



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office MC-208
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401




IN REPLY REFER TO:
DESCRM
MC-208

APR 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 authorize land use for gathering pipelines connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE trunk pipeline on the Fort Berthold Indian 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 (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)
Jonathon Shelman, Corps of Engineers (with attachment)
Jeff Hunt, Fort Berthold Agency (with attachment)

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

**Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines
Connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline**

The U.S. Bureau of Indian Affairs (BIA) received a proposal to construct and install gathering pipelines on tribal land originating from the southeast side of the Dakota-3 Benson #3-9H well pad and joining the existing Arrow Phase 2SE trunk 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

4/14/11

Date

Notice of Availability and Appeal Rights

Arrow Pipeline: Gathering Pipelines Connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline

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 Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline on the Fort Berthold Reservation as shown on the attached map. Construction by Arrow Pipeline, LLC is expected to begin in 2011.

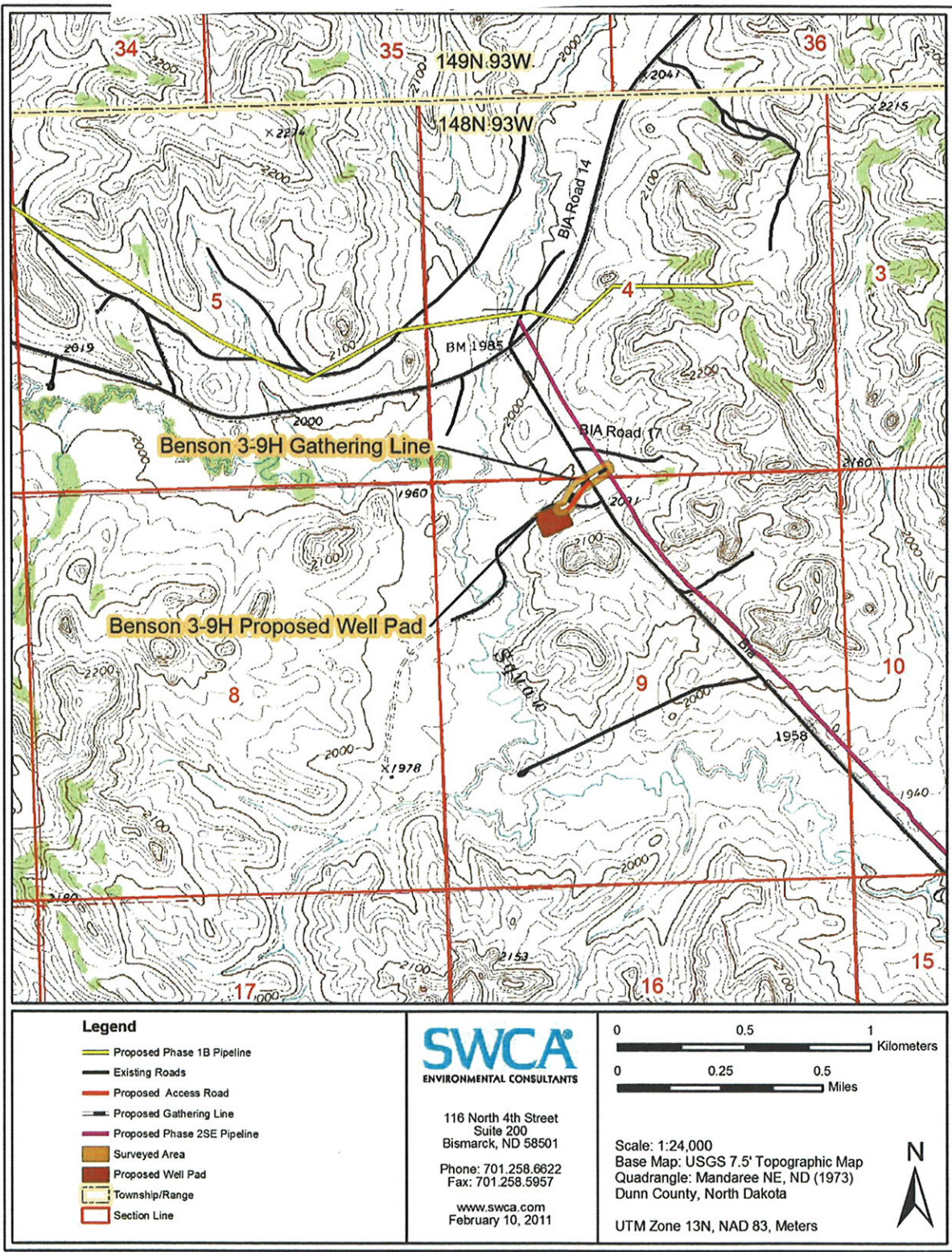
An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No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

Project locations



**ENVIRONMENTAL ASSESSMENT
Addendum**

United States Bureau of Indian Affairs

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



Zenergy Operating Company, LLC

**Addendum to Environmental Assessment to Authorize Land Use for Gathering
Pipelines Connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline**

Fort Berthold Indian Reservation

April 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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1. Purpose and Need for the Proposed Action

Zenergy Operating Company, LLC (Zenergy) 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) and Zenergy for the construction and installation of three separate co-located pipelines occupying the same ground disturbance to transport oil, natural gas, and produced water. The proposed gathering pipeline system would utilize pipe that would not exceed eight inches in diameter and would transport oil and natural gas from the productive Dakota-3 Benson #3-9H well to markets via the Arrow Phase 2SE Trunk pipeline.

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

Dakota-3 Benson #3-9H gathering line would be located on tribal land off of the northeast side of the well side of the well pad, approximately 8 miles southeast of the Mandaree, North Dakota. The pipeline would originate at the well pad in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 9, Township (T) 148 North (N), Range (R) 93 West (W), 5th Prime Meridian (P.M.), Dunn County, North Dakota and terminating at a tie in point on the Arrow Phase 2SE trunk pipeline in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 4, Section 4, T148N, R93W, 5th P.M., Dunn County, North Dakota (

Figure 1).

4. Scope of Work for Proposed Action

Arrow and Zenergy propose to construct and install gathering pipelines on tribal land originating from the southeast side of the Dakota-3 Benson #3-9H well pad and joining the existing Arrow Phase 2SE trunk pipeline. The pipelines would be buried in a 2.5-foot wide trench, and would consist of three separate co-located pipelines occupying the same ground disturbance to transport oil, natural gas, and produced water. Oil, gas, and water pipelines would be buried in either two 2.5-foot wide trenches, spaced 5 feet apart or one 5-foot wide trench. Oil and gas pipelines would be 4 inches in diameter and constructed of steel. Water pipelines would be 4 inches in diameter and constructed of Fiberspar[®] or similar material. The approximate length of the proposed pipelines would be 814.76 feet, as shown in Appendix A.

All construction disturbance would occur within a 120-foot temporary right-of-way and permanent surface disturbance would occur within a 50-foot right-of-way between the Dakota-3 Benson #3-9H well pad and Arrow Phase 2SE trunk pipeline, which has been surveyed for impacts to natural and cultural resources with no significant findings. Approximately 0.93 acres would be disturbed as a result of proposed gathering pipeline construction activities. Pipeline plats can be located in Appendix A.

The proposed pipelines would also cross the existing BIA Road 17, at Latitude 47° 37' 38.13" Longitude 102° 32' 15.29" (NAD 83). The pipelines would be bored a minimum of 5 feet beneath the roadway and perpendicular to it, with bore pits installed outside of the established right-of-way fences, as shown in schematic diagrams in Appendix A. All applicable BIA and DOT permits will be obtained by Arrow for the proposed road bore. The bore length would be approximately 300 feet from bore pit to bore pit. Anode installation would be used to provide cathodic protection to the steel pipeline, as shown in schematic diagram in Appendix A. Construction within the highway right-of-way (ROW) would be in accordance with the BIA requirements.

5. Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species, raptors or raptor nests, bald and golden eagles, and wetlands on October 25, 2010. No wildlife, protected species, or wetlands were identified at the proposed pipeline location during the survey.

A cultural resource inventory of this pipeline route was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 4.47 acres were inventoried on October 25, 2010 (Herson 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 March 15, 2011; however, the THPO did not respond within the allotted 30 day comment period.

6. Potential Effects

Zenergy and Arrow have previously committed to the following measures to minimize potential impacts from constructing gathering lines from the Benson 3-9H well to tie-in point on the Arrow Midstream Holdings, LLC gathering system (BIA 2010). In addition to co-location of the gathering pipelines, if electrical lines are installed in association with this project or to provide service to this project, they will be installed underground within the approved ROW. To the extent possible, Arrow will attempt to co-locate the gathering pipeline system with Zenergy's Benson #3-9H access road, however the temporary work space needed for pipeline installation and the perpendicular alignment for the crossing of highway BIA 17 do not allow for complete co-location.

Arrow will also follow best management practices (BMPs) from the BLM Gold Book, including the following:

- burying the gathering lines at least 4 feet below the bottom of any intermittent channel that is crossed,
- testing the gathering lines prior to backfilling the trenches,
- compacting the trenches during backfilling and then heaping to mitigate settling,
- and recontouring any cut-and-fill slopes.

Potential impacts as a result of the proposed action would be mitigated by surveying for and avoiding any eligible cultural resource sites within the proposed ROW, implementing a storm water 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 by 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 FONSI (BIA 2010)¹. Resource surveys and the supplementary assessment of the potential impacts of the proposed action were completed in October 2010.

SWCA has reviewed the location of the proposed gathering pipeline system relative to the surveys and all existing data and sensitive environmental factors in the vicinity, finding that no sensitive wildlife habitats occur nearby. The previously approved EA and FONSI for the Benson 3-9H well (BIA 2009, 2010) described that the nearest wetland is approximately 0.7 mile from the location, and 5 homes occur within one mile of the proposed gathering pipeline system, concluding that no adverse impacts would occur to these resources. Based on those surveys and evaluation of existing data and the mitigation measures committed to by Zenergy, no significant impacts to natural and cultural resources are anticipated.

7. Applicable NEPA Documents

Environmental Assessment: Zenergy Operating Company, LLC, Five Bakken Exploratory Oil Wells: Dakota-3 Benson #3-9H, Dakota-3 High Hawk #4-9H, Dakota-3 Joseph Eagle #16-19H, Dakota-3 Fettig (860 A-B) #16-22H, Dakota-3 Morsette #35-26H (November 2009).

Memorandum of Environmental Assessment and Finding of No significant Impacts for Five Bakken Exploratory Oil Wells: Dakota-3 Benson #3-9H, Dakota-3 High Hawk #4-9H, Dakota-3 Joseph Eagle #16-19H, Dakota-3 Fettig (860 A-B) #16-22H, Dakota-3 Morsette #35-26H. January 20, 2010.

8. NEPA Adequacy Criteria

The two previously prepared NEPA documents adequately describe the environmental consequences of the newly proposed action described herein. In addition, the following cultural resource report was submitted for review by the BIA in support of the original environmental assessment: *Cultural Resource Report: SWCA 2010. North Dakota Negative Results Cultural Resource Report for Benson #3-9H Pipeline Tie-In* (February, 2010). Based on a review of these documents, the proposed Project meets the following NEPA Adequacy Criteria:

1. The proposed action is substantially the same action and at the site specifically analyzed in the two existing NEPA documents.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA documents, which appropriately considers and analyzes current environmental concerns, interests, and resource values.
3. The existing analysis and conclusions are adequate in the existing NEPA documents. 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 documents 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 documents.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA documents.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA documents.

References

Herson, Chandler S.

(2011) A Class I and Class III Cultural Resource Inventory of the Zenergy Dakota-3 Benson #3-9H Gathering Line on the Fort Berthold Indian Reservation, Dunn County, North Dakota.

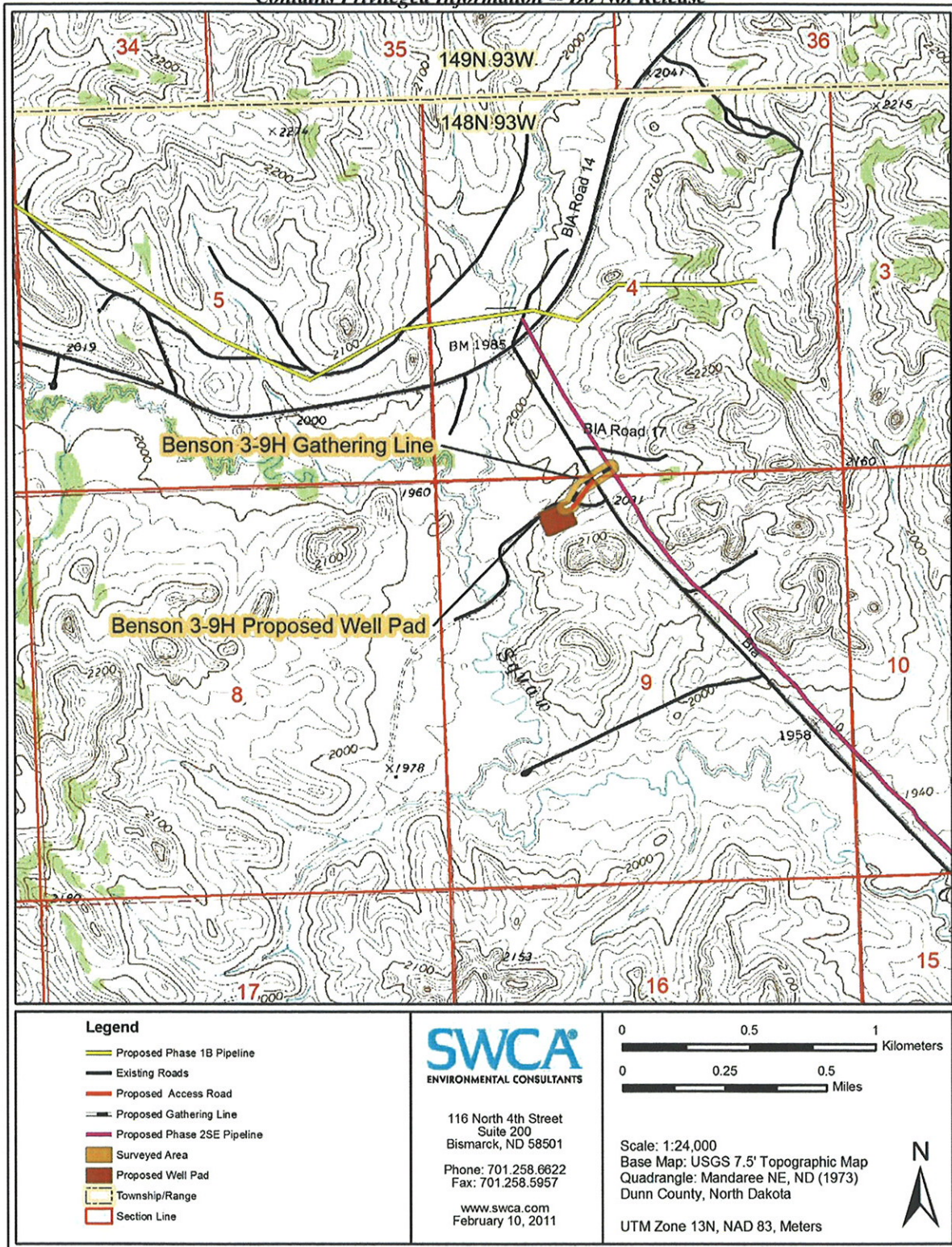
SWCA Environmental Consultants for Zenergy Operating Company, LLC, Tulsa, OK.



Figure 1. Proposed Dakota-3 Benson #3-9H gathering pipeline system and associated well pad and other infrastructure.

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines
 Connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline

Contains Privileged Information -- Do Not Release



Project location map at 1:24,000 showing inventoried area.
 (Mandaree NE [1973], North Dakota USGS 7.5-minute Quadrangle)

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines
Connecting Dakota-3 Benson #3-9H to Arrow Phase 2SE Trunk Pipeline



United States Department of the Interior

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



MAR 15 2011

IN REPLY REFER TO:
DESCRM
MC-208

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 an oil gathering line and a well pad and access road in Dunn and Mountrail Counties, North Dakota. Approximately 16.6 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. 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 these undertakings. The proposed undertakings, locations, and project dimensions are described in the following reports:

Herson, Chandler S.

(2011) A Class I and Class III Cultural Resource Inventory of the Zenergy Dakota-3 Benson #3-9H Gathering Line on the Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Zenergy Operating Company, LLC, Tulsa, OK. Ms. on file (AAO-1602/FB/09)

Hutchinson, Alan, and Todd Kohler

(2011) A Class I and Class III Cultural Resource Inventory of the Zenergy Dakota-3 Mabel Evans #10-3H and Dakota-3 Normal Eagle #15-22H Dual Well Pad and Access Road on the Fort Berthold Indian Reservation, Mountrail County, North Dakota. SWCA Environmental Consultants for Zenergy Operating Company, LLC, Tulsa, OK. Ms. on file (AAO-1887/FB/11)

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

Enclosures

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

APPENDIX A
Pipeline Layout Plats and
Pipeline Right-of-Way, Boring, and Anode Installation Schematics
for Dakota-3 Benson #3-9H Gathering Pipelines

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines

