



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



IN REPLY REFER TO:
DESCRM
MC-208

NOV 04 2011

MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Acting 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, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued. The addendum authorizes land use for gathering pipelines connecting the Good Bird #36-25H and Black Hawk #1-12H wells to the Arrow Phase 2 SE pipeline on the Fort Berthold Indian Reservation.

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 (40 C.F.R. Part 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)
Derek Enderud, BLM, Bureau of Land Management (with attachment)
Michael Madson, SWCA (with attachment)
Jonathon Shelman, Corps of Engineers (with attachment)
Jeff Hunt, Fort Berthold Agency

**Finding of No Significant Impact
Dakota-3 E&P**

**Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipelines
Connecting the Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2
SE Pipeline**


**Fort Berthold Indian Reservation
Dunn County, North Dakota**

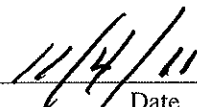
The U.S. Bureau of Indian Affairs (BIA) has received a proposed Addendum to authorizing land use for gathering pipelines connecting the Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE Pipeline on the Fort Berthold Indian Reservation in McKenzie County, North Dakota. Associated federal actions by BIA include determinations of effect regarding cultural resources, approvals of leases, rights-of-way and easements, and a positive recommendation to the Bureau of Land Management regarding the Applications for Permit to Drill.

The potential of the proposed actions 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 EA, I have determined that the proposed projects will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

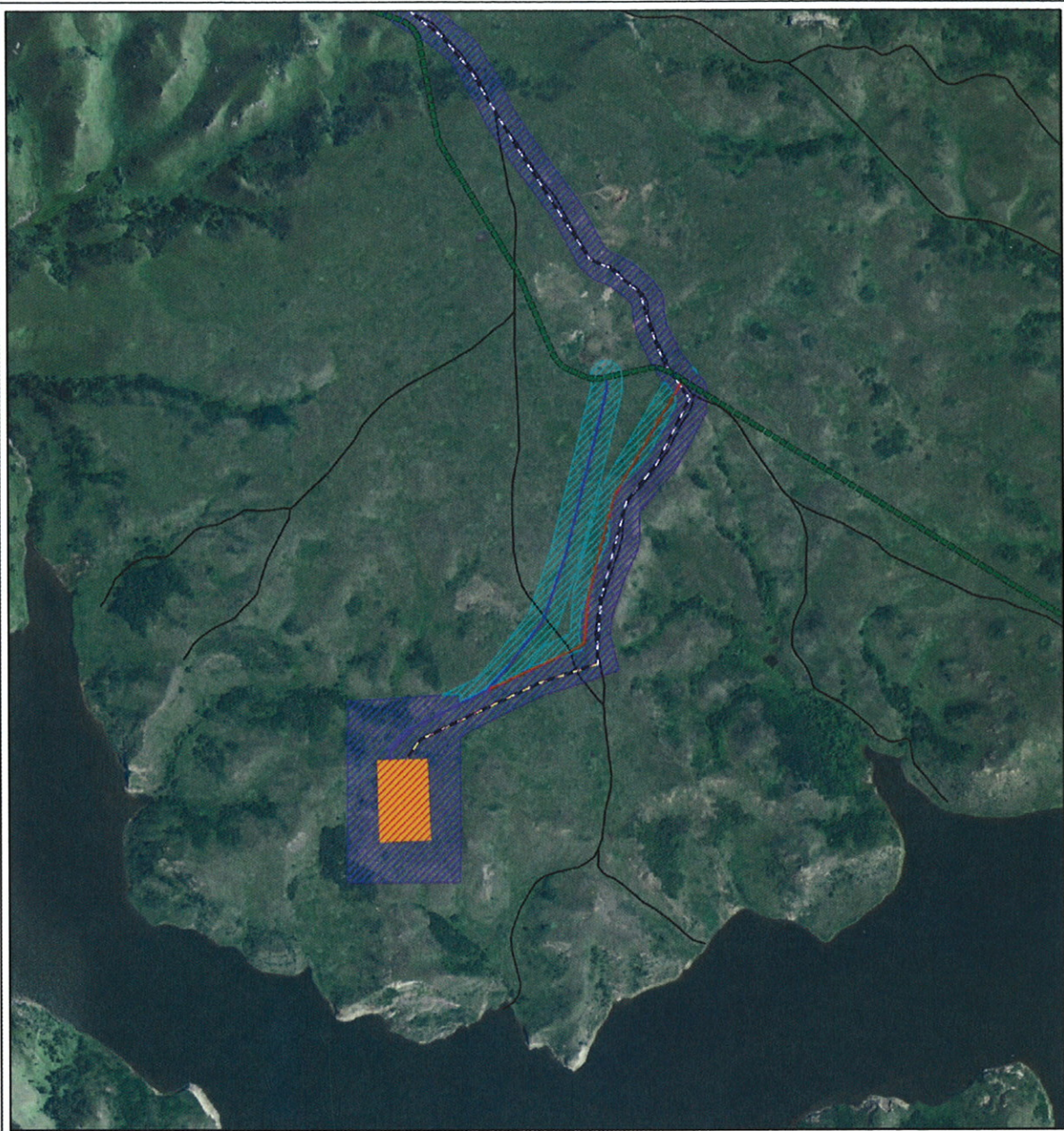
This determination is based on the following factors:

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, public safety, water resources, and cultural resources. The remaining 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 actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
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 projects will improve the socio-economic condition of the affected Indian community.

Acting 
Regional Director


Date

Project location



**Good Bird #36-25H
& Black Hawk #1-12H Gathering Line**

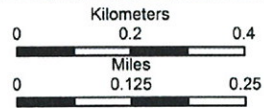
- Gathering Line Original Route
- Gathering Line Reroute
- Survey Area
- Previous Survey
- Access Road
- Well Pad
- Existing Roads
- Arrow Phase 2SE Pipeline



116 North 4th Street
Suite 200
Bismarck, ND 58501

Phone: 701.258.6622
Fax: 701.258.5957

www.swca.com



Base Map: NAIP 1-meter Aerial Imagery
Source: ND GIS Hub
Quadrangle: Saddle Butte SW, (1973)
Township 148N & Range 93W
Dunn County, North Dakota



Scale: 1:10,000 NAD 1983 UTM Zone 13N

**ENVIRONMENTAL ASSESSMENT
Addendum**

United States Bureau of Indian Affairs

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



Dakota-3 E&P Company, LLC

**Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipelines
Connecting the Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2
SE Pipeline**

Fort Berthold Indian Reservation

November 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

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A. Pipeline Layout and Pipeline Right-of-Way for Dakota-3 E&P Good Bird #36-25H and Black Hawk #1-12H

1. Purpose and Need for the Proposed Action

The purpose of the proposed action is to authorize the land use by Dakota-3 E&P Company, LLC (D3) for the construction and installation of three gathering pipelines including one oil pipeline, one gas pipeline, and one produced water pipeline. As proposed, the Good Bird #36-25H/Black Hawk #1-12H gathering pipeline system (pipelines) would transport oil, gas, and produced water to markets and approved disposal sites. A buried electrical line may be installed in the future within the approved right-of-way (ROW).

Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota, where the Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected individual allotments. 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.

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 pipelines would be located on trust land originating from the north side of the existing well pad in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 36, Township (T) 148 North (N), Range (R) 93 West (W), 5th Prime Meridian (P.M.), Dunn County, North Dakota. The pipelines would terminate at the existing Arrow Phase 2 Southeast Pipeline (Phase 2E pipeline) in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36, T148N, R93W, 5th P.M. The proposed project is located approximately 13.8 miles southeast of Mandaree, North Dakota.

4. Scope of Work for Proposed Action

D3 proposes to construct and install oil, gas, and produced water gathering pipelines on trust land that would join the Good Bird #36-25H/Black Hawk #1-12H wells (wells) to the existing Phase 2SE pipeline. Oil, gas, and produced 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 greater than 8 inches in diameter and constructed of new steel. The produced water pipeline would also be no greater than 8 inches in diameter and constructed of Fiberspar[®] or similar corrosion resistant material. Technical descriptions for the materials, corrosion rates, spill response plans and quality assurance/control are specific to Arrow Pipeline, LLC.

Approximately 3,340 feet of oil, gas, and produced water pipeline would be needed to connect the wells to the existing Phase 2SE pipeline. All construction disturbances would occur within

a 130-foot temporary right-of-way (ROW) and permanent surface disturbance would occur within a 50-foot ROW between the wells and the existing Phase 2SE pipeline, which has been surveyed for impacts to natural and cultural resources with no significant findings. In total, approximately 10 acres will be temporarily disturbed, as a result of activities associated with the construction of the proposed pipelines. Pipeline plats are provided in Appendix A.

5. Materials Information and Corrosion Rates

D3 proposes to construct the pipelines according to the specifications used by Arrow Pipeline, LLC (Arrow). These specifications may vary if D3 uses different materials and methods to install the pipelines. If the technical specifications of the materials vary from those contained herein, D3 will provide the BIA with a revised technical specification explanation that contains the same or similar information as disclosed below.

Steel Pipe

D3 proposes to construct the oil and gas pipelines using new steel pipe rated by the American Petroleum Institute (API) as 5L X52. D3 would ensure that each steel pipe segment is coated with approximately 14 to 16 millimeters of fusion bonded epoxy coating. Further, D3 would deploy an active cathodic protection system for all steel pipe, which further reduces the likelihood of external corrosion. Arrow would ensure that each steel pipe segment is allotted a 1/16-inch corrosion allowance; however, because of the non-corrosive nature of Bakken crude and the low concentrations of hydrogen sulfide, D3 does not anticipate any external or internal corrosion during the operating lifetime of the pipe, which, at a minimum, is estimated to be 50 years.

Fiberspar® or Similar Pipe

D3 proposes to construct the produced water pipeline using a material known as Fiberspar or one with the same corrosion resistant characteristics as Fiberspar. This type of material is not subject to internal or external corrosion.

6. Spill Response Plan

Arrow has developed a Spill Response Plan (Plan) (Middick 2011¹) for the Phase 3SW pipeline. The spill preventative measures and monitoring protocols, notification procedures, spill detection and on-scene spill mitigation procedures, response activities, contacts, training and drill procedures, and response plan review and update procedures, as referenced in the Plan, apply to the proposed pipelines, so long as Arrow remains the operator. A copy of the Plan has been filed with the BIA and Arrow has legally committed to adhering to the procedures and requirements as defined by federal law (Title 49 Code of Federal Regulations [CFR] 194). D3 has committed to developing a project specific spill response plan that will be submitted to the BIA prior to the commencement of construction activities.

¹ Middick, Andy. 2011. *Operations Monitoring and Spill Response Plan*. Blackshare Environmental Solutions. Oklahoma City, Oklahoma.

7. Pipeline Marking Procedures

D3 adheres to the requirements of 49 CFR 192.707 with regard to the marking of buried pipelines. Specifically, D3 would place pipeline markers within 1,000 feet of one another, at all public road crossings, railroad crossings, creek crossings, fence crossings, and at all points of major direction change.

8. Quality Control/Quality Assurance Measures

D3 would purchase steel pipe that is rated as API 5L X52 and would inspect all pipe while at the mill to ensure quality. D3 would ensure that external epoxy coating is applied to a minimum thickness of 14 millimeters. During construction, all welds are visually inspected for quality and completeness by qualified professionals. Once welds have passed visual inspection, they are subjected to 100 percent Non Destructive Testing. After passing these tests, the weld areas are covered for corrosion protection. After the weld areas have been covered, the external coating of the pipe is inspected using a jeepmeter to detect holes and cracks. The pipe is lowered into the trench and buried. Prior to being put into service, the steel pipe is hydrotested to approximately 1.5 times the minimum design pressure of 1,180 pounds per square inch gauge (psig).

The produced water pipe is designed to sustain a minimum pressure of 750 psig and is hydrotested to approximately 900 psig prior to being approved for service.

9. Valve Locations

Two valves would be installed at each end of the proposed pipelines. One valve would be installed at the well location while the second valve would be installed at the proposed tie-in with the Phase 2SE pipeline. The installation of two valves would allow D3 to isolate the proposed gathering pipelines if required.

10. Reclamation

Interim Reclamation

Reclamation would continue to occur over the life of the pipelines. Initial reclamation would be required after initial construction and then following any maintenance work or additions of infrastructure. Reclamation would be required before final abandonment of the decommissioned pipeline. A successful reclamation would at all times be the responsibility of the system's operator.

Trenches would be back-filled immediately after the pipe is installed and testing is complete, assuming frozen or saturated soils are not present. Back-fill piles would be stored opposite of the topsoil piles during construction. If construction is to occur during winter, D3 will partially fill the trench with useable, non-frozen, back-fill soil to the extent possible and cover the entire

ROW including the trench with straw. The trench would be back-filled and topsoil distributed as soon as practicable after the soil has defrosted. Topsoil piles would be covered to eliminate the potential for rill erosion and subsequent loss of soil during spring snow melt and precipitation events.

Applicable short- and long-term best management practices would be used to minimize and control erosion in disturbed areas. To reduce compaction, the ROW would be plowed before the stockpiled topsoil is distributed.

The disturbed areas would be reclaimed and contoured as soon as possible after construction is complete (fall/spring). The ROW would be covered with stockpiled topsoil and reseeded with a seed mixture determined by the BIA. D3 would control noxious weeds within the ROW and other applicable facilities by approved chemical or mechanical methods. If seeding of the ROW does not occur due to growing season constraints, D3 will deploy approved weed-free hay across the entire ROW. The presence of hay across the ROW will reduce the potential for excessive erosion as a result of spring snow melt and precipitation.

The entire ROW would be monitored for erosion, subsidence, or noxious weeds. In areas where problems are found to occur, reclamation efforts would continue until the BIA feels the ROW is successfully reclaimed. Reclamation is considered successful when:

- seeded areas are established;
- adjacent vegetative communities spread back into the disturbed areas; and
- noxious weeds are under control.

If after two growing seasons the new seeding is not successful, the BIA may require additional efforts to establish vegetation. For noxious weeds, a survey was conducted on the ROW prior to the construction commencing. The BIA has developed a weed management plan to treat known or likely to occur noxious weed species.

Final Reclamation

Final reclamation would occur when the pipeline is decommissioned. All disturbed areas would be reclaimed, reflecting the BIA's view of oil and gas exploration and production as temporary intrusions on the landscape. All facilities would be removed. Work areas would be leveled or backfilled as necessary, scarified, recontoured, and seeded. It is economically and environmentally unfeasible to excavate and remove the decommissioned pipeline. Instead it would be purged with water of any natural gas remaining in the lines and abandoned in place.

11. Surveys

SWCA Environmental Consultants (SWCA) conducted cursory natural resource surveys for threatened and endangered species and habitat, migratory birds and active nests, bald and golden eagles and nests, and wetlands for the proposed pipeline alignment on April 28, 2011.

Habitat observed was consistent with those described in Section 13. Vegetation was typical of rolling prairie grassland ecosystems, consisting predominantly of grass species including little bluestem (*Schizachyrium scoparium*), green needle grass (*Nassella viridula*), western wheatgrass (*Pascopyrum smithii*), and purple coneflower (*Echinacea angustifolia*), prairie sandreed (*Calamovilfa longifolia*), and Canada thistle (*Cirsium arvense*). Woody-stemmed species recorded include: fringed sagewort (*Artemisia frigida*), western snowberry (*Symphoricarpos occidentalis*), silver buffaloberry (*Shepherdia argentea*), wild rose (*Rosa arkansana*), Green Ash, (*Fraxinus pennsylvanica*), Siberian elm (*Ulmus pumila*), chokecherry (*Prunus virginiana*) and creeping juniper (*Juniperus horizontalis*). One small area of woody-stemmed vegetation was identified within the proposed ROW, as indicated in Figure 1. The project area is considered migratory bird nesting habitat. Migratory bird species encountered include; western meadowlark (*Sturnella neglecta*), ring-billed gull (*Larus delewarensis*), and chestnut-collared longspur (*Calcarius ornatus*).

No protected species including threatened and endangered species, migratory birds or active nests, or bald/golden eagles or nests, or wetlands/waterbodies were observed during the natural resource survey.

Designated critical habitat for piping plover occurs approximately 0.66 river miles from the existing well pad. D3 would implement all best management practices (BMPs), erosion control measures, and spill prevention practices required by the Clean Water Act to minimize the potential for adverse impact as a result of the construction and operation of the proposed pipelines.

A cultural resource inventory of this pipeline route was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 15.63 acres were inventoried between April 28 and May 4, 2011 (Leroy and Riordan 2011). 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 October 5, 2011; however the THPO did not respond within the allotted 30 day comment period.

Leroy, Adam, and Carolyn Riordan

(2011) A Class I and Class III Cultural Resource Inventory of the Good Bird #36-25H and Black Hawk #1-12H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Dakota-3 E & P Company, LLC, Denver.

12. Potential Effects

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. Soils observed in the project area are known to support native grassland vegetation, which may substantially increase the probability for successful and permanent reclamation, provided land reclamation takes place immediately after construction has ceased. Best management practices (BMPs) would be used to prevent erosion, minimize runoff and loss of sediment, and ensure soil stabilization. The implementation of BMPs by the operator would reduce project effects and maintain negligible levels of erosion; therefore, no significant adverse impacts are anticipated to soil resources or long-term impacts on vegetation or wildlife resources.

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 and active nests, implementation of best management practices to control the introduction of noxious weeds, and minimization of 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 (April 2011).

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. Any 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.

13. Applicable National Environmental Policy Act (NEPA) Document(s)

Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Phase 2 Southeast Pipeline (April 2011).

14. Other Relevant Documentation

Environmental Assessment and Finding of No Significant Impact: Two Bakken Exploratory Oil Wells atop one pad on the Forth Berthold Indian Reservation: Dakota-3 Good Bird #36-25H and Dakota-3 Black Hawk #1-12H (August 2011)

15. NEPA Adequacy Criteria

This document has identified one previously prepared NEPA document, *Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Phase 2 Southeast Pipeline (April 2011)* 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.

*Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline
Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE
Pipeline (November 2011)*

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.

Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE Pipeline (November 2011)

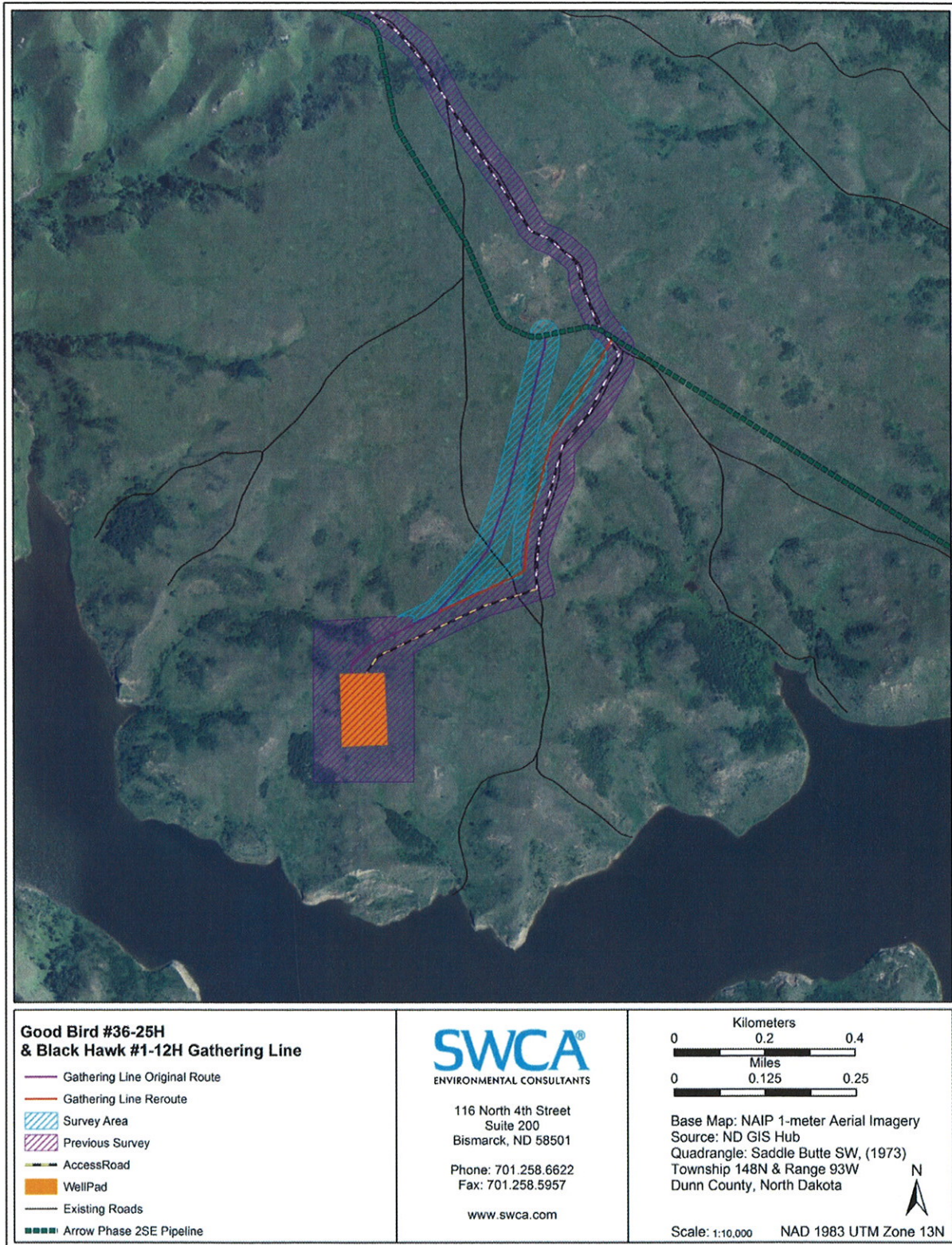


Figure 1. Good Bird #36-25H and Black Hawk #1-12H Proposed Gathering Pipelines.

*Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline
Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE
Pipeline (November 2011)*



IN REPLY REFER TO:
DESCRM
MC-208

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



OCT 05 2011

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 a proposed oil gathering line in Dunn County, North Dakota. Approximately 15.63 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-1993/FB/11**, the proposed undertaking, location, and project dimensions are described in the following report:

Leroy, Adam, and Carolyn Riordan
(2011) A Class I and Class III Cultural Resource Inventory of the Good Bird #36-25H and Black Hawk #1-12H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Dakota-3 E & P Company, LLC, Denver.

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

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

Sincerely,


ACTING Regional Director

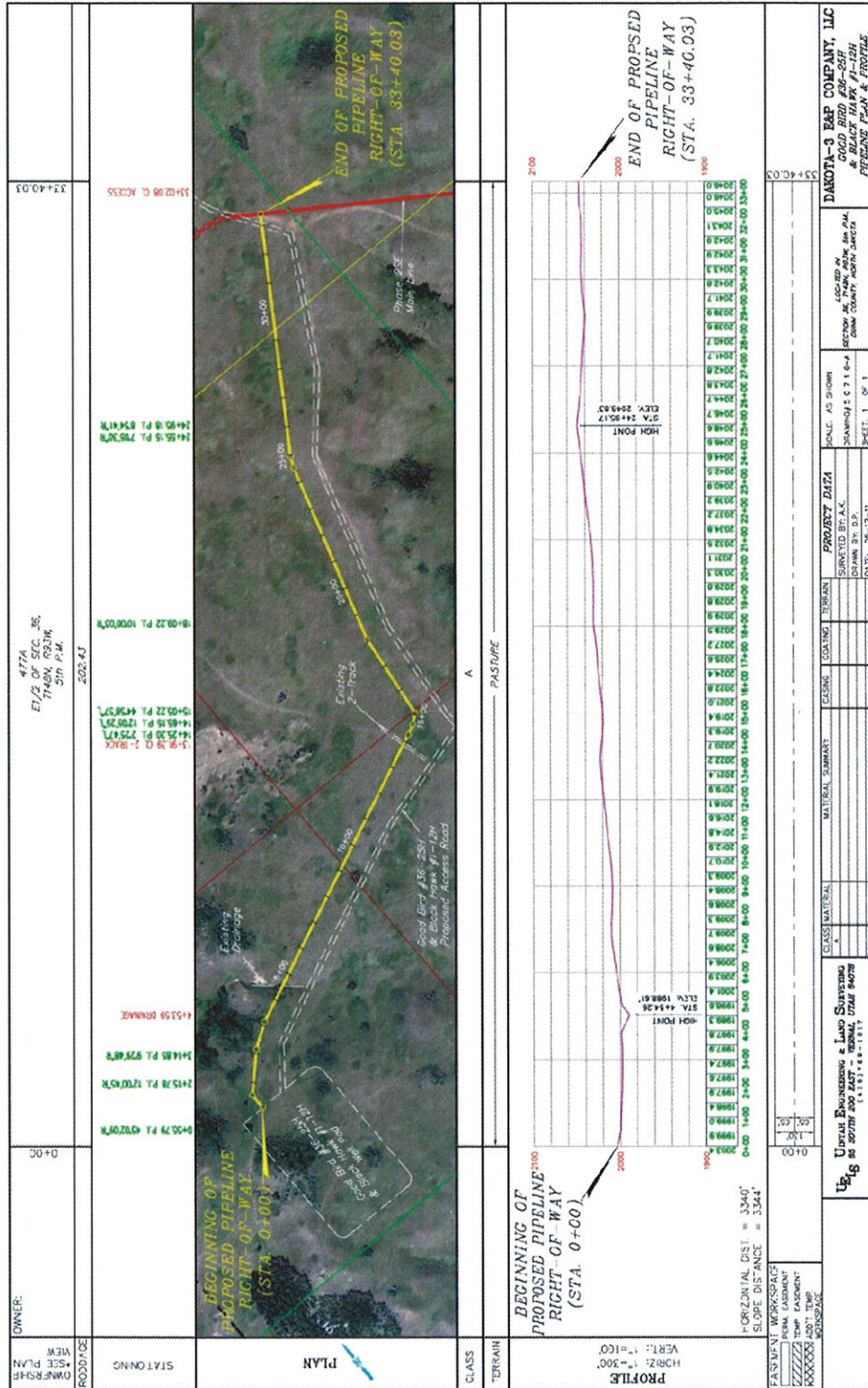
Enclosure

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

APPENDIX A

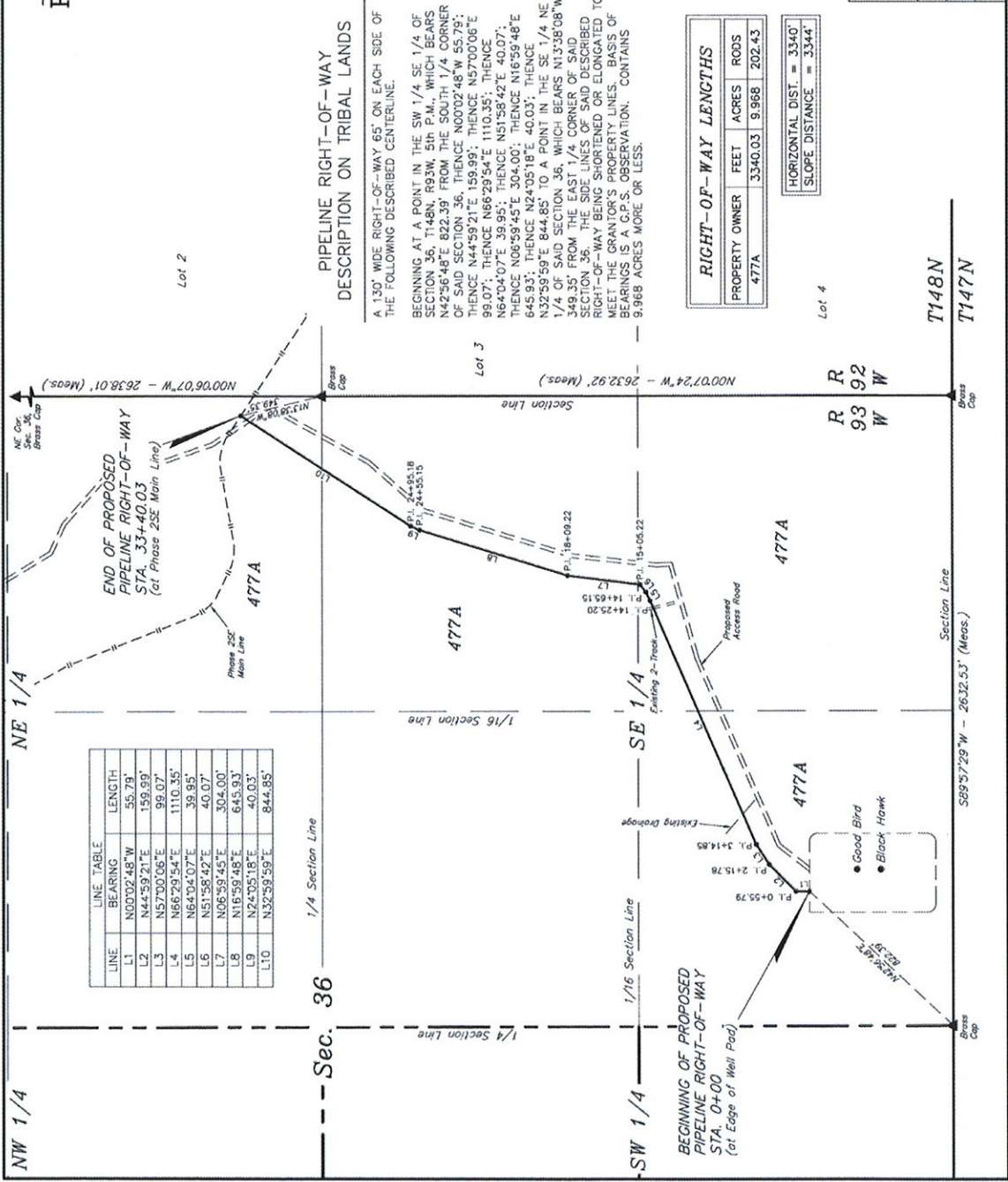
**Pipeline Layout and Pipeline Right-of-Way for Dakota-3 E&P Good Bird
#36-25H and Black Hawk #1-12H**

Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE Pipeline (November 2011)



Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE Pipeline (November 2011)

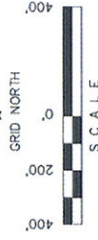
DAKOTA-3 E&P COMPANY, LLC
**PIPELINE RIGHT-OF-WAY
 ON TRIBAL LANDS**
 (For GOOD BIRD #36-25H
 & BLACK HAWK #1-12H)
 LOCATED IN
 SECTION 36, T148N, R93W, 5th P.M.,
 DUNN COUNTY, NORTH DAKOTA



LINE	BEARING	LENGTH
L1	N00°02'48"W	55.79'
L2	N44°59'21"E	159.99'
L3	N57°00'06"E	99.07'
L4	N66°29'54"E	1110.35'
L5	N64°04'07"E	39.95'
L6	N51°58'42"E	40.07'
L7	N06°59'45"E	304.00'
L8	N16°59'48"E	645.93'
L9	N24°05'18"E	40.03'
L10	N32°59'59"E	844.85'

**PIPELINE RIGHT-OF-WAY
 DESCRIPTION ON TRIBAL LANDS**
 A 130' WIDE RIGHT-OF-WAY 65' ON EACH SIDE OF
 THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SW 1/4 SE 1/4 OF
 SECTION 36, T148N, R93W, 5th P.M., WHICH BEARS
 N42°56'48"E 822.39' FROM THE SOUTH 1/4 CORNER
 OF SAID SECTION 36, THENCE N00°02'48"W 55.79';
 THENCE N44°59'21"E 159.99'; THENCE N57°00'06"E
 99.07'; THENCE N66°29'54"E 1110.35'; THENCE
 N64°04'07"E 39.95'; THENCE N51°58'42"E 40.07';
 THENCE N06°59'45"E 304.00'; THENCE N16°59'48"E
 645.93'; THENCE N24°05'18"E 40.03'; THENCE
 N32°59'59"E 844.85' TO A POINT IN THE SE 1/4 NE
 1/4 OF SAID SECTION 36, WHICH BEARS N13°38'08"W
 349.35' FROM THE EAST 1/4 CORNER OF SAID
 SECTION 36. THE SIDE LINES OF SAID DESCRIBED
 RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO
 MEET THE GRANTRY'S PROPERTY LINES. BASIS OF
 BEARINGS IS A G.P.S. OBSERVATION. CONTAINS
 9.968 ACRES MORE OR LESS.



▲ = SECTION CORNERS LOCATED.
 BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

CERTIFICATE

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



RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
477A	3340.03	9.968	202.43

HORIZONTAL DIST = 3340'
 SLOPE DISTANCE = 3344'

SCALE	1" = 400'	DATE	05-17-11
PARTY	A.K. D.P.	REFERENCES	G.L.O. PLAT
WEATHER	COOL	FILE	5 0 7 1 6
UNTAH ENGINEERING & LAND SURVEYING 85 SOUTH - 200 EAST • (435) 789-1017 VERNAL, UTAH - 84078			

*Addendum to Environmental Assessment Authorizing Land Use for Gathering Pipeline
Connecting Good Bird #36-25H and Black Hawk #1-12H Wells to the Arrow Phase 2 SE
Pipeline (November 2011)*

DAKOTA-3 E&P COMPANY, LLC
GOOD BIRD #36-25H BLACK HAWK #1-12H
PIPELINE RIGHT-OF-WAY
SECTION 36, T148N, R93W, 5th P.M.

TOTAL PIPELINE RIGHT-OF-WAY ON TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 3340.03' OR 0.633 MILES. WIDTH OF RIGHT-OF-WAY IS 130' (65' PERPENDICULAR ON EACH SIDE OF CENTER LINE). CONTAINS 9.968 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF MONTANA }
COUNTY OF RICHLAND } SS

TROY JENSEN, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR DAKOTA-3 E&P COMPANY, LLC , THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION); THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE PIPELINE RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 0.633 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.




REGISTERED LAND SURVEYOR
REGISTRATION NO. 4654
STATE OF NORTH DAKOTA

APPLICANT'S CERTIFICATE

I, _____, DO HEREBY CERTIFY THAT I AM THE AGENT FOR DAKOTA-3 E&P COMPANY, LLC , HEREINAFTER DESIGNATED THE APPLICANT; THAT TROY JENSEN WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS PIPELINE RIGHT-OF-WAY, 0.633 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA 33+40.03, THAT SAID PIPELINE RIGHT-OF-WAY IS ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

TITLE