between the FBIR WalterPacksWolf

#31x-12 well pad to the Beaks #24x-8 and Huntsmedicine #24x-8 gathering pipeline, which has been surveyed for impacts to natural and cultural resources with no significant findings. In total, approximately 13.1 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipelines. Pipeline plats are provided in Appendix A.

## 5. Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species, migratory birds, bald and golden eagles, and wetlands on August 13, 2010. BIA Environmental Specialist Darryl Turcotte approved the location and alignment of the gathering lines. No protected species including threatened and endangered species, migratory birds, or bald/golden eagles were observed during the natural resource survey. Additionally, no wetland areas will be impacted as a result of construction activities.

A cultural resource inventory of this pipeline route was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 52.35 acres were inventoried on August 13, 2010 (Eisenhauer and Lechert 2010). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on December 3, 2010; however, the THPO did not respond within the allotted 30 day comment period.

Eisenhauer, Nancy, and Stephanie E. Lechert

(2010) A Class I and Class III Cultural Resource Inventory of the Arrow XTO Walter Packs Wolf Gathering Line, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

## 6. Potential Effects

Potential impacts to cultural resource sites would occur as a result of direct disturbance and/or the loss of sites eligible for the National Register of Historic Places. Further, potential impacts to natural resources may include the loss of native vegetation and wildlife habitats; soil removal and mixing; and erosion during construction. However, potential impacts as a result of the proposed action were mitigated via field survey and subsequent avoidance of any eligible cultural resource sites within the proposed ROW, implementing a stormwater pollution prevention plan and best management practices, completing reclamation of the pipeline corridors with native grasses and other appropriate native vegetation, and stockpiling and re-using topsoil for reclamation.

Potential indirect impacts include noise and other disturbances to wildlife during construction and the introduction of noxious weeds. Impacts would be mitigated through avoidance of any federally listed threatened or endangered species or wetlands, avoidance of nesting migratory

birds, implementing best management practices to control the introduction of noxious weeds, and minimizing the length of time between trenching, pipeline burial, and reclamation. These mitigation measures are consistent with the approved National Environmental Policy Act (NEPA) document, which received a finding of no significant impact (FONSI) (October 2010).

Resource surveys and the supplementary assessment of the potential impacts of the proposed action were completed (August 2010); based on those surveys and the mitigation measures committed to by Arrow, no significant impacts to natural and cultural resources are anticipated.

## **7. Applicable National Environmental Policy Act (NEPA) Document(s)**

*Environmental Assessment: Arrow Pipeline, LLC, Oil, Gas, and Water Gathering System Phase 2E (August 2010).*

## **8. Other Relevant Documentation**

*Final Environmental Assessment: Walter Packs Wolf 31X-12 Well Pad, XTO Energy, Inc, (October 2010).*

## **9. NEPA Adequacy Criteria**

This document has identified a previously prepared NEPA document, *Environmental Assessment: Arrow Pipeline, LLC, Oil, Gas, and Water Gathering System Phase 2E* (August 2010), which adequately describes the environmental consequences of the newly proposed action described herein, and meets the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA document.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA document, which appropriately considers and analyzes current environmental concerns, interests, and resource values.
3. The existing analysis and conclusions are adequate in the existing NEPA document. The analysis is still valid in light of new studies or resource assessment information.
4. The methodology and analytical approach used in the existing NEPA document continues to be appropriate for the proposed action.
5. The direct and indirect impacts of the proposed action are unchanged from those identified in the existing NEPA document.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA document.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA document.

# **Notice of Availability and Appeal Rights**

Connecting FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Lines

**The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Lines on the Fort Berthold Reservation. Pipeline as shown on the attached map. Construction by Arrow Pipeline, LLC is expected to begin in the Spring of 2011.**

**An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).**

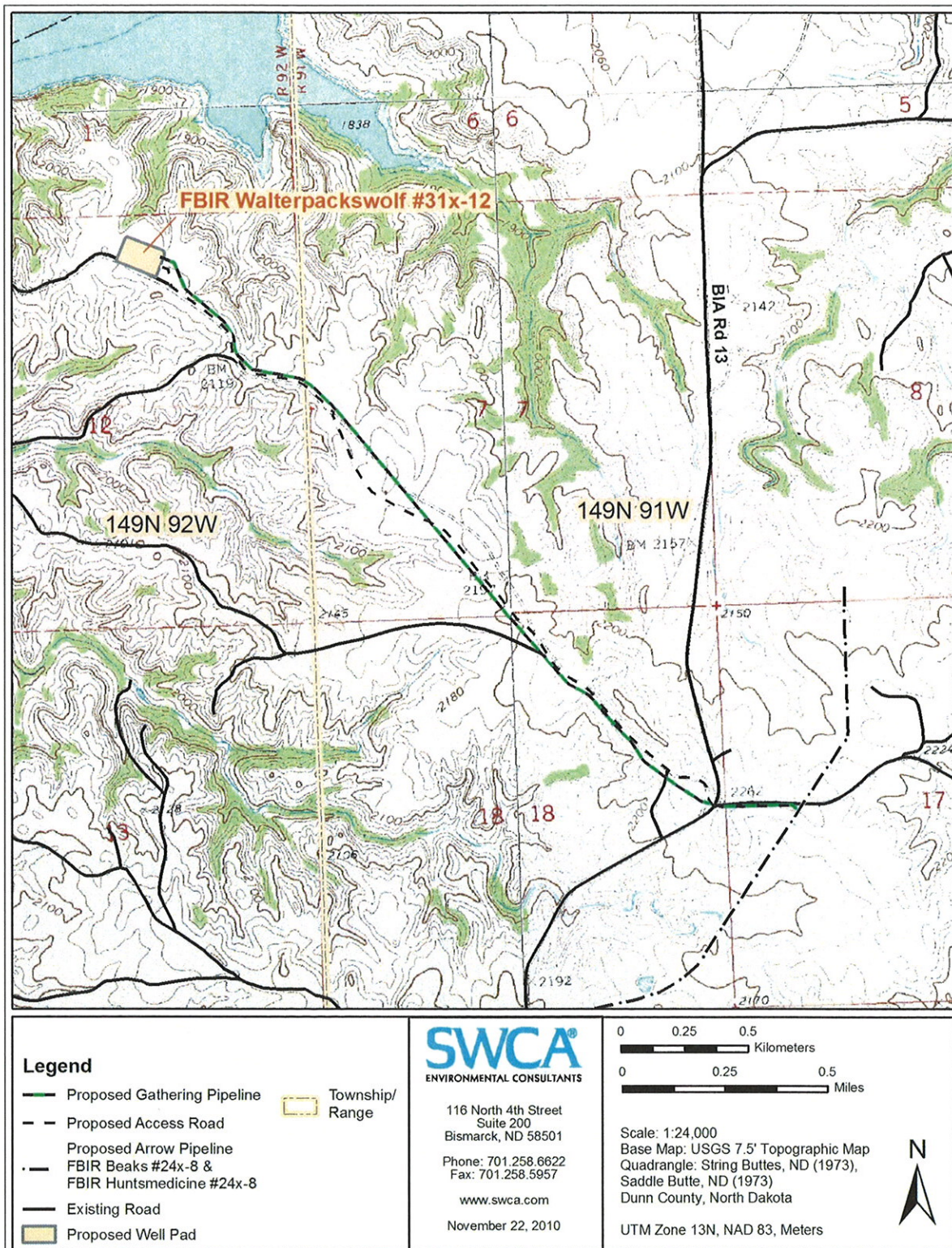
**The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA’s decision to proceed with administrative actions *can* be appealed until February 14, 2011, by contacting:**

**United States Department of the Interior  
Office of Hearings and Appeals  
Interior Board of Indian Appeals  
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

**Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.**



*Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the FBIR WalterPacksWolf #31x-12 Well Pad to the Arrow Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Pipeline (January 2011)*



**Figure 1. Proposed FBIR WalterPacksWolf #31x-12 gathering line and associated well pad.**

*Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the FBIR Walter Packs Wolf #31x-12 Well Pad to the Arrow Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Pipeline (January 2011)*



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Great Plains Regional Office  
115 Fourth Avenue S.E.  
Aberdeen, South Dakota 57401



IN REPLY REFER TO:  
DESCRM  
MC-208

DEC 03 2010

Elgin Crows Breast, THPO  
Mandan, Hidatsa and Arikara Nation  
404 Frontage Road  
New Town, North Dakota 58763

Dear Mr. Crows Breast:

We have considered the potential effects on cultural resources of the proposed Arrow Walter Packs Wolf 31x-12 Pipeline in Dunn County, North Dakota. Approximately 52.35 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the area depicted in the enclosed report. No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located that appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

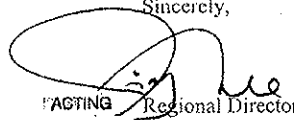
As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-1804/FB/10**, the proposed undertaking, locations, and project dimensions are described in the following report:

Eisenhauer, Nancy, and Stephanie E. Lechert  
(2010) A Class I and Class III Cultural Resource Inventory of the Arrow XTO Walter Packs Wolf Gathering Line, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

If your office concurs with this determination, consultation will be completed under the National Historic Preservation Act and its implementing regulations. The Standard Conditions of Compliance will be adhered to.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

  
ACTING Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes  
Superintendent, Fort Berthold Agency

**APPENDIX A**

**Pipeline Layout and Pipeline Right-of-Way  
for FBIR WalterPacksWolf #31x-12 Gathering Lines**

ARROW PIPELINE, LLC  
**GATHERING PIPELINE RIGHT-OF-WAY  
 ON TRIBAL LANDS**  
 (For FBIR WALTERPACKS WOLF #31x-12)  
 LOCATED IN  
 SECTIONS 7, 17 & 18, T149N, R91W, 5th P.M. &  
 SECTION 12, T149N, R92W, 5th P.M.,  
 DUNN COUNTY, NORTH DAKOTA

UNYAH ENGINEERING & LAND SURVEYING  
 85 SOUTH - 200 EAST • (435) 789-1077  
 VERNAL, UTAH - 84078

SCALE 1" = 600'  
 PART A.K. D.P.  
 BEARING HOT  
 DATE 08-31-10  
 REFERENCES C.L.O. PLAT  
 PLZ 4 9 9 4 9 - A

CERTIFICATE  
 I HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK  
 PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS  
 TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Sec. 7

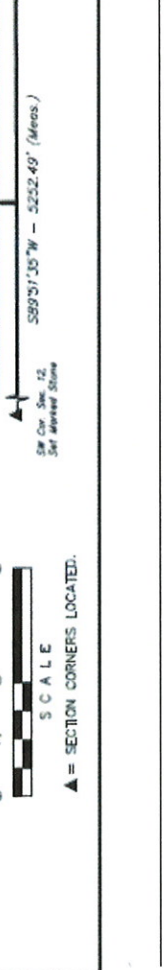
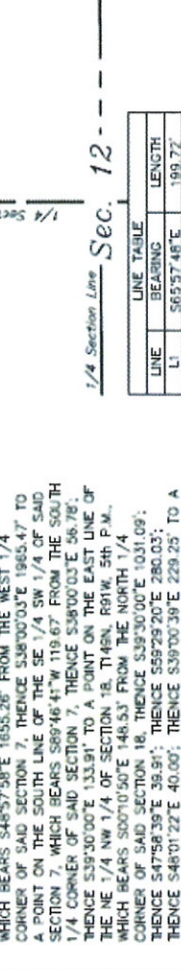
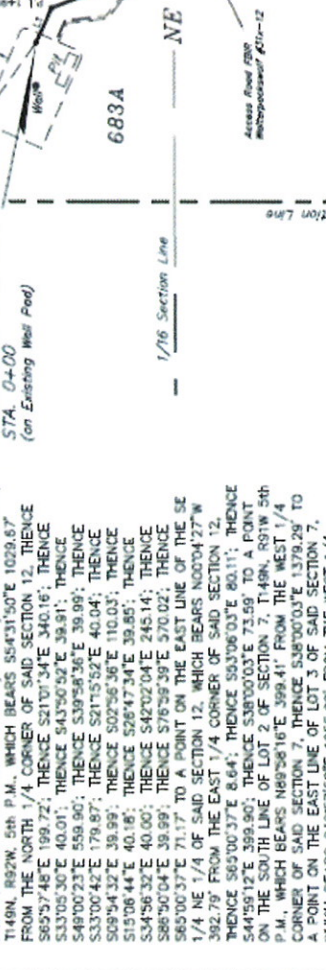
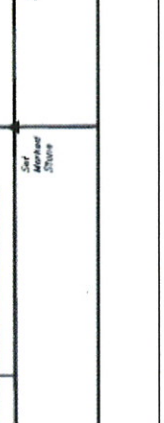
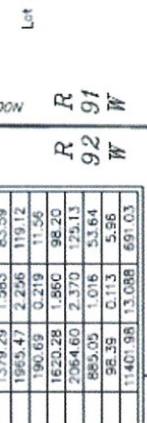
**SHEET 1 OF 2**  
 PIPELINE RIGHT-OF-WAY  
 DESCRIPTION ON TRIBAL LANDS

A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE  
 FOLLOWING DESCRIBED CENTERLINE  
 BEGINNING AT A POINT IN THE NW 1/4 NE 1/4 OF SECTION 12,  
 T149N, R92W, 5th P.M., WHICH BEARS S84°31'50"E 1029.87'  
 FROM THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE  
 S85°57'48"E 199.77', THENCE S21°07'34"E 340.16', THENCE  
 S33°05'30"E 40.01', THENCE S43°50'52"E 39.81', THENCE  
 S48°00'23"E 59.90', THENCE S39°58'36"E 39.99', THENCE  
 S33°00'42"E 179.87', THENCE S21°15'52"E 40.04', THENCE  
 S09°54'32"E 39.89', THENCE S02°56'36"E 110.03', THENCE  
 S15°08'44"E 40.18', THENCE S26°47'34"E 39.85', THENCE  
 S34°36'32"E 40.00', THENCE S42°02'04"E 245.14', THENCE  
 S85°00'37"E 39.99', THENCE S79°59'39"E 570.02', THENCE  
 S92°79' FROM THE EAST 1/4 CORNER OF SAID SECTION 12,  
 THENCE S65°00'37"E 8.64', THENCE S93°08'03"E 80.11', THENCE  
 S44°59'12"E 399.90', THENCE S38°00'03"E 73.59' TO A POINT  
 ON THE SOUTH LINE OF LOT 2 OF SECTION 7, T149N, R91W 5th  
 P.M., WHICH BEARS N89°58'16"E 399.41' FROM THE WEST 1/4  
 CORNER OF SAID SECTION 7, THENCE S38°00'03"E 1379.29' TO  
 A POINT ON THE EAST LINE OF LOT 3 OF SAID SECTION 7,  
 WHICH BEARS S48°57'58"E 1655.26' FROM THE WEST 1/4  
 CORNER OF SAID SECTION 7, THENCE S38°00'03"E 1965.47' TO  
 A POINT ON THE SOUTH LINE OF THE SE 1/4 SW 1/4 OF SAID  
 SECTION 7, WHICH BEARS S89°46'41"W 119.67' FROM THE SOUTH  
 1/4 CORNER OF SAID SECTION 7, THENCE S38°00'03"E 56.78',  
 THENCE S39°00'07"E 133.91' TO A POINT ON THE EAST LINE OF  
 THE NE 1/4 NW 1/4 OF SECTION 18, T149N, R91W, 5th P.M.,  
 WHICH BEARS S00°10'50"E 148.53' FROM THE NORTH 1/4  
 CORNER OF SAID SECTION 18, THENCE S39°30'00"E 1031.09',  
 THENCE S47°56'39"E 39.91', THENCE S59°29'20"E 280.03',  
 THENCE S48°01'22"E 40.00', THENCE S39°00'39"E 229.25' TO A  
 POINT ON THE SOUTH LINE OF THE NW 1/4 NE 1/4 OF SAID  
 SECTION 18, WHICH BEARS S49°07'51"W 2015.98' FROM THE  
 NORTHEAST CORNER OF SAID SECTION 18, THENCE S39°00'39"E  
 280.86', THENCE S41°57'29"E 299.84', THENCE S31°03'49"E  
 239.95', THENCE S39°52'37"E 40.07', THENCE S47°52'49"E  
 80.19', THENCE S51°32'35"E 406.78', THENCE S55°28'52"E  
 400.03', THENCE S65°00'00"E 40.00', THENCE S74°00'00"E  
 240.00', THENCE S85°00'00"E 33.87' TO A POINT ON THE EAST  
 LINE OF THE SE 1/4 NE 1/4 OF SAID SECTION 18, WHICH  
 BEARS N00°17'00"W 16.29' FROM THE EAST 1/4 CORNER OF  
 SAID SECTION 18, THENCE S85°00'00"E 6.13', THENCE EAST  
 862.00', THENCE S45°00'00"E 18.92' TO A POINT ON THE  
 SOUTH LINE OF THE SW 1/4 NW 1/4 OF SECTION 17, T149N,  
 R91W, 5th P.M., WHICH BEARS N89°50'43"E 979.41' FROM THE  
 WEST 1/4 CORNER OF SAID SECTION 17, THENCE S45°00'00"E  
 21.08', THENCE S55°02'58"E 77.51' TO A POINT IN THE NW 1/4  
 SW 1/4 OF SECTION 17, T149N, R91W, 5th P.M., WHICH BEARS  
 S86°36'17"E 959.36' FROM THE WEST 1/4 CORNER OF SAID  
 SECTION 17, THE SIDE LINES OF SAID DESCRIBED  
 RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE  
 GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S.  
 OBSERVATION, CONTAINS 13.088 ACRES MORE OR LESS.

LINE	BEARING	LENGTH	FEET	ACRES	ROODS
L1	S65°57'48"E	199.77'	31,989.21	3.671	193.83
L2	S21°07'34"E	340.16'	13,779.29	1.583	83.59
L3	S33°05'30"E	40.01'	1,965.47	2.256	119.12
L4	S43°50'52"E	39.81'	190.69	0.219	11.56
L5	S48°00'23"E	59.90'	1620.28	1.860	98.20
L6	S39°58'36"E	39.99'	885.05	1.016	53.64
L7	S33°00'42"E	179.87'	98.39	0.113	5.96
L8	S21°15'52"E	40.04'	11,401.98	13.088	691.03
L9	S09°54'32"E	39.99'			
L10	S02°56'36"E	110.03'			
L11	S15°08'44"E	40.18'			
L12	S26°47'34"E	39.85'			
L13	S34°36'32"E	40.00'			
L14	S42°02'04"E	245.14'			
L15	S48°00'37"E	39.99'			
L16	S59°29'20"E	280.03'			
L17	S51°32'35"E	406.78'			
L18	S55°28'52"E	400.03'			
L19	S65°00'00"E	40.00'			
L20	S74°00'00"E	240.00'			
L21	S85°00'00"E	33.87'			
L22	S89°46'41"W	119.67'			
L23	S38°00'03"E	1965.47'			
TOTAL					

PROPERTY OWNER	FEET	ACRES	ROODS
683A	31,989.21	3.671	193.83
1182	13,779.29	1.583	83.59
1180	1,965.47	2.256	119.12
607	190.69	0.219	11.56
1171	1620.28	1.860	98.20
1172	2064.60	2.370	125.13
1173	885.05	1.016	53.64
1170	98.39	0.113	5.96
TOTAL	11,401.98	13.088	691.03

RIGHT-OF-WAY LENGTHS



CONTINUES ON SHEET 2 OF 2

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the FBIR Walter-Packs Wolf #31x-12 Well Pad to the Arrow Beaks #24x-8 and Huntsmedicine #24x-8 Gathering Pipeline (January 2011)

