



# 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

**MAY 22 2012**

IN REPLY REFER TO:  
DESCRM  
MC-208

## MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: <sup>Acting</sup> Regional Director, Great Plains Region

SUBJECT: Environmental Assessment and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, an Environmental Assessment (EA) has been completed and a Finding of No Significant Impact (FONSI) has been issued. The EA authorizes land use for one oil and gas well pad with up to six wells, access road, pipeline and utilities on the Omaha Woman 13-12H well pad 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, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the (40 C.F.R. Section 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)  
Ryan Krapp, CarlsonMcCain (with attachment)  
Eric Wortman, EPA, (with attachment)  
Jonathon Shelman, Corps of Engineers  
Jeff Hunt, Fort Berthold Agency

**Finding of No Significant Impact**  
**WPX Energy Williston, LLC**

**Environmental Assessment for One Oil and Gas Well Pad with up to Six Wells, Access Road, Pipeline and Utility Corridor**

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

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to authorize land use for One Oil and Gas Well Pad with up to Six Wells, Access Road, Pipeline and Utility Corridor on the Fort Berthold Indian Reservation. The Omaha Woman 13-12 proposed well pad will include six well bores, the Omaha Woman 13-12HD, Omaha Woman 13-12HZ, Omaha Woman 13-12HY, Omaha Woman 13-12HC, Omaha Woman 24HC, and the Omaha Woman 24HD, into the Bakken and Three Forks formations. 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

5-22-2012

Date

# **ENVIRONMENTAL ASSESSMENT**

**United States Bureau of Indian Affairs**

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



**WPX Energy Williston, LLC  
Omaha Woman 13-12H  
Well Pad, Access Road, Pipeline and Utilities**

**Fort Berthold Indian Reservation**

**May 2012**

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

**Environmental Assessment**  
**Omaha Woman 13-12H**  
**Well Pad, Access Road, Pipeline and Utilities**  
**WPX Energy Williston, LLC**

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## **Acronyms**

AAQM	Ambient Air Quality Monitoring (site)
AIRFA	American Indian Religious Freedom Act
APD	Application for Permit to Drill
APE	Area of Potential Affect
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FONSI	Finding of No-Significant Impact
GPRO	Great Plains Regional Office
MHA Nation	Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation
NAGPRA	Native American Graves Protection and Repatriation Act
NDCC	North Dakota Century Code
NDDH	North Dakota Department of Health
NDGFD	North Dakota Game and Fish Department
NDIC	North Dakota Industrial Commission
NDNHI	North Dakota Natural Heritage Inventory
NDSWC	North Dakota State Water Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPAL	Northern Plains Agro-ecosystems Laboratory
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTL	Notice to Lessees
SHPO	State Historic Preservation Officer
TCP	Traditional Cultural Property
TERO	Tribal Employment Rights Office
THPO	Tribal Historic Preservation Officer
TVD	Total Vertical Depth
USACE	United States Army Corps of Engineers
USC	United States Code
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

## 1.0 Purpose and Need for the Proposed Action

WPX Energy Williston, LLC (WPX) is proposing to construct a well pad to drill six horizontal oil/gas wells on the Fort Berthold Indian Reservation (FBIR), in order to evaluate and/or develop the commercial potential of the natural resources. This includes an associated access road and gathering/supply utilities.

The U.S. Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The development is proposed on lands held in trust by the United States in McKenzie County, North Dakota (Figure 1). The BIA may also hold title to subsurface mineral rights.

Additional NEPA analysis, decisions, and federal actions will be required prior to any other developments. Any authorized project will comply with all applicable federal, state, and tribal laws, rules, policies, regulations, and agreements. No construction, drilling, or other ground-disturbing operations will begin until all necessary leases, easements, surveys, clearances, consultations, permissions, determinations, and permits are in place.

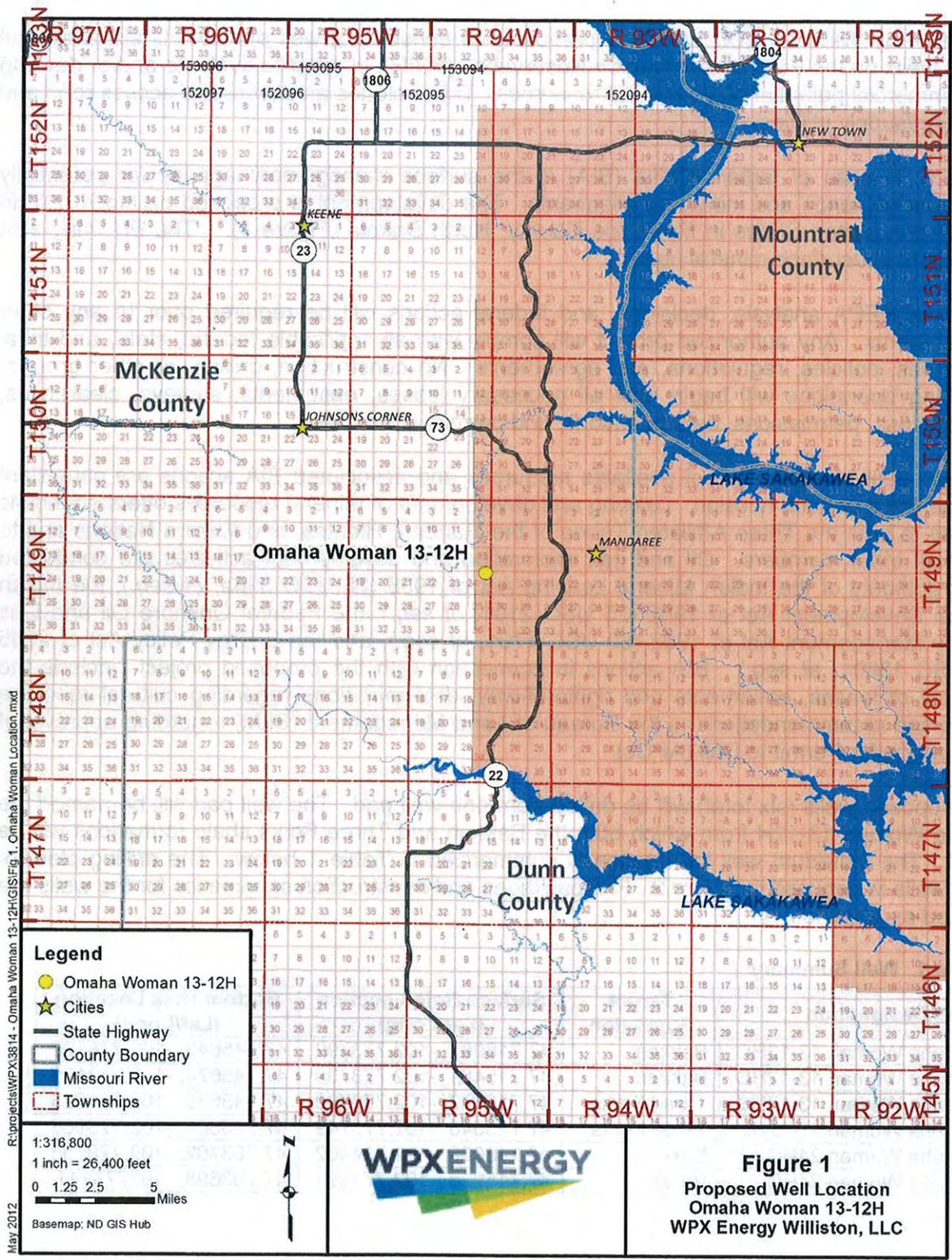
The economic development of available resources and associated BIA actions are consistent with the BIA's general mission. Leasing and development of mineral resources offers economic benefits to both the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members. Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 USC 396a, *et seq.*), the Indian Mineral Development Act of 1982 (25 USC 2101, *et seq.*), the Federal Onshore Oil and Gas Royalty Management Act of 1982 (30 USC 1701, *et seq.*), and the Energy Policy Act of 2005 (42 USC 15801, *et seq.*). BIA actions in connection with the proposed project include the approval of leases, easements and rights-of-way, determinations regarding cultural resource effects and recommendations to the Bureau of Land Management (BLM) regarding approval of Applications for Permit to Drill (APDs).

The proposed wells (six total) will be drilled from one well pad. The well pad will be named the Omaha Woman 13-12H from which both the Bakken and Three Forks shale formations will be drilled. The individual well information is summarized in Table 1 below. The drilling plan for these wells is depicted in Figure 2. Plat packages and construction schematics for the wells are included as Appendix A.

**Table 1. Well Summary**

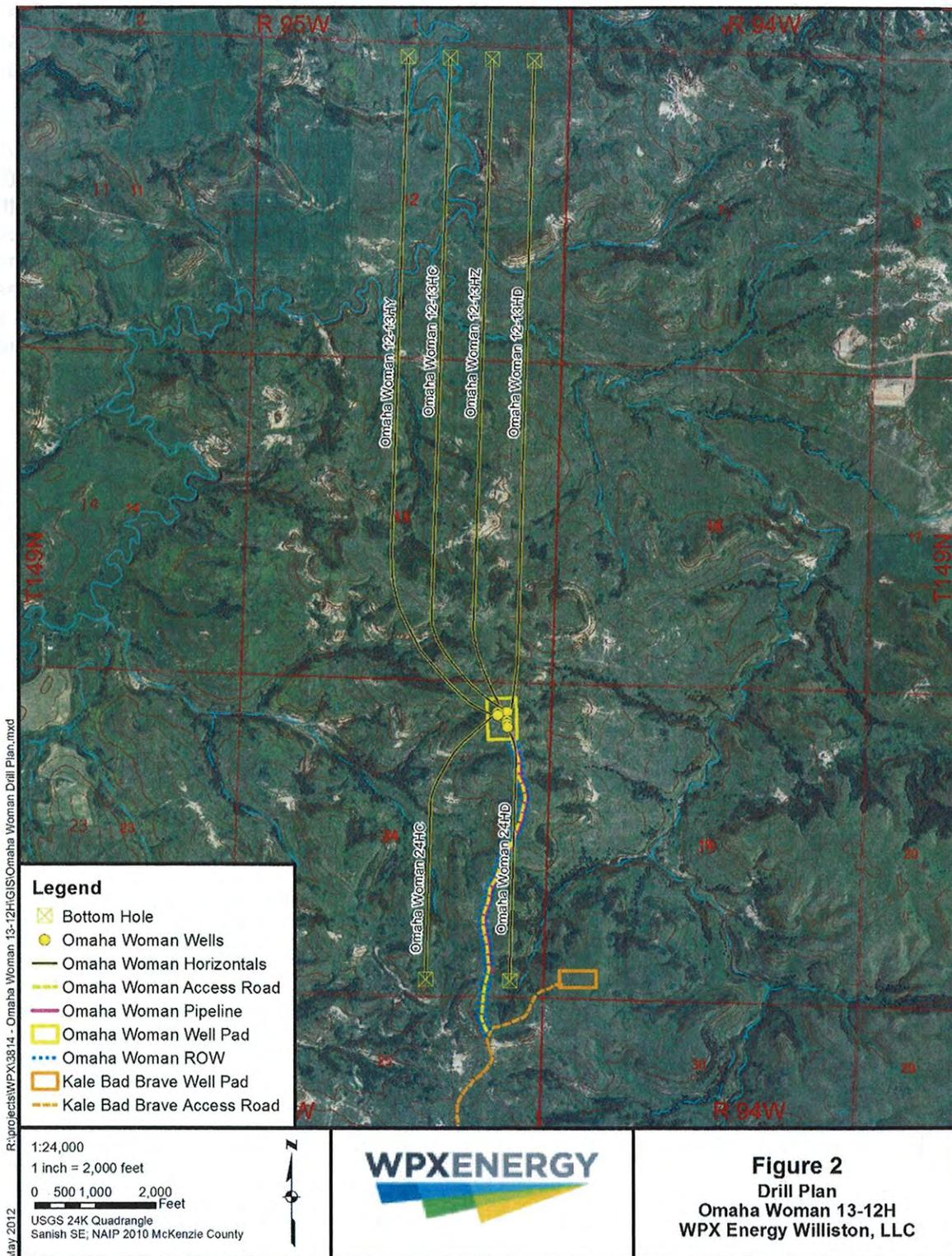
<b>Well Designation</b>	<b>Target Formation</b>	<b>Surface Hole Location (Lat/Long)</b>	<b>Bottom Hole Location (Lat/Long)</b>
Omaha Woman 13-12HC	Bakken	47.716087, -102.773792	47.745649, -102.778797
Omaha Woman 13-12HD	Bakken	47.715403, -102.773739	47.745674, -102.773136
Omaha Woman 13-12HY	Three Forks	47.715677, -102.773760	47.745635, -102.781629
Omaha Woman 13-12HZ	Three Forks	47.715540, -102.773749	47.745661, -102.775968
Omaha Woman 24HC	Bakken	47.716065, -102.774402	47.703702, -102.778798
Omaha Woman 24HD	Bakken	47.715928, -102.774391	47.703698, -102.773141

Figure 1. Proposed Well Location



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May 2012

**Figure 2. Proposed Omaha Woman 13-12H Drill Plan**



**Figure 2**  
**Drill Plan**  
**Omaha Woman 13-12H**  
**WPX Energy Williston, LLC**

There are several components of the proposed action. A new access road will be constructed to access the proposed well site; a well pad will be built to accommodate drilling operations; oil and natural gas pipelines may be constructed; and underground electrical and fiber optics lines may be installed. All project components will eventually be abandoned and reclaimed, as specified in this document, the APD, and according to any other federal conditions, unless formally transferred with federal approval to either the BIA or the landowner.

These proposed federal actions require compliance with the *National Environmental Policy Act* of 1969 (NEPA) and regulations of the Council on Environmental Quality (CEQ, 40 CFR 1500-1508). Analysis of the proposal's potential to affect the human environment is expected to both improve and explain federal decision-making. APDs submitted by WPX describe developmental, operations, and reclamation procedures and practices that contribute to the technical basis of this Environmental Assessment (EA). The procedures and practices described in the application are critical elements in both the project proposal and the BIA's decision regarding environmental impacts. This EA will result in either a Finding of No Significant Impact (FONSI) or a decision to prepare an Environmental Impact Statement (EIS).

## 2.0 Proposed Action and Alternatives

The Proposed Action, outlined within this document, analyzes the potential impacts of the specific proposed project, six exploratory oil/gas wells on tribal allotted surface ownership and mineral estate held in trust by the BIA in McKenzie County, North Dakota. The proposed wells will test the commercial potential of the Bakken and Three Forks Formations. Site-specific actions will include several components, including construction and installation of the following:

- Access road,
- Well pad,
- Oil and natural gas gathering pipelines,
- Underground electrical and fiber optic utilities.

### 2.1 Proposed Action

Construction activities will follow lease stipulations, practices, and procedures outlined in this document, the APD, guidelines and standards in *Surface Operating Standards for Oil and Gas Explorations and Development* (BLM/US Forest Service, Fourth Edition, also known as the Gold Book), and any conditions added by either BIA or the BLM. All lease operations will be conducted in compliance with applicable laws and regulations, including 43 CFR 3100, *Onshore Oil and Gas Orders 1, 2, 3, 6, and 7*, approved plans of operations and any applicable Notices to Lessees.

#### 2.1.1 Field Camps

Self-contained trailers may house a few key personnel during drilling operations, but any such arrangements will be short-term. No long-term residential camps are proposed. Construction and drilling personnel will commute to the proposed project site, most likely from within or around the Reservation. Human waste will be collected in standard portable chemical toilets or service trailers located on site, then transported to a state-approved wastewater treatment facility. Other solid waste will be collected in enclosed containers and disposed of at a state-approved facility.

#### 2.1.2 Access Road Construction Procedures

Approximately 5,083 feet of new access road, within a 130-foot right-of-way (ROW), will be constructed from the southeast corner of the proposed pad proceeding south until it connects with the access road for the Kale Bad Brave 19-18H well site.

The maximum disturbed ROW width of 130 feet of the access road, pipeline, and utility corridor will result in a potential 15.2 acres of disturbance. Signed agreements will be in place allowing road construction across affected surface allotments and private land surfaces. Any applicable approach permits and/or easements will be obtained prior to any construction activity.

Construction will follow road design standards outlined in the Gold Book. A minimum of eight inches of topsoil will be stripped from the Omaha Woman 13-12H access road and utility corridor. The stockpiled topsoil will be redistributed on the outslope areas of the borrow ditches following road construction. Ditches will be reseeded as soon as practical with a seed mixture approved by the BIA. Care will be taken during road construction to avoid disturbing any existing buried utilities. The access road will be surfaced with a minimum of four-inches of

gravel and the roadway will remain in place for the life of the well. Typical cross-sections are shown in Figure 3.

### **2.1.3 Pipeline and Utility Construction Procedures**

An associated pipeline and utility corridor will parallel the road alignment within the ROW of the access route. The pipeline and utility corridor will include oil, natural gas, and produced water gathering pipelines. Underground electrical and fiber optic utilities may also be constructed.

The natural gas pipeline will be constructed of three-inch diameter polyethylene pipe. The oil pipeline will be constructed of six to eight-inch welded steel pipe. Produced water pipelines will consist of four-inch diameter polyethylene pipe.

All pipelines will be underground. Natural gas and oil pipelines will be installed in one trench with produced water pipeline installed in a second trench. Trenches will be approximately 2.5 feet wide and will be placed 10 to 15 feet apart. All pipelines will be installed at a minimum depth of six feet except as needed at road and stream crossings, or as needed for safety considerations. Underground electrical and fiber optic utilities will be installed at the same time or at a later date utilizing the spider-plow method.

Trenches will be backfilled immediately after pipeline and utility installation and testing, waiting only if soils are overly wet or frozen. Appropriate temporary and long-term erosion control measures will be applied to all disturbed areas to minimize and control erosion. Field practices will conform with prescribed BMP's which may include:

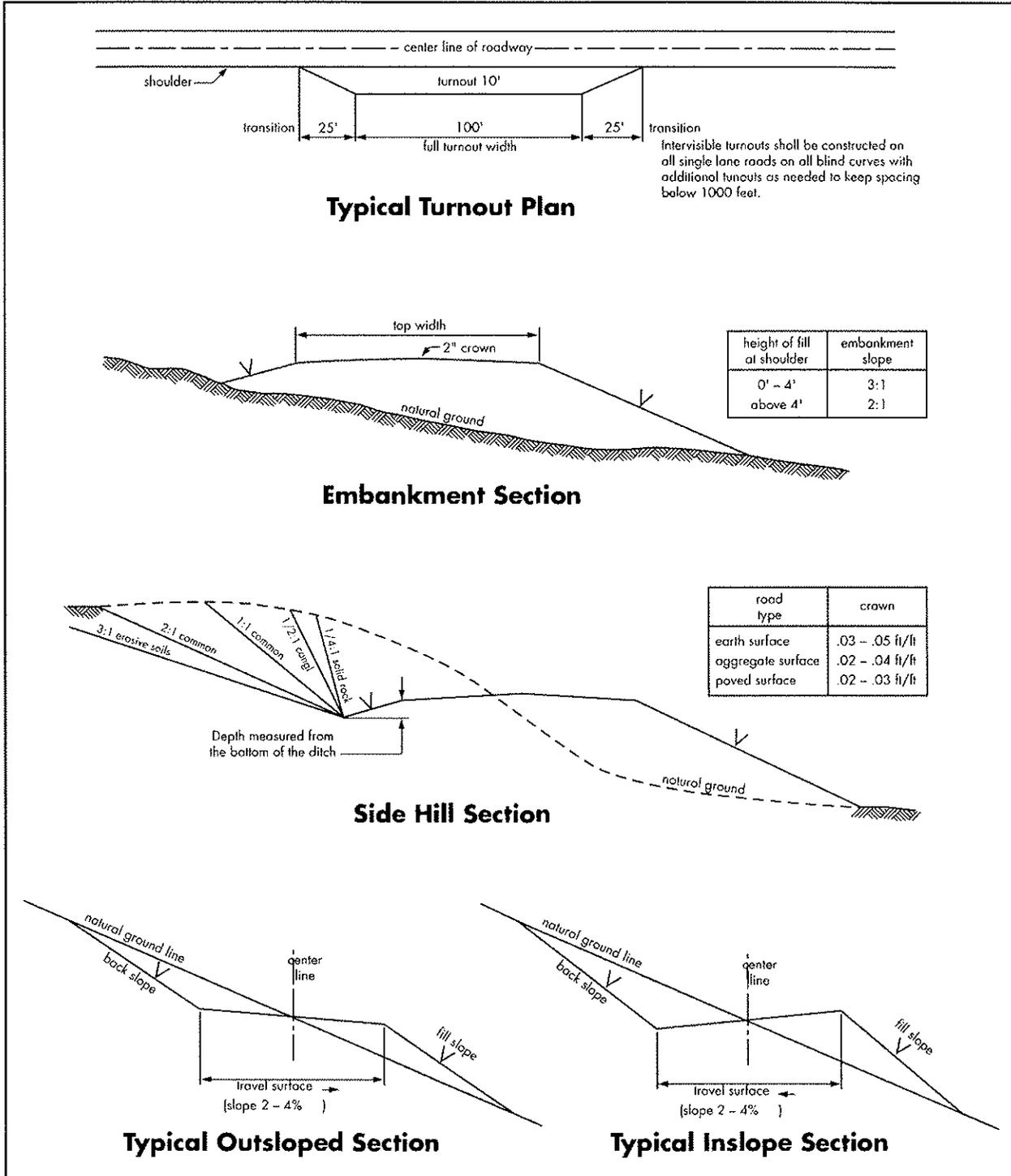
- Installing erosion fabric, mats or logs;
- Construction of diversion ditches and/or water bars;
- Seeding, planting, mulching and creation of buffer strips; and
- Other measures identified at on site meetings by BIA and during construction to minimize erosion and soil loss.

When ditching is implemented with a trenching machine, the topsoil will first be stripped and stored on the far side of the spoil side of the ROW. Subsoil will be stored closest to the open ditch. Pipeline installation and subsoil backfilling will be performed as soon as possible dependent on weather conditions. If construction occurs during winter months, topsoil will likely contain chunks of frozen soil. If the topsoil is excessively frozen, the topsoil will not be replaced but kept in windrows. Appropriate BMP's will be placed along the entirety of the ROW to reduce the potential for excessive erosion because of spring snowmelt. In areas where the spring thaw will likely bring considerable amounts of running water, surface breakers, along with temporary surface matting may be installed to further minimize erosion potential.

After subsoil is scarified to alleviate compaction, the stockpiled topsoil will be redistributed over the ROW. Topsoil redistribution and final grading will be done in the spring following complete frost thaw and required drying of the right-of-way. Monitoring and maintenance of erosion along the ROW will be ongoing and responsibility of WPX.

**Figure 3. Typical roadway cross section (Gold Book)**

- Construction Steps**
1. Salvage topsoil
  2. Construct road
  3. Redistribute topsoil
  4. Revegetate slopes



#### **2.1.4 Well Pad Construction Procedures**

The proposed well pad will consist mainly of an area leveled for the drilling rig and related equipment. The well pad area will be cleared of vegetation, stripped of topsoil, and graded to the specifications in the approved APD. Topsoil will be stockpiled and stabilized until disturbed areas are reclaimed and re-vegetated. Excavated subsoil will be used in well pad construction, with the finished well pad graded to ensure positive water drainage away from the drill site. Erosion control devices will be maintained throughout well pad construction, drilling, and interim reclamation, as needed. Weed control will be performed for the duration of the project.

The Omaha Woman 13-12H well pad working surface will be constructed initially to approximately 9.0 acres in size. Construction activities and soil stockpiles will increase the overall surface disturbance. The total surface use, within the fenced area of the site, will be approximately 11.0 acres.

#### **2.1.5 Drilling**

WPX will submit APDs to the BLM for the proposed well. The BLM North Dakota Field Office will forward the APDs to the BIA's Fort Berthold Agency in New Town, North Dakota, for review and concurrence. The BLM will not approve an APD until BIA completes its NEPA process and recommends APD approval. No construction or drilling will begin until an approved permit has been obtained from the BLM.

Rig transport and on-site assembly will take approximately seven days per well. A rotary drill rig will require approximately 30 days to reach target depths. A typical drilling rig is shown in Figure 4. For approximately the upper 2,500 feet of each drilled hole, a fresh-water based mud system with non-hazardous additives such as bentonite clay will be used to minimize contaminant concerns. Fresh water will be obtained from a commercial source for drilling, using nearly 8.4 gallons of water per foot of hole drilled.

Following the setting and cementing of the near-surface casing, an oil-based mud system will be used to drill to the production casing point for the proposed wells. The oil-based mud system consists of a diesel fuel (80-85%) and water (15-20%) mixture. The oil-based drilling fluids reduce the potential for hole sloughing while drilling through shale formations. Approximately 4,725 gallons of water and 18,900 gallons of diesel fuel per well will be used during the vertical drilling for each well. The lateral reach of each well hole will be drilled using approximately 33,600 gallons of fresh water.

A closed-loop drilling system will be used to drill the wells. The cuttings and fluids generated from drilling will be circulated and deposited within reserve tanks on the well pad. Tanks will be emptied as needed at approved off-site disposal facilities in accordance with North Dakota Industrial Commission (NDIC) rules and regulations.

Prior to use, the entire location will be fenced with a cattle guard at the access road entrance to each pad, in order to protect both wildlife and livestock. Fencing will be installed in accordance with Gold Book guidelines and maintained through the life of the wells.



**Figure 4. Typical drill rig (Carlson McCain)**

#### **2.1.6 Casing and Cementing**

Surface casing will be set to approximately 2,500 feet and cemented back to the surface during drilling, isolating all near-surface aquifers. The Fox Hills Formation will be encountered at approximately 1,700 feet and the Pierre Formation at approximately 1,800 feet. A production casing cemented from approximately 11,256 feet up to 4,000 feet will isolate potential hydrocarbon zones in the Dakota Formation that occur below 4,500 feet. The production horizontal section will be uncased, with all associated operations conducted in compliance with *Onshore Oil and Gas Order 2* (Title 43 CFR 3160).

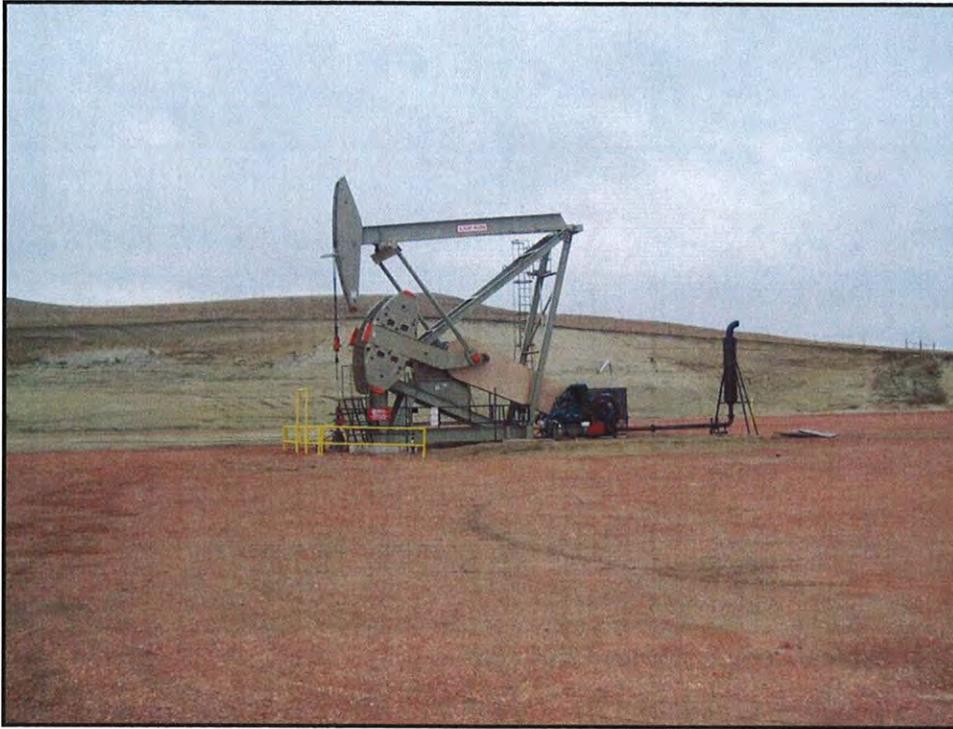
#### **2.1.7 Completion and Evaluation**

A work-over unit will be moved onto the well site following the completion of the drilling operations. Approximately 30 days are usually needed to clean out the well bore, pressure test the casing, perforate and fracture the horizontal portion of the hole, and run production tubing for commercial production. A mixture of sand and a carrier (water and/or nitrogen) may be pumped into the well bore under extreme pressure to fracture the target formation. The sand particles will stabilize the fractures, increase the capture zone and maximize the field drainage. The fracture fluids will be recovered by flowing the well back to the surface, with all collected fluids disposed of in accordance with NDIC rules and regulations.

#### **2.1.8 Commercial Production**

If drilling, testing, and production support commercial production from the proposed locations, additional equipment will be installed including a pumping unit at the wellhead, a vertical heater/treater, storage tanks, and a flare/production pit. An impervious dike (that can contain 110% capacity of the largest holding tank plus one full day's production) will be placed around the production tanks and heater/treater. Load-out lines will be located inside the diked area and a screened drip barrel will be installed under the outlet. A metal access staircase will provide access to the diked area, protect the dike, and may provide support to tanker truck hoses. The BIA will choose an inconspicuous paint color for permanent aboveground production facilities from

colors recommended either by the BLM or by the Rocky Mountain Five-State Interagency committee. A typical producing unit is shown in Figure 5.



**Figure 5. Typical producing unit (Carlson McCain)**

Oil and produced water will be collected in tanks and trucked to existing oil terminals or approved disposal site until connection to pipelines. Production volumes of oil and water along with pipeline operational date will dictate trucking frequency and duration.

The duration of production operations cannot be reliably predicted, but some oil wells have pumped for more than 100 years. Initial daily production is estimated at 500 barrels of oil and 100 barrels of water, decreasing after three months to approximately 200 barrels of oil and 50 barrels of water per day.

Natural gas will initially be flared in accordance with Notice to Lessees (NTL) 4A and adopted NDIC regulations, which prohibit unrestricted flaring for more than the initial year of operation (NDCC 28-08-06.4).

Gathering pipelines for oil and natural gas will be constructed as part of this project. The gathering network will allow for gas and oil to be transported to a central location for shipping to market.

Should future oil/gas exploration and development activities be proposed wholly or partly on trust land, those proposals and associated federal actions would require additional site-specific NEPA analysis and BIA consideration prior to implementation.

### **2.1.9 Pipeline Spill Response Plan**

Saddle Butte Pipeline (SBP) has developed an Emergency Spill Contingency Plan (Plan) for the SBP System. 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. A copy of the Plan has been filed with the BIA and SBP has committed to adhering to the procedures and requirements as defined by federal law (Title 49 Code of Federal Regulations [CFR] 194).

### **2.1.10 Pipeline Marking Procedures**

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

### **2.1.11 Pipeline Quality Control/Quality Assurance Measures**

SBP's pipelines are coated with 14-16 mil FBE, which protects the pipelines against corrosive elements in the soil. The coating is inspected thoroughly at the time of installation, both visually and by electronic testing means. All coating repairs are inspected by SBP personnel. In addition, shrink sleeves protect field joints. SBP also utilizes specialty coatings that are applicable for underground fittings, bore crossings, etc. to provide additional levels of protection in areas.

Erosion is addressed during the design phase when velocities and pressure drops for the pipeline system are carefully evaluated and lines are sized to prevent erosion velocity by a safety factor of approximately two. Additionally, lines are designed to be cleaned and inspected via internal tools (e.g., cleaning pigs and smart pigs), which helps in the identification of issues in the pipes.

Following design and installation, SBP immediately conducts a cathodic survey utilizing test stations, rectifier pads and other means designed by cathodic protection specialists. The system is continuously monitored throughout the life of the asset in accordance with the strict pipeline safety requirements set forth in the USDOT's rules and regulations. SBP installs pig launchers and receivers on its trunk lines and primary laterals to identify pipeline conditions both internally and externally, in order to maintain the integrity of SBP's system.

SBP installs check valves between its trunk line and its laterals to prevent a "back feed" scenario to a spill, thereby limiting the volume of any spill. SBP also has manual valve sets at all intersections of laterals to our trunk, allowing isolation as well as at the wells themselves. Real time web-based mapping for use by its operations team and for use by first responder personnel is being developed. SBP has provided options in its trunk line for automatic isolation based on low-pressure switching devices once the system pressure exceeds 1400 psi. These valves will automatically isolate the pipeline under most line rupture circumstances.

SBP's construction specifications require its contractors to at all times allow for inspection, and no pipeline is laid and backfilled without appropriate approvals. SBP also conducts very rigorous hydro testing of its pipelines with extremely tight tolerances on pressure drop throughout the duration of the test to assure there is no possibility of leakage at the time of installation.

### **2.1.12 Site Description**

The proposed Omaha Woman 13-12H well site will consist of six well bores, drilled to access petroleum resources of the Bakken and Three Forks formations under Sections 12 and 24, T149N, R95W. The well pad working surface will initially be constructed to approximately 680 feet by 480 feet or 9.0 acres in size (Figure 6). Construction activities and soil stockpiles will

increase the overall surface disturbance. The total surface use (fenced area) will be approximately 11.0 acres

A 24-inch containment berm will be constructed on top of the pad site to contain surface runoff during drilling and for the life of the well. Topsoil from the site will be stripped at a depth of eight inches and stockpiled on the south side of the pad. Soil stockpiles will act as secondary containment during drilling with the topsoil redistributed during interim and final reclamation. Site-specific BMP's include the containment berm and erosion control measures identified during the on-site review. A closed-loop drilling system will be utilized and no cuttings pits will be excavated; however, there is a possibility of a contingency pit to be established for emergencies.

The access route will begin at the southeast side of the pad and proceed south, approximately 5,083 feet where it connects to the access route for the Kale Bad Brave 19-18H well site. An associated pipeline and utility corridor will follow the road alignment and will include oil and natural gas pipelines along with underground electrical and fiber optic utilities as described in previous sections. Shut off valves will be installed at the pad site for all pipelines. The Omaha Woman 13-12H lateral pipelines will connect to the SBP.

### **2.1.13 Interim Reclamation**

If commercial production equipment is installed, best faith efforts will be made to reduce the size of the well pad to approximately half of the original size. Re-contouring and interim reclamation of disturbed areas will be accomplished within six-months after construction is completed, and no later than by the next appropriate planting season (fall or spring). Interim site reclamation plans after well drilling completions will reduce the pad surface sizes to less than half of the size needed for development. No reclamation of cuttings pits will be necessary due to the use of a closed-loop drilling system.

The working area of the well pad and the running surface of the access road will remain surfaced with scoria or crushed rock. Other interim reclamation measures include reduction of the cut and fill slopes, redistribution of stockpiled topsoil, installation of erosion control measures, and reseeded of native species as recommended by the BIA.

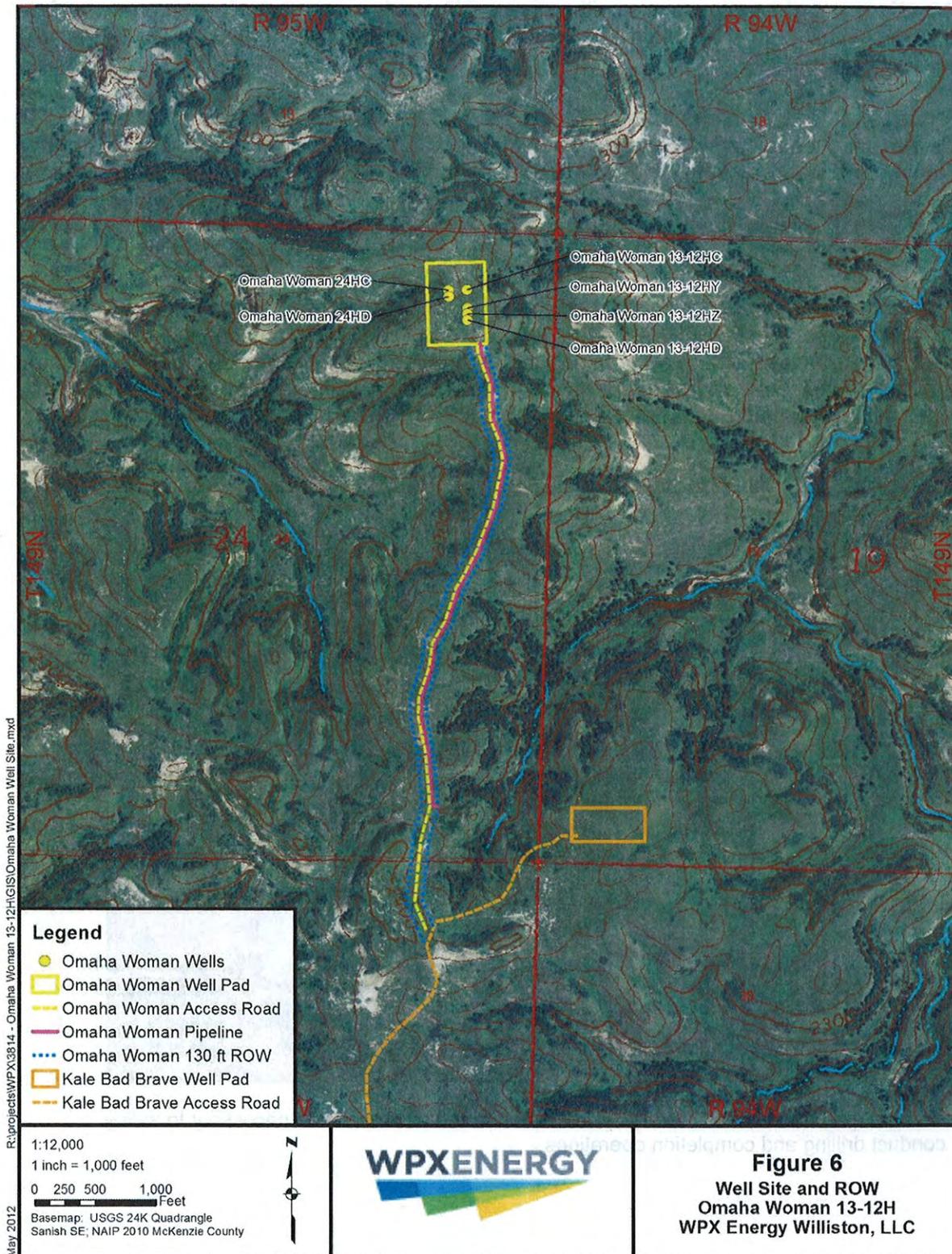
### **2.1.14 Final Reclamation**

Final reclamation will occur within six months if the proposed well is commercially unproductive, or later upon final abandonment of commercial operations. All disturbed areas will be reclaimed, reflecting the BIA view of oil and gas exploration and production as temporary intrusions on the landscape. All above ground facilities will be removed, well bores will be plugged with cement and dry hole markers will be set. The access road and work area will be leveled or backfilled as necessity, scarified, re-contoured and re-seeded.

Decommissioning of the pipelines and utilities will also result in mandatory final reclamation of the ROW. Due to economic costs and additional environmental disturbance associated with excavation and removal, pipelines will be purged with water to remove hydrocarbons, and then abandoned in place.

Weather conditions will determine final reclamation timing. The disturbed area(s) in grassland locales will be re-seeded with certified, weed-free seed mixtures established by the BIA. Native species will be used to the extent possible and seeding and planting will comply with BIA and BLM regulations to ensure successful reclamation. Disturbed areas in cultivated fields will not require re-seeding, reverting to agricultural use.

**Figure 6. Omaha Woman 13-12H Well Site and ROW**

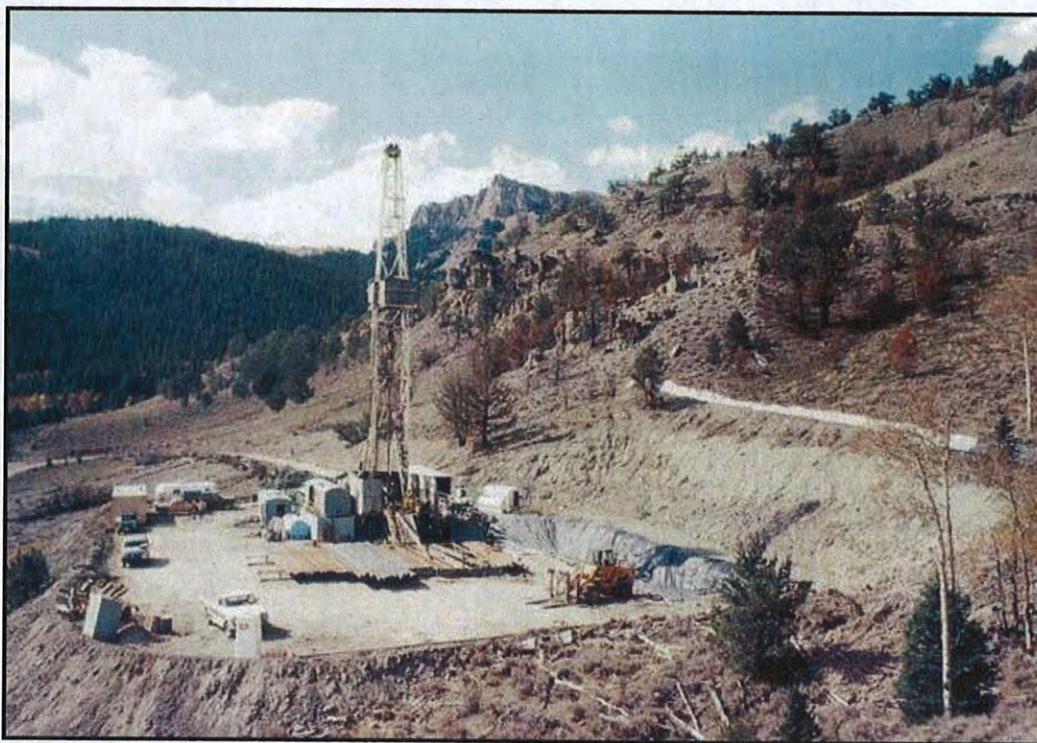


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Long term monitoring will be required to ensure successful reclamation and implementation of any necessary remedial efforts. Exceptions to these reclamation measures might occur if the BIA approves assignment of an access road either to the BIA roads inventory or to concurring surface allottees. Figure 7 and Figure 8 (from the Gold Book) show a typical site that was constructed and reclaimed.

Disturbed areas will be monitored to identify areas of excessive erosion, subsidence, or invasion of noxious weeds. Periodic monitoring will be performed and repeated reclamation efforts will be undertaken in problem areas until the BIA has certified the reclamation is successful. Successful reclamation is defined by the BIA to include the following observable factors: 1) reproduction of seeded and re-established species; 2) natural invasion of plants from undisturbed adjacent communities; and 3) control or exclusion of noxious weeds.

The BIA has developed a weed management plan to facilitate the treatment of known and likely noxious/invasive weed species. If seeding is not successful within two growing seasons, the BIA may require extra efforts to stabilize the site, such as matting the entire affected area, or using a mix of rapidly growing forbs and annual grasses, followed by reseeding with grasses, forbs, and shrubs with rapidly expanding, deep root systems.



**Figure 7. Typical well pad during operation.**

The well pad and access road are constructed to the minimum size necessary to safely conduct drilling and completion operations.



**Figure 8. Well pad after reclamation.**

The well pad and access road have been regraded back to the original contour, the topsoil respread, and the site revegetated.

## **2.2 The No Action Alternative**

The No Action Alternative must be considered within an EA. If this alternative is selected, the BIA will not approve leases, rights-of-way, or other administrative proposals for the proposed project. The project, as proposed, will not be constructed and neither the benefits nor the impacts outlined in this EA will be realized.

### 3.0 The Affected Environment and Potential Impacts

The FBIR is the home of the Three Affiliated Tribes of the MHA Nation. Located in west-central North Dakota, the FBIR encompasses more than one million acres, of which almost half are held in trust by the United States for either the MHA Nation or individual allottees. The remainder of the land is owned in fee simple title, sometimes by the MHA Nation or tribal members, but usually by non-members. The Reservation occupies portions of six counties, including Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward. In 1945, the Garrison Dam was completed inundating much of the Reservation. The remaining land was divided into three sections by Lake Sakakawea, an impoundment of the Missouri River upstream of the Garrison Dam.

The proposed well and access road is situated geologically within the Williston Basin, where the shallow structure consists of sandstones, silts and shales dating to the Tertiary Period (65 to 2 million years ago), including the Sentinel Butte and Golden Valley Formations. The underlying Bakken and Three Forks Formations are a well-known source of hydrocarbons targeted by the proposed project. Although earlier oil/gas exploration activities within the Reservation were limited and commercially unproductive, recent economic and technological advancement have created feasible access to these formations.

The Reservation is within the northern Great Plains ecoregion, which consists of four physiographic units:

- Missouri Coteau Slope north of Lake Sakakawea;
- Missouri River Trench (not flooded);
- Little Missouri River Badlands; and
- Missouri Plateau south and west of Lake Sakakawea

Much of the Reservation is located on the Missouri Coteau Slope and is comprised of a glaciated gently rolling landscape. Elevations of the Reservation range from 1,838 feet at Lake Sakakawea to over 2,600 feet on Phaelan's Butte near Mandaree. Annual precipitation averages between 15 to 17 inches. Mean temperatures fluctuate between -3° and 21°F in January and between 55° to 83° in July, with 95 to 130 frost-free days each year (Bryce et al. 1998; High Plains Regional Climate Center 2008).

The proposed well site and spacing unit is in a rural area consisting primarily of grassland, shrubland, and cropland that is currently farmed, idle or used to graze livestock. The landscape has been previously disturbed by dirt trails and gravel and paved roadways.

The specific well pad location was determined at on-site inspections by the proponent, the BIA Environmental Specialist, land surveyors, archeologists, the Tribal Historic Preservation Office (THPO) monitor and the environmental consultant. Resource surveys were conducted at the time of on-site inspections to determine potential affects to cultural, biological, and physical resources such as topography, natural drainage and erosion control, location of topsoil and subsoil stockpiles, flora, fauna, and wildlife habitat. The Omaha Woman 13-12H location was evaluated on February 13, 2012.

The broad definition of human and natural environment under NEPA leads to the consideration of the following elements:

- Air quality;
- Public health and safety;
- Water resources;

- Wetland/riparian habitat;
- Threatened and endangered species;
- Soils;
- Vegetation and invasive species;
- Cultural resources;
- Socioeconomic conditions; and
- Environmental justice.

Potential impacts to these elements are analyzed for both the No Action Alternative and the Proposed Action. Impacts may be beneficial or detrimental, direct or indirect, and short-term or long-term. The EA also analyzes the potential for cumulative impacts and ultimately makes a determination as to the significance of any impacts. In the absence of significant negative consequences, it should be noted that a significant benefit from the project does *not* in itself require preparation of an EIS. After consideration of the no-action alternative, existing conditions and potential impacts from proposed projects are described below.

### 3.1 Air Quality

The North Dakota Department of Health (NDDH) network of Ambient Air Quality Monitoring (AAQM) stations includes Watford City in McKenzie County, Dunn Center in Dunn County, and Beulah in Mercer County. These stations are located west, south, and southeast of proposed well site. Criteria pollutants tracked under National Ambient Air Quality Standards (NAAQS) of the *Clean Air Act* include sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), and ozone (O<sub>3</sub>). Two other criteria pollutants, lead (Pb) and carbon monoxide (CO), are not monitored by these three stations. Table 2 summarizes federal air quality standards and available air quality data from the three-county study area.

**Table 2. Summary of Federal Air Quality Standards and Available Air Quality Data**

Pollutant	Averaging Period	NAAQS ( $\mu\text{g}/\text{m}^3$ )	NAAQS (ppm)	County		
				Dunn	McKenzie	Mercer
SO <sub>2</sub>	24-Hour	365	0.14	0.004 ppm	0.004 ppm	0.011 ppm
	Annual Mean	80	0.3	0.001 ppm	0.001 ppm	0.002 ppm
PM <sub>10</sub>	24-Hour	150	--	50 ( $\mu\text{g}/\text{m}^3$ )	35( $\mu\text{g}/\text{m}^3$ )	35 ( $\mu\text{g}/\text{m}^3$ )
	Annual Mean	50	--	--	--	--
PM <sub>2.5</sub>	24-Hour	35	--	--	--	--
	Weighted Annual Mean	15	--	--	--	--
NO <sub>2</sub>	Annual Mean	100	0.053	0.002 ppm	0.001 ppm	0.003 ppm
CO	1-Hour	40,000	35	--	--	--
	8-Hour	10,000	9	--	--	--
Pb	3-Month	1.5	--	--	--	--
O <sub>3</sub>	1-Hour	240	0.12	0.071 ppm	0.072 ppm	0.076 ppm
	8-Hour	--	0.08	0.061 ppm	0.066 ppm	0.067 ppm

North Dakota was one of nine states in 2006 that met standards for all criteria pollutants. The state also met standards for fine particulates and the eight-hour ozone standards established by the U.S. Environmental Protection Agency (EPA) (NDDH 2007). The three counties addressed in Table 2 are also in full attainment and usually far below established limits (American Lung Association 2006). The Clean Air Act mandates prevention of significant deterioration in designated attainment areas. Class I areas are of national significance and include national parks

greater than 6,000 acres in size, national monuments, national seashores, and federal wilderness areas larger than 5,000 acres and designated prior to 1977. There is a Class I air shed at nearby Theodore Roosevelt National Park (TRNP). TRNP covers three units of approximately 110 square miles within the Little Missouri National Grassland between Medora and Watford City. The nearest unit, (TRNP North Unit) and is located 30-40 miles west of the proposed projects. The reservation can be considered a Class II attainment air shed, which affords it a lower level of protection from significant deterioration.

The proposed projects are similar to other nearby previously approved and installed projects. Construction, drilling, and tanker traffic will generate temporary, intermittent, and nearly undetectable gaseous emissions of particulates, SO<sub>2</sub>, NO<sub>2</sub>, CO<sub>2</sub>, and volatile organic compounds. Road dust will be controlled as necessary and other BMPs will be implemented as necessary to limit emissions to the immediate project area (BLM 2005). No detectable or long-term impacts to air quality or visibility are expected within the air sheds of the Reservation, state, or TRNP. No laws, regulations or other requirements have been waived; no monitoring or compensatory measures are required.

### 3.2 Public Health and Safety

Health and safety concerns include naturally occurring toxic gases, hazardous materials used or generated during installation or production, and hazards posed by heavy truck traffic associated with drilling, completion, and production activities.

Hydrogen sulfide gas (H<sub>2</sub>S) is extremely toxic in concentrations above 500 parts per million (ppm), but it has not been found in measurable quantities in the Bakken and Three Forks Formations. Before reaching the Bakken, however, drilling will penetrate the Mission Canyon Formation, which is known to contain varying concentrations of H<sub>2</sub>S. Release of H<sub>2</sub>S at dangerous concentrations is very unlikely. Contingency plans submitted to BLM comply fully with relevant portions of *Onshore Oil and Gas Order 6* to minimize potential for gas leaks during drilling. Emergency response plans protect both the drilling crew and the general public within one mile of a well. Precautions implemented include automated sampling and alarm systems operating continuously at multiple locations on the well pad.

Satellite imagery was used to identify occupied homes within one and five-miles of the proposed well site (Table 3). There are no occupied homes located within one-mile and 76 occupied home within five-miles of the proposed well site. Of those, 61 are occupied residences that are located in the town of Mandaree.

**Table 3. Distance and Location of Residences**

Well Name	Nearest residence	Occupied Residences within 1 mile	Occupied Residences within 5 miles
Omaha Woman 13-12H	1.8 mi West	0	76

Impacts from construction will be largely temporary. Noise, fugitive dust, and traffic hazards will be present during the construction, drilling, and well completion (approximately 60 days) and then diminish quickly during commercial operation. Approximately 50 trips during several days will be needed to transport the drilling rig and associated equipment to each site. The same amount of traffic will be required to dismantle and transport the drilling rig following the completion of the drilling operations.

Natural gas will initially be flared during production and the produced oil and water will be trucked away from the well site. Tanker truck activity depends directly on production of the well and timing of connection to the SBP. Initially a successful Bakken well usually produces high rates of

both oil and water. Upwards of 500 barrels of oil and 100 barrels of water per day might be expected during the initial months of production with production typically decreasing by 50% or more after the initial months. An oil tanker usually hauls 140 barrels and a water tanker holds 110 barrels per load. Four oil tankers and one water tanker may visit each well site per day during the initial months of production. This number will decline as production declines. Established load restrictions for state and BIA roadways will be followed and appropriate haul permits will be acquired. All traffic must be confined to approved routes and conform to load and speed limits.

The EPA specifies chemical reporting under Title III of the *Superfund Amendments and Reauthorization Act* (SARA) of 1986, as amended. No materials used or generated by this project for production, use, storage, transport, or disposal are on either the SARA list or on EPA's list of extremely hazardous substances in 40 CFR 355. Project design and operational precautions mitigate against impacts from toxic gases, hazardous materials, and traffic. All operations, including flaring, will conform to instructions from BIA fire management staff. Impacts from the proposed projects are considered minimal, unlikely or insignificant. No laws regulations, or requirements have been waived; no compensatory mitigation measures are required.

### 3.3 Water Resources

#### 3.3.1 Surface Water

The proposed site is located on a glaciated upland in the Missouri River Regional Water Basin (Figure 9). Surface water runoff generally starts as sheet-flow until collected by ephemeral drainages leading to Lake Sakakawea. The ephemeral drainages, in turn, combine to form intermittent and/or perennial streams that flow into Lake Sakakawea. Lake Sakakawea is part of the Missouri River sub-regional watershed and is the receiving water for runoff from the land area surrounding the well site.

The Omaha Woman 13-12H is located within the Garrison Dam Sub-Basin, the Bear Den Creek Watershed and the Upper Bear Den Creek Sub-Watershed. WPX will construct and maintain a 24-inch containment berm on the well pad during drilling operations and after interim reclamation. Surface water runoff will be diverted around the pad by topsoil placement.

**Table 4. Distance from Omaha Woman 13-12H to receiving water**

Source - Point	Distance (feet)
Pad to USGS intermittent stream/ treed drainage	2,483
USGS intermittent stream to Lake Sakakawea <sup>1</sup>	61,956

<sup>1</sup>Lake level based on McKenzie County Aerial Photograph (NAIP 2010) and high water mark

Figure 9. General Hydrology



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National Wetland Inventory (NWI) maps prepared and maintained by the USFWS the proposed Omaha Woman 13-12H well site does not impact any existing NWI wetlands; however, there is a small (20' x 20') temporary (non-jurisdictional) wetland located within the proposed well pad construction area. The wetland is a barren depression that had served as a wallow for livestock, thus it had very little vegetation. It has been determined that the depression has been highly impacted by livestock and mitigation is not required.

### **3.3.2 Groundwater**

The principal uses of ground water in the area are for domestic and livestock supplies, public supplies, industrial supplies, and irrigation. Most farm units in the area have at least one well for their domestic and livestock uses, but no records are available to accurately determine the quantity of water used. Practically all of the water used for industrial purposes either is used in connection with the production of petroleum or is obtained from public supplies and no records are kept. The largest use of ground water is for pressure maintenance during well drilling.

Ground water in McKenzie County is obtained from aquifers in the glacial drift of Quaternary age, the Sentinel Butte and Tongue River Formations in the Fort Union Group of Tertiary age, and the Fox Hills Formation, Hell Creek Formation, and the Dakota Group of Cretaceous age. The Dakota Group, Fox Hills Formation, Hell Creek Formation, Fort Union Group, and the glacial drift contain the only aquifers that are presently of economic importance.

The upper part of the Fox Hills Formation and the lower part of the Hell Creek Formation contain about 100 feet of sandstone in an inter-bedded sandstone, siltstone, and shale zone. The sandstone beds in the zone apparently are hydrologically connected and herein are referred to as the Fox Hills-Hell Creek aquifer.

The top of the Fox Hills-Hell Creek aquifer generally ranges from 1,550 to 2,100 feet below land surface (altitude about 300 feet above msl) in the south-central and southwestern parts of Mountrail County. The top of the aquifer is approximately 1,450 to 2,100 feet below land surface (altitude about 550 feet above msl) in the southeastern part of the county.

The Fort Union Group generally underlies the glacial drift at depths of less than 100 feet throughout much of the Coteau Slope and the Drift Prairie, except in the larger ancient buried valleys. Depths to the Fort Union are commonly more than 100 feet in the Coteau du Missouri area, but many exceptions do exist. The group is subdivided into four formations in some Tongue River and Sentinel Butte Formations

The Tongue River and Sentinel Butte Formations either crop out or immediately underlie the glacial drift in the report area. These units are distinguishable only on the surface in Mountrail County. Individual sand beds in the Tongue River-Sentinel Butte Formations vary greatly in thickness. Most sand beds are less than 10 feet thick, but thicknesses exceeding 100 feet, does occur.

### **3.3.3 Water Wells and Water Use Permits**

There is one domestic water supply well within five miles of the proposed well site (Figure 9). In addition, there are three observation wells, six test wells, and four unknown-use wells located within five miles of the Omaha Woman 13-12H (Table 6). There is one surface-water sampling site located within five miles of the proposed well site.

**Table 5. Water Wells Within 5 miles**

LOCATION	Distance To Nearest Proposed Well (miles)	Permit Type	Aquifer	Well Depth (feet)	Date
<b>Omaha Woman 13-12H</b>					
NE SW 30 T149N R94W	1.6	Unknown	Fort Union		
NW SW 15 T149N R95W	2.8	Test Well	Unknown	109	9/10/1980
NE SE 15 T149N R95W	2.8	Test Well	Unknown	108	9/10/1980
NW NW 22 T149N R94W	3.2	Test Well	Unknown	111	9/9/1980
NE NE 28 T149N R94W	3.2	Observation Well	Tongue River	320	6/10/1992
NE NE 28 T149N R94W	3.2	Observation Well	Sentinel Butte-Tongue	120	6/10/1992
NW NW 22 T149N R94W	3.3	Test Well	Unknown	80	9/9/1980
SE SW 9 T149N R95W	3.5	Observation Well	Fox Hills	1740	7/17/1984
NW SW 27 T149N R94W	3.6	Domestic Well	Unknown	36	5/19/1973
SW SW 4 T149N R95W	4.3	Test Well	Unknown	128	9/10/1980
SE NW 14 T149N R94W	4.5	Unknown	Sentinel Butte-Tongue		
SW SE 5 T149N R95W	4.6	Test Well	Unknown	180	9/10/80
NE NW 14 T149N R94W	4.7	Unknown	Fox Hills	1745	7/21/70
NW NW 30 T150N R94W	4.8	Surface Water Sample Site	Surface		
NW SE 06 T148N R94W	4.9	Unknown	Sentinel Butte-Tongue		

Source: ND State Water Commission 2009

Water quality will be protected by drilling with fresh water to a point below the base of the Fox Hills Formation, implementing proper hazardous materials management, and using appropriate casing and cementing. Drilling will proceed in compliance with *Onshore Oil and Gas Order 2, Drilling Operations* (43 CFR 3160). If cement circulation is lost, a cement bound log will be required by BLM to ascertain if remedial cementing is required to provide an adequate seal between casing and strata. Surface casing will be cemented in place to a depth of approximately 2,500 feet, isolating aquifers in the Fox Hills Formation and extending a minimum of 50 feet into the underlying Pierre shale. Intermediate casing will extend from the surface and cemented as needed to isolate potentially productive water and hydrocarbon-bearing zones.

Seepage and infiltration of hazardous materials from the site is considered unlikely due to the use of closed-loop drilling system (pit-less). There will be no other pits or lagoons. Impacts to shallow aquifers from surface activities and spills will also be minimized or managed by implementation of a Spill Prevention, Control, and Countermeasure (SPCC) Plan. Produced water will be stored in tanks on site and periodically trucked to an approved disposal site until connection to the SBP.

Evidence of groundwater contamination related to the project will result in a stop work order until appropriate measures are identified and implemented. These and other construction and

reclamation techniques included in the APD will minimize the potential for impacts to both surface water and groundwater. No significant impacts to surface water or groundwater are expected because of the proposed action. No applicable laws or regulations will be waived; no compensatory mitigation measures are required to protect surface water or groundwater. The BIA and the BLM will monitor operations and review site records at their discretion.

### 3.4 Wildlife and Habitat

#### 3.4.1 Species of Concern

Assessments for Federally listed threatened and endangered species and candidate species were conducted by evaluating historic and present occurrences by determining if potential habitat exists within the project area. Scoping letters were sent to the US Fish and Wildlife Service (USFWS), North Dakota Game and Fish Department (NDGFD), the BLM and the North Dakota Parks and Recreation Department - Natural Heritage Inventory (NDPRD) concerning wildlife and habitat impact concerns (Appendix B). Consultation and comments received are presented in Appendix C. All concerns have been considered and mitigation measures have been incorporated throughout this EA.

Currently, eight species and one Designated Critical Habitat is listed as potentially occurring in McKenzie County (Table 6).

**Table 6. McKenzie County Threatened, Endangered, and Candidate species and Designated Critical Habitat**

Species	Status
Interior Least Tern	Endangered
Whooping Crane	Endangered
Black-footed Ferret	Endangered
Pallid Sturgeon	Endangered
Gray Wolf	Endangered
Piping Plover	Threatened
Sprague's Pipit	Candidate
Dakota Skipper	Candidate
Designated Critical Habitat - Piping Plover	

Source: USFWS (March, 2012)

#### 3.4.2 Species Assessments

Assessments for Federally listed threatened, endangered species were conducted by evaluating historic and present occurrences and by determining if potential habitat exists within the project area. A determination was made concerning direct and cumulative effects of the proposed activities on each species and habitat. Determinations made for federally listed species are:

- No effect
- May affect, but is not likely to adversely affect
- May affect, and is likely to adversely affect
- Is likely to jeopardize a proposed species or adversely modify critical habitat
- Is not likely to jeopardize a proposed species or adversely modify critical habitat

Determinations concerning direct and cumulative effects of the proposed activities on each species and their habitat are presented below. The USFWS has issued a letter of concurrence with the determinations of affects below and is included in Appendix C.

#### **3.4.2.1 Black-footed Ferret**

Black-footed ferrets were historically in the southwest portion of North Dakota but their occurrence is unlikely or questionable at this time. The black-footed ferret requires expansive black-tailed prairie dog colonies for food and den habitat. The Black-Footed Ferret Survey Guidelines (USFWS 1989) states that 80 acres is the minimum size prairie dog habitat needed to support black-footed ferret. Black-footed ferret reintroduction into the wild began in 1991 (Black-footed Ferret Recovery Implementation Team 2009). There have been 19 reintroduction sites, but none in North Dakota at this time. No potential habitat occurs in the area and the proposed project will have **no effect** on this species at this time.

#### **3.4.2.2 Gray Wolf**

Gray wolves, an Endangered Species in North Dakota, were historically found throughout much of North America including the Upper Great Plains. Human activities have restricted their present range to the northern forests of Minnesota, Wisconsin, and Michigan and the Northern Rocky Mountains of Idaho, Montana, and Wyoming. They now only occur as occasional visitors in North Dakota. The most suitable habitat for the gray wolf is found around the Turtle Mountains region where documented and unconfirmed reports of gray wolves in North Dakota have occurred (Grondahl and Martin, no date). Due to the transient nature and there are no recent recorded sightings in the area it is reasonable to expect that the proposed project **may affect, is not likely to adversely affect** this species.

#### **3.4.2.3 Interior Least Tern**

The interior least tern nests on midstream sandbars along the Yellowstone and Missouri River systems. Interior least terns construct bowl-shaped depression nests on sparsely vegetated sandbars and sandy beaches. Their nesting period occurs between mid-May through mid-August. During the nesting season, the least tern has been documented to travel 7.5-miles or more from the lake to forage in wetlands. The Omaha Woman 13-12H well site is located approximately 15 miles from and not within line-of-sight of the Missouri River system shoreline. The pad site will not impact any wetlands and BMP's will be employed to protect adjacent drainages and the lake. No individual terns were observed in the area during the on-site evaluation. Following these guidelines, it is reasonable to expect that the proposed activities **may affect, is not likely to adversely affect** this species.

#### **3.4.2.4 Pallid Sturgeon**

Pallid sturgeon are found in the Mississippi, Missouri, and Yellowstone River systems and are adapted for living close to the bottom of large, shallow rivers with sand and gravel bars. Pallid sturgeon populations in North Dakota have decreased since the 1960's (Grondahl and Martin no date). The proposed Omaha Woman 13-12H well site is approximately 15 miles from the Missouri River system (Lake Sakakawea). A closed-loop drilling system will be used to drill and BMP's will be employed, including a containment berm surrounding the proposed well pad site. Following these guidelines, it is reasonable to expect that the proposed project **may affect, is not likely to adversely affect** this species

#### **3.4.2.5 Whooping Crane**

The primary nesting area for the whooping crane is in Canada's Wood Buffalo National Park. Aransas National Wildlife Refuge in Texas is the primary wintering area for whooping cranes. In the spring and fall, the cranes migrate primarily along the Central Flyway. During the migration, cranes make numerous stops, roosting in large shallow marshes, and feeding and loafing in

harvested grain fields. The primary threats to whooping cranes are power lines, illegal hunting, and habitat loss (Texas Parks and Wildlife 2008).

The proposed well site is located within the Central Flyway. Approximately 75% of the whooping crane sightings in North Dakota occur within a 90-mile corridor that includes the proposed well location. Because collisions with power lines are the primary cause for fledgling mortality, it is BIA directive that any utility lines be constructed underground. Land use in the area is native grasslands and agricultural fields. The pad and access road is placed in locations that may have some potential of impacting whooping crane feeding habitat. No individual whooping cranes were observed in the area during the on-site visits.

Construction activities may cause migratory cranes to divert from the area but are not likely to result in fatalities. If a crane is sighted within one-mile of the project area, construction activities in the immediate area will cease and will be immediately reported to the USFWS, the NDGFD, and the BIA. In coordination with the USFWS and the BIA construction will resume once the bird(s) have left the area. Following these guidelines, it is reasonable to expect that the proposed activities **may affect, is not likely to adversely affect** whooping cranes.

#### **3.4.2.6 Piping Plover and Critical Habitat**

Piping plovers are found along the Missouri and Yellowstone River systems on gravel shorelines and sandbars and also on large alkaline wetlands. Nesting sites have been documented on the shorelines of Lake Sakakawea. In addition, critical habitat has been designated along Lake Sakakawea. NDPRD records indicate historic piping plover critical habitat within two miles of the project site but still greater than one-mile.

No individuals were observed in the area during the on-site evaluation. The proposed Omaha Woman 13-12H well site is located in rolling native prairie dissected by wooded draws and is approximately 15 miles from, and not within line-of-sight, of the Missouri River system shoreline. Applying the aforementioned BMP's, it is reasonable to expect that the proposed projects **may affect, is not likely to adversely affect** this species.

#### **3.4.2.7 Sprague's Pipit**

The Sprague's pipit is a ground nesting bird that breeds and winters on open grasslands. It feeds mostly on insects, spiders, and some seeds. The Sprague's pipit is closely tied with native prairie habitat and breeds in the north-central United States in Minnesota, Montana, North Dakota and South Dakota as well as south-central Canada. During the breeding season, Sprague's pipits prefer large patches of native grassland with a minimum size requirement thought to be approximately 145 ha (358.3 ac). The species prefers to breed in well-drained, open grasslands and avoids grasslands with excessive shrubs. Preferred grass height is estimated to be between 10 and 30 cm. They may avoid roads, trails, and habitat edges.

The proposed Omaha Woman 13-12H pad site will be developed within a native prairie pasture dissected by drainages. The pasture was grazed at the time of the on-site evaluation and vegetation height was moderate to high (>30cm). The shrub species buffalo berry and tree species green ash and bur oak occupy the immediate landscape. Based upon these landscape conditions the proposed activities **may affect, is not likely to adversely affect** this species.

### 3.4.2.8 Dakota Skipper

Dakota skippers are found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; and 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needle grass, pale purple coneflower and upright coneflowers and blanket flower. Dakota skipper populations have declined historically due to widespread conversion of native prairie.

The proposed Omaha Woman 13-12H pad site and ROW are located within a mixed grass prairie pasture. This pasture does contain needle grasses, bluestem grasses and coneflower species as well. The overall surface disturbance by these projects will be small in context to the amount of native prairie habitat available in the immediate area. Based upon these landscape conditions the proposed activities **may affect, is not likely to adversely affect** this species.

### 3.4.3 Wildlife (General)

Proposed oil and gas development in the area may affect raptor and migratory bird species through direct mortality, habitat degradation, and/or displacement of individual birds. These impacts are regulated in part through the *Migratory Bird Treaty Act* (916 USC 703-711) and the Bald and Golden Eagle Protection Act (BGEPA).

A ground survey for cliff, tree, and ground raptor nests has been conducted within ½-mile of the proposed projects during the on-site reviews. The project area was also surveyed for migratory bird species. Three nests were observed in a draw adjacent to the proposed access road during the on-site review on; however, no raptors were observed during the initial site visit or during the ROW on-site. The timing of the surveys was not within the typical nesting window; therefore, may not be an accurate account of nesting species in the project area. Surveys for migratory birds nests (including raptor) will again be conducted within five-days of construction if portions of the projects are to be constructed during the spring nesting season (February 1 - July 15). If a migratory bird nest is located, the location will be recorded, monitored and documentation will be maintained. The USFWS and BIA will be consulted to determine mitigation measures to avoid disturbance of the nest. Measures may include applying an appropriate avoidance buffer to the nest or delaying construction in that area until the nest is fledged.

Mowing and/or grubbing of suitable nesting habitat in the project area may be done in the fall prior to construction. This discourages migratory birds from establishing territories and nests in the spring following the disturbance.

Table 7 identifies other wildlife that was observed and/or may generally be expected around the proposed site(s). These were confirmed by direct observation or by various signs of wildlife activity. Direct wildlife observations are affected by time of day, time of year, etc.

**Table 7. Wildlife (General)**

Location	Observed	Suitable Habitat
Omaha Woman 13-12H	Porcupine, Pheasant tracks, Pocket gopher mounds, and deer beds	Mule deer and white-tailed deer, pronghorn antelope, small mammals, sharp-tailed grouse, and a variety of grassland and song birds

Potential impacts to wildlife include disturbance of habitat by construction of the well pad, construction of a new road, and potential future commercial operations. Minimal to no impacts on listed species are expected due to the low likelihood of their occurrence within the project area.

Ground clearing may affect habitat for unlisted species, including small birds, ground dwelling mammals, and other wildlife species. Proposed projects may affect raptor and migratory bird species through direct mortality, habitat degradation, and/or displacement of individual birds. Fragmentation of native prairie habitat is a specific concern for grouse species. High value wildlife habitat will not be compromised by pad construction but there will be an overall loss of grassland cover.

Precautions benefitting all wildlife include:

- Locations overlying or near existing disturbances;
- No open pits or ponds;
- Installation of covers on drip buckets under valves or spigots; and
- Prompt initial reclamation.

Final reclamation will proceed within six months (or the following spring if during winter months) if the well is unproductive, or promptly after a commercial well is decommissioned.

### 3.5 Soils

The Natural Resource Conservation Services (NRCS) soils data was reviewed prior to the on-site assessment and verified during the field visit. Generally, the pad site is located on fine-grained soils with low to moderate erosion potential. The site is suitable for construction. The site will be monitored for erosion and BMP's will be placed to control erosion as necessary.

The Omaha Woman 13-12H site (fenced surface use area) and ROW is located on a 0-25% slope comprised of the Zahl-Williams loams and Dogtooth-Janesburg silt loams, according to the NRCS Soils Mapping Units (MUs) of McKenzie County (Table 8). The surface is mixed prairie grassland dissected by wooded draws with topsoil approximately six-inches deep across the site.

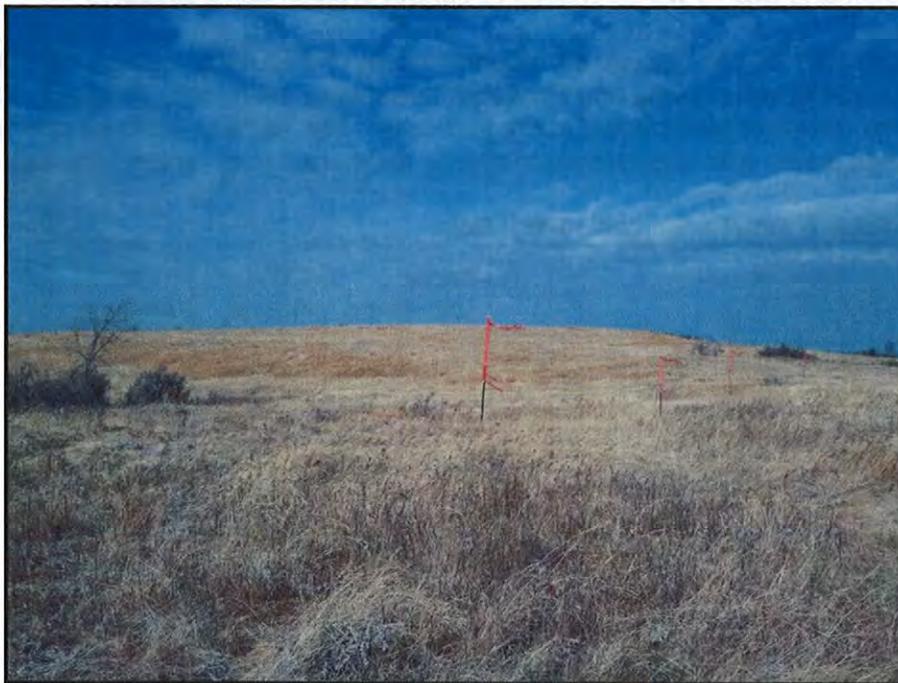
**Table 8. Omaha Woman 13-12H Soils**

Soil Name	Surface Use Acres	ROW Acres	Total Acres
Zahl-Williams loams, 15 to 25 percent slopes	9.1	6.9	16
Dogtooth-Janesburg silt loams, 0 to 6 percent slopes	2.0	3.0	5.0
Cabba-Badland, outcrop complex, 9 to 70 percent slopes	0.1	2.1	2.2
Dogtooth-Janesburg-Cabba complex, 6 to 30 percent slopes	0	2.1	2.1
Arikara-Shambo-Cabba loams, 9 to 70 percent slopes	0	0.6	0.6
Zahl-Cabba-Arikara complex, 9 to 70 percent slopes	0	0.2	0.2
Cabba-Sen-Chama silt loams, 15 to 70 percent slopes	0	0.1	0.1

### 3.6 Vegetation and Noxious Weeds

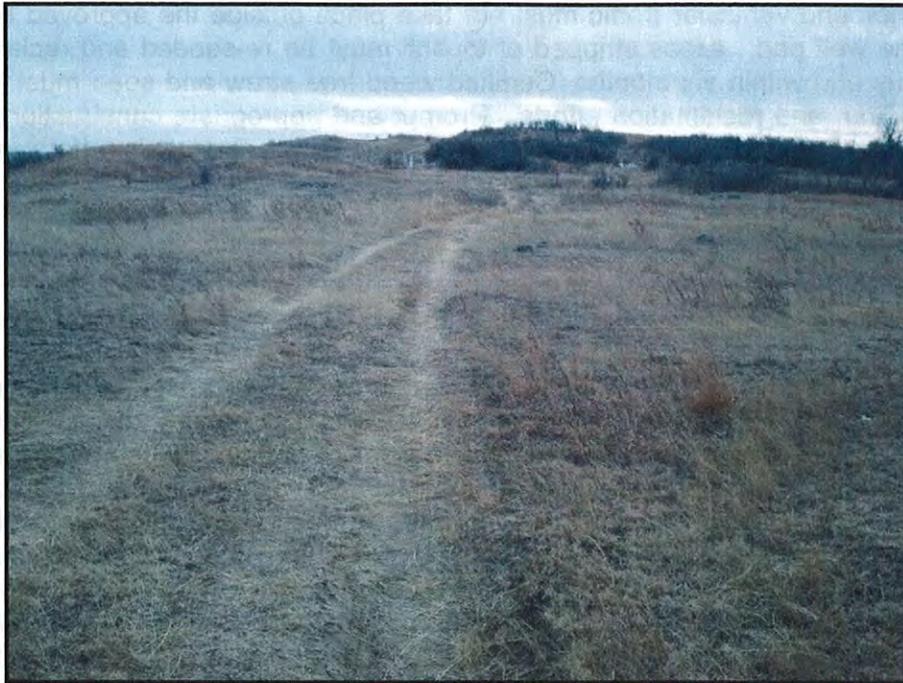
The Missouri Plateau Ecoregion (Missouri Slope) is a western mixed-grass and short-grass prairie (Bryce et al. 1998). The U.S. Department of Agriculture soil surveys for McKenzie County describe vegetation within proposed project areas as mostly cultivated farmlands, native grasses, and wetland plants. Common grain and seed crops include wheat, oats, flax, canola, and barley. Native grasses include big bluestem, little bluestem, blue grama, side-oats grama, green needlegrass, and western wheatgrass. Typical wetland plants are smartweed, sedge species, bulrush, bluejoint and cattail. Woody draws, coulees, and drainages may host communities of chokecherry, buffalo berry, western snowberry and gooseberry.

The proposed Omaha Woman 13-12H pad site is located on rolling hills within a native prairie community dissected by native wooded draw communities. Little bluestem (*Schizachyrium scoparium*), western wheatgrass (*Agropyron smithii*), blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipedula*), and green needlegrass (*Stipa viridula*) are the dominant grasses. Common forbs included fringed sagewort (*Artemisia frigid*), purple coneflower (*Echinacea angustifolia*), silver leaf scurfpea (*Psoralea argophylla*), white sagewort (*Artemisia ludoviciana*), and stiff sunflower (*Helianthus rigidus*). Claypans dominated by western wheatgrass and blue grama are common across the site. Patches of buffalo berry (*Shepherdia argentea*) are scattered along the south and east sides of the pad site. A wooded draw characterized by bur oak (*Quercus macrocarpa*), green ash (*Fraxinus pennsylvanica*), and buffalo berry dissects the west side of the pad site.



**Figure 10. Omaha Woman 13-12H General Appearance**

The proposed well site is located in a rolling native prairie pasture dissected by wooded draws. Photograph taken facing north across the site.



**Figure 11. Access Road, Pipeline and Utility ROW**  
 Photograph taken facing south from southeast side of the proposed Omaha Woman 13-12H well site.

### 3.4.4 Noxious Weeds

The North Dakota Agriculture Commission (ND Department of Agriculture, 2010) identifies eleven noxious weed plant species in the state (Table 9). Ten of the eleven noxious weed species have been reported in McKenzie County. Absinth wormwood, Canada thistle, Leafy spurge, Musk thistle, Purple loosestrife, Saltcedar, Diffuse knapweed, Spotted knapweed, and Russian knapweed are known to occur. No noxious weeds were observed at the on-site assessments.

**Table 9. Noxious weeds known to occur in McKenzie County**

Common Name	Scientific Name	2010 Reported Acres of Noxious Weeds McKenzie County
Absinth wormwood	<i>Artemisia absinthium</i>	8,813
Canada thistle	<i>Cirsium arvense</i>	30,178
Dalmatian toadflax	<i>Linaria genistifolia</i>	NR
Diffuse knapweed	<i>Centaurea diffusa</i>	2
Leafy spurge	<i>Euphorbia esula</i>	1,306
Musk thistle	<i>Carduus nutans</i>	19,751
Purple loosestrife	<i>Lythrum salicaria</i>	2
Russian knapweed	<i>Acroptilon repens</i>	17
Saltcedar	<i>Tamarix spp.</i>	123
Spotted knapweed	<i>Centaurea maculosa</i>	4
Yellow toadflax	<i>Linaria vulgaris</i>	NR

Source: North Dakota Department of Agriculture 2010

Potential disturbance of up to 27.2 acres presents opportunities for invasive species and threatens to reduce the quality or quantity of forage or crop production. The APD and this EA require the operator to control noxious weeds throughout project areas. Vehicles that have been driven in areas with invasive species must be cleaned with high-pressure sprayers before entering the project area.

Surface disturbance and vehicular traffic must not take place outside the approved ROW or the fenced area of the well pad. Areas stripped of topsoil must be re-seeded and reclaimed at the earliest opportunity and within six months. Certified weed-free straw and seed must be used for construction, seeding, and reclamation efforts. Prompt and appropriate construction, operation, and reclamation are expected to reduce vegetative impacts to minimal levels, effectively negating the potential to establish or spread invasive species.

### 3.7 Cultural Resources

Many laws, regulations and agreements protect historic properties, or cultural resources, on federal or tribal lands. The *National Historic Preservation Act of 1966* (16 USC 470 *et seq.*) in Section 106 requires, for any federal, federally assisted or federally licensed undertaking, that the federal agency take into account the effect of that undertaking on any district, site, building, structure or object that is included in the National Register of Historic Places (National Register) before the expenditure of any federal funds or the issuance of any federal license. Cultural resources is a broad term encompassing sites, objects, or practices of archaeological, historical, cultural and religious significance. Eligibility criteria (36 CFR 60.6) include association with important events or people in our history, distinctive construction or artistic characteristics, and either a record of yielding or a potential to yield information important in prehistory or history. In practice, properties are generally not eligible for listing on the National Register if they lack diagnostic artifacts, subsurface remains or structural features, but those considered eligible are treated as though they were listed on the National Register, even when no formal nomination has been filed. This process of taking into account an undertaking's effect on historic properties is known as "Section 106 review," or more commonly as a cultural resource inventory.

The area of potential effect (APE) of any federal undertaking must also be evaluated for significance to Native Americans from a cultural and religious standpoint. Sites and practices may be eligible for protection under the *American Indian Religious Freedom Act of 1978* (42 USC 1996). Sacred sites may be identified by a tribe or an authoritative individual (Executive Order 13007). Special protections are afforded to human remains, funerary objects, and objects of cultural patrimony under the *Native American Graves Protection and Repatriation Act* (NAGPRA, 25 USC 3001 *et seq.*).

Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution, whose office and functions are certified by the National Park Service. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). Thus, BIA consults and corresponds with the THPO regarding cultural resources on all projects proposed within the exterior boundaries of the Fort Berthold Reservation.

A cultural resource inventory of this well pad and access road was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 80.18 acres were inventoried between February 9 and 13, 2012 (Reinhart 2012). One archaeological site was located that may 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, as the archaeological site will be avoided. This determination was communicated to the THPO on March 1, 2012; however, the THPO did not respond within the allotted 30 day comment period.

If cultural resources are discovered during construction or operation, the operator shall immediately stop work, secure the affected site and notify BIA and THPO. Unexpected or inadvertent discoveries of cultural resources or human remains trigger mandatory federal procedures that include work stoppage and BIA consultation with all appropriate parties. Following any such discovery, operations will not resume without written authorization from the BIA. **Project personnel are prohibited from collecting any artifacts or disturbing cultural resources in the area under any circumstances. Individuals outside the right-of-way are trespassing.** No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required.

### 3.8 Socio-economics

Socioeconomic conditions include population, demographics, income, employment, and housing. These conditions can be analyzed and compared at various scales. This analysis focuses on the reservation, the four counties that overlap the majority of the Reservation and the state of North Dakota. The state population showed little change between the last two censuses (1990-2000), but there were notable changes locally, as shown in Table 10. Populations in Dunn, McKenzie, McLean, and Mountrail counties declined 5 to 11%, while population on the Fort Berthold Reservation increased by almost 10%. These trends are expected to continue (Rathge et al. 2002). While American Indians are the predominant group on the reservation, they are a minority everywhere else in the state. More than two-thirds (3,986) of the Reservation population are tribal members.

In addition to the ranching and farming that are employment mainstays in western North Dakota, employment on the Reservation largely consists of ranching, farming, tribal government, tribal enterprises, schools, and federal agencies. The MHA Nation's Four Bears Casino and Lodge, near New Town, employs over 320 people, 90% of which are tribal members (Three Affiliated Tribes 2008).

**Table 10. Population and Demographics.**

County or Reservation	Population in 2000	% of State Population	% Change 1990-2000	Predominant Group	Predominant Minority
Dunn County	3,600	0.56	- 10.1	White	American Indian (12%)
McKenzie County	5,737	0.89	- 10.1	White	American Indian (21%)
McLean County	9,311	1.45	- 11.0	White	American Indian (6%)
Mountrail County	6,631	1.03	- 5.6	White	American Indian (30%)
Fort Berthold Reservation	5,915	0.92	+ 9.8	American Indian	White (27%)
Statewide	642,200	100	+0.005	White	American Indian (5%)

Source: U.S. Census Bureau 2007.

As shown in Table 11, counties overlapping the Reservation tend to have per capita incomes, median household incomes, and employment rates that are lower than North Dakota statewide averages. Reservation residents have lower average incomes and higher unemployment rates compared to the encompassing counties. MHA Nation members are in turn disadvantaged relative to overall Reservation incomes and unemployment rates that average in non-member data. The most recent census found that per capita income for residents of the Reservation is \$10,291 (less than 1/3 the state average). Overcrowded housing skews the median reservation household income upward to \$26,274 (about 1/3 the state average). A BIA report in 2003 found

that 33% of employed MHA Nation members were living below federal poverty levels. The unemployment rate of tribal members is 22% compared to 11.1% for the reservation as a whole and 4.6% statewide.

Availability and affordability of housing can affect oil and gas development and operations. Housing information from the year 2000 is summarized in Table 12. The tribal Housing Authority manages a majority of the housing units within the reservation. Housing typically consists of homes built through various government programs, low-rent housing units, and scattered-site homes. Private purchase and rental housing are available in New Town. New housing construction has recently increased within much of the analysis area, but availability remains low.

**Table 11. Income and Unemployment.**

Unit of Analysis	Per Capita Income	Median Household Income	Unemployment Rate (2007)	Employed but Below Poverty Level	Percent of All People in Poverty
MHA Nation	--	--	22%	33%	Unknown
Fort Berthold Reservation	\$10,291	\$26,274	11.1%	--	Unknown
Mountrail County	\$29,071	\$34,541	5.8%	--	15.4%
Dunn County	\$27,528	\$35,107	3.4%	--	13%
McKenzie County	\$27,477,	\$35,348	3.1%	--	15.8%
McLean County	\$32,387	\$37,652	4.7%	--	12.8%
North Dakota	\$31,871	\$40,818	3.2%		11.2%

Source: U.S. Department of Agriculture Economic Research Data 2008 and BIA 2003.

The proposed projects are not expected to have measurable impacts on population trends, local unemployment rates or housing starts. Relatively high-paying construction jobs will result from exploration and development of oil and gas reserves on the reservation, but most of these opportunities are expected to be short-term. The proposed actions will require temporary employees during the well construction cycle and one to two full-time employees from the long-term production cycle. Short-term construction employment will provide some economic benefit. Long-term commercial operations will provide significant royalty income and indirect economic benefits.

Table 12. Housing

Housing Development	Fort Berthold Reservation	Dunn County	McKenzie County	McLean County	Mountrail County
<b>Existing Housing</b>					
Owner-Occupied Units	1,122	1,570	2,009	4,332	2,495
Renter Occupied Units	786	395	710	932	941
Total	1,908	1,965	2,719	5,264	3,436
New Private Housing Building Permits 2000-2005	--	18	4	135	113
<b>Housing Development Statistics</b>					
State rank in housing starts	--	51 of 53	15 of 53	21 of 53	17 of 53
National rank in housing starts	--	3112 / 3141	2498 / 3141	2691 / 3141	2559 / 3141

Source: U.S. Census Bureau 2007 and 2008

### 3.9 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, was signed by President Clinton in 1994. The Order requires agencies to advance environmental justice (EJ) by pursuing fair treatment and meaningful involvement of minority and low-income populations. Fair treatment means such groups should not bear a disproportionately high share of negative environment consequences from federal programs, policies, decisions, or operations. Meaningful involvement means federal officials actively promote opportunities for public participation and federal decisions can be materially affected by participating groups and individuals.

The U.S. Environmental Protection Agency (EPA) headed the interagency workgroup established by the 1994 Order and is responsible for related legal action. Working criteria for designation of targeted populations are provided in *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (EPA 1998). This guidance uses a statistical approach to consider various geographic areas and scales of analysis to define a particular population's status under the Order.

Environmental Justice is an evolving concept with potential for disagreement over the scope of analysis and the implications for federal responsiveness. It is nevertheless clear that tribal members on the Great Plains qualify for EJ consideration as both a minority and low-income population. The population of the Dakotas is predominantly Caucasian. While some 70% of Reservation residents are tribal members, Indians comprise only 5% of North Dakota residents.

There are, however, some unusual EJ considerations when proposed federal actions are meant to benefit tribal members. Determination of fair treatment necessarily considers the distribution of both benefits and negative impacts, due to variation in the interests of various tribal groups and individuals. There is also potential for major differences in impacts to resident tribal members and those enrolled or living elsewhere. A general benefit to the MHA Nation government and infrastructure has already resulted from tribal leasing, fees, and taxes. Oil and gas leasing has also already brought much-needed income to MHA Nation members who hold mineral interests, some of whom might eventually benefit further from royalties on commercial production. Profitable production rates at proposed locations might lead to exploration and development on

additional tracts owned by currently non-benefitting allottees. The absence of lease and royalty income does not, moreover, preclude other benefits. Exploration and development will provide many relatively high-paying jobs, with oversight from the Tribal Employment Rights Office.

The owners of allotted surface within the project areas may not hold mineral rights. In such case, surface owners do not receive oil and gas lease or royalty income and their only income will be compensatory for productive acreage lost due to road and well pad construction. Tribal members without either surface or mineral rights will not receive any direct benefits. Indirect benefits of employment and general tribal gains will be the only potential offsets to negative impacts.

Potential impacts to tribes and tribal members include disturbance of cultural resources. There is potential for disproportionate impacts, especially if the impacted tribes and members do not reside within the Reservation and therefore do not share in direct or indirect benefits. This potential is significantly reduced following the surveys of proposed well locations and access road routes and determination by the BIA that there will be no effect to historic properties. Research and survey has found nothing to be impacted at either well pad that qualifies as a traditional cultural property (TCP) under the *American Indian Religious Freedom Act*. Potential for disproportionate impacts is further mitigated by requirements for immediate work stoppage following an unexpected discovery of cultural resources of any type. Mandatory consultations will take place during any such work stoppage, affording an opportunity for all affected parties to assert their interests and contribute to an appropriate resolution, regardless of their home location or tribal affiliation.

The proposed project has not been found to pose significant impacts to any other critical element – air, public health and safety, water, wetlands, wildlife, vegetation, or soils – within the human environment. The proposed action offers many positive consequences for tribal members, while recognizing Environmental Justice concerns. Procedures summarized in this document and in the APD are binding and sufficient. No laws, regulations, or other requirements have been waived; no compensatory mitigations measures are required.

### **3.10 Irreversible and Irrecoverable Commitment of Resources**

Removal and consumption of oil and/or gas from the Bakken and/or Three Forks Formation will be an irreversible and irretrievable commitment of resources. Other potential resource commitments include acreage devoted to disposal of cuttings, soil lost through wind and water erosion, cultural resources inadvertently destroyed, wildlife killed during earthmoving or in collisions with vehicles, and energy expended during construction and operation.

### **3.11 Short-Term Use versus Long-Term Productivity**

Short-term activities will not detract significantly from long-term productivity of the project areas. The small areas dedicated to the access roads and well pad will be unavailable for livestock grazing, wildlife habitat, and other uses. Allottees with surface rights will be compensated for loss of productive acreage. Project footprints will shrink considerably once the wells are drilled, the pipelines and utilities installed and the area is reclaimed and reseeded. Successful and ongoing reclamation of the landscape will quickly support wildlife and livestock grazing, stabilize the soil, and reduce the potential for erosion and sedimentation. The major long-term resource loss corresponds with the project purpose: extraction of hydrocarbons from the Bakken and Three forks Formations.

### 3.12 Cumulative Impacts

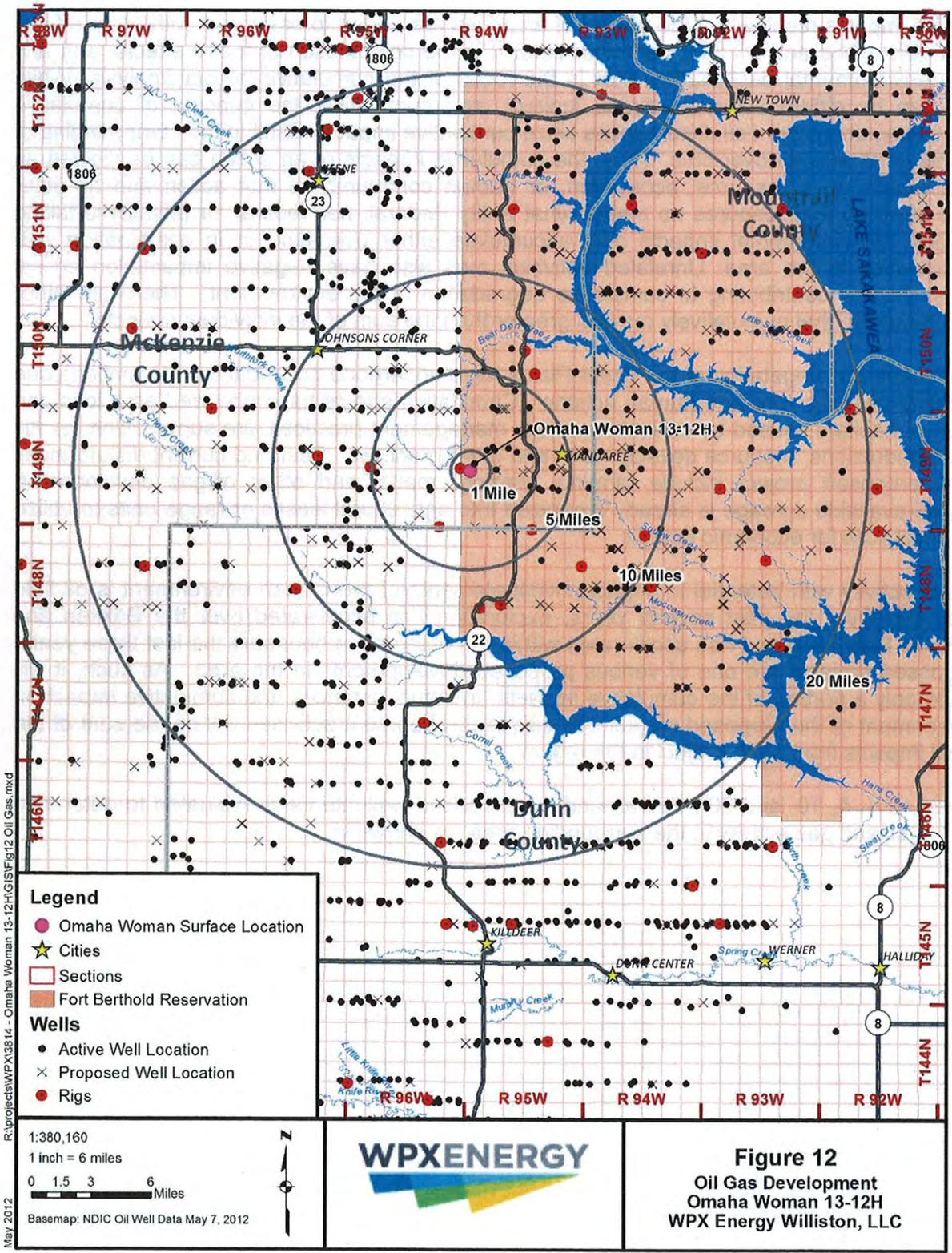
Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that is the focus of the cumulative impact analysis. While impacts can be differentiated as direct, indirect, and cumulative, the concept of cumulative impacts takes into account all disturbances since cumulative impacts result in the compounding of the effects of all actions over time. Thus, the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal, or private) is taking the actions. Environmental impacts may accumulate either over time or in combination with similar activities in the area. Unrelated activities may also have negative impacts on critical elements, thereby contributing to cumulative degradation of the environment. There are other impacts, however, that cumulatively may be greater than the sum of the individual projects.

The landscape and vegetation of the Great Plains have undergone continual transformations due to the influences of nature and human actions. Cumulative effects have occurred as a loss and alteration of habitats caused by cultivation, range management practices, fire suppression, exotic species introductions, resource development, and other practices. Past and current disturbances near the proposed project include farming, grazing, roads, and other oil/gas development. Virtually all-available acreage is already organized into agricultural leases or range units to utilize surface resources for economic benefit.

The major activity with potential to impact critical elements of the human environment is oil field development. Over the past several years, exploration has accelerated over the Bakken and Three Forks Formation and has accelerated within the reservation boundary the last three years. The proposed projects are one of various proposed developments in the area. As such, it will contribute only a portion of the cumulative impacts. In some instances, the cumulative impact on the environment of the proposed project and oil/gas development activities will be the sum of the individual impacts from each project in the region.

Perimeters of 1, 5, 10, and 20 miles around the proposed well site were evaluated to determine the level of oil and gas activity in the surrounding area, as shown in

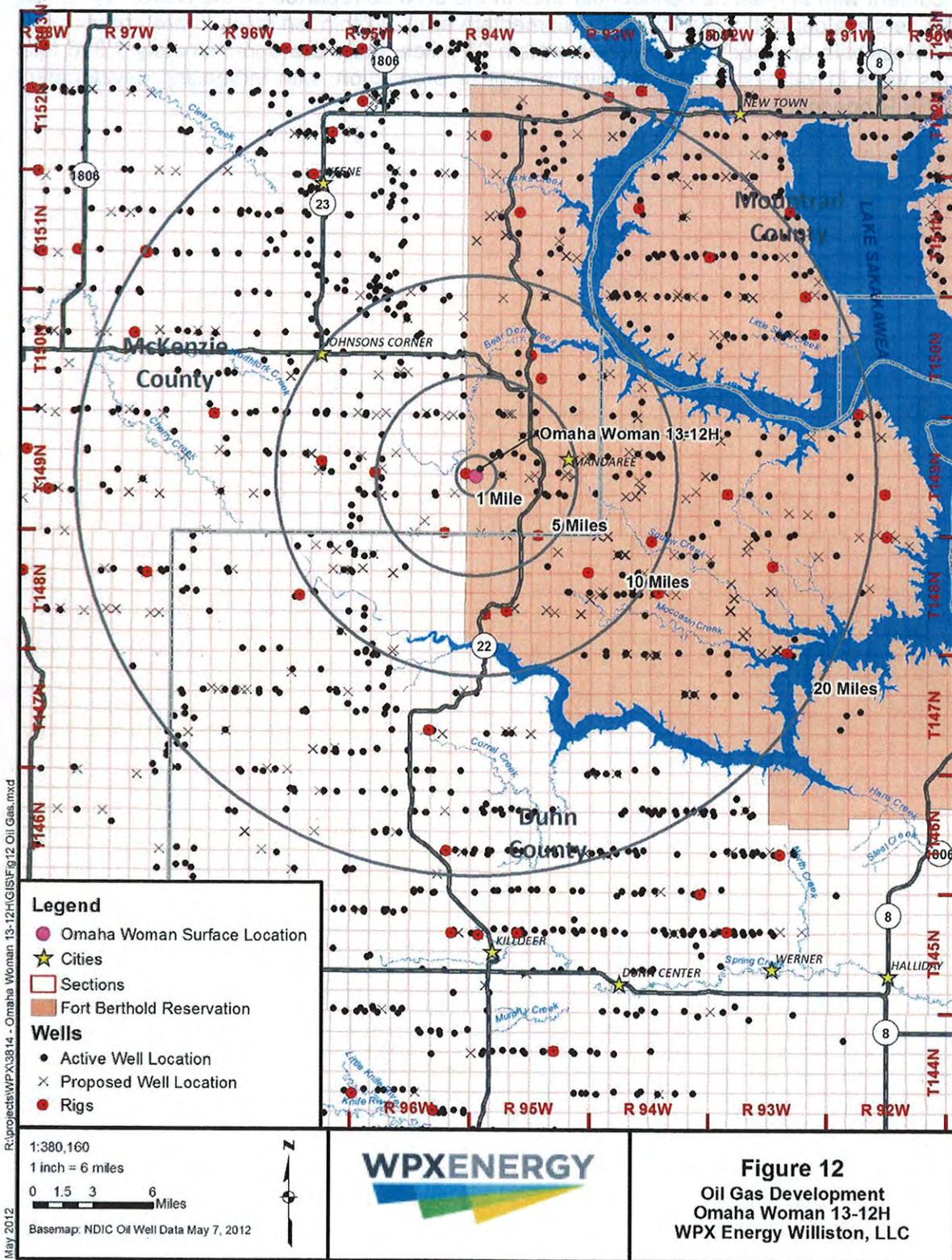
Figure 12. Oil and Gas Development



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May 2012

**Table 13** and in Figure 12. There are now 36 active wells within five miles of the site considered in this document with at least 32 confidential sites in the area as reported by the NDIC. WPX and other producers are currently developing the immediate area. Within ten miles, there are currently 133 active wells with another 100 proposed. Within 20 miles, there are approximately 1,896 total oil and gas wells in various stages of development or production, with increasing development within the FBIR boundaries.

Figure 12. Oil and Gas Development



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**Table 13. Oil and Gas Well Status in Area**

Distance from Well Site	Active Wells	Proposed Wells (Confidential)	Permitted to Drill	Currently Drilling	Totals
<b>Omaha Woman 13-12H</b>					
0-1 miles	0	1	0	0	1
1-5 miles	36	32	2	2	73
5-10 miles	133	100	2	14	248
10-20 miles	570	261	6	27	864
<b>Cumulative Total (20-mile radius)</b>	<b>736</b>	<b>394</b>	<b>10</b>	<b>43</b>	<b>1,186</b>
<b>Fort Berthold Reservation</b>	<b>471</b>	<b>291</b>	<b>17</b>	<b>34</b>	<b>813</b>

Source: NDIC O/G Well Status – May 7, 2012

Commercial success at any new well may result in additional oil/gas exploration proposals, but such developments are speculative at this time. WPX has numerous wells in various stages of development, in the planning process or in the application process. Such developments will rely wherever possible on shared roads, expanding pads to accommodate multiple wells, centralized and downsized facilities, and other opportunities to reduce surface disturbance and impacts to the human environment. SBP is developing a gas, oil, and produced water gathering system to connect wells planned for development in the area. The connection to the SBP will reduce the amount of oil field truck traffic over the life of the oil field.

Approved oil/gas leases may lead to additional exploration and development, but additional analysis and BIA approval are required before the surface is disturbed at any other location. Potential impacts from possible future development cannot be meaningfully analyzed at this time. Not only is the level of development highly sensitive to volatile commodities prices, but additional development may increase interest in pipelines, thereby *reducing* impacts to certain critical elements of the human environment, such as public safety and air quality.

There will be ground-disturbing activities to lands that have not been previously cultivated or otherwise physically manipulated. The proposed well site will disturb a portion of native prairie rangelands. Current land uses are expected to continue with little change other than the acreage required for road and pad construction. Increased truck traffic on adjacent roadways can be expected and has a documented negative, but manageable, impact on road conditions.

The proposed actions have been planned to avoid impacts to wetlands, floodplains, surface water, cultural resources, and threatened and endangered species. Unavoidable affects to these or other resources will be minimized and/or mitigated as described in this document. The Operator of any facility will be required to reclaim disturbed areas following construction and completion. Implementation of other precautionary and protective measures detailed in this EA and applicable regulations are expected to minimize impacts to critical elements of the human environment. Foreseeable impacts from the proposed projects are expected generally to be temporary, manageable, and/or insignificant. Cumulative impacts over the entire Bakken basin have not been assessed. No cumulative impacts are reasonably foreseen from the proposed activities, relative to the existing scale of development.

### **3.13 Mitigation and Commitments by WPX**

Many protective measures and procedures are described in this document and in the APD. No laws, regulations, or other requirements have been waived; no compensatory mitigation measures are required.

Resource surveys were conducted at the time of on-site inspections to determine potential affects to cultural and natural (i.e., biological and physical) resources. The locations were inspected in consideration of topography, location of topsoil/subsoil stockpiles, natural drainage and erosion control, flora, fauna, habitat, historical and cultural resources, and other surface issues. The final locations were determined in consideration of these issues.

Avoidance measures and other protective measures were incorporated into the final project design to minimize impacts to evaluated resources, as appropriate. Those measures are presented here and will be incorporated in the Permit to Construct.

#### **3.4.5 Site Specific Spill Prevention and BMP's**

WPX has committed to use the following mitigation measures:

- Utilization of a closed-loop drilling system.
- Construction of a containment berm (24 inches) on top of the pad to contain surface water from transferring off of the pad during drilling operations and after interim reclamation.
- Soil grading on the south side of the pad to divert water around the pad site.
- Use of Best Management Practices (BMP's) including containment berm(s), diversion ditches, matting on fill slopes, soil compaction, and reseeding of native species after final reclamation.
- Interim reclamation within six months of initial construction disturbance.

#### **3.4.6 Wildlife Protections**

WPX has made commitments to the following wildlife protection and mitigation measures:

- If portions of the projects will be constructed during the spring nesting season (February 1 - July 15) surveys for migratory bird nests will be conducted within five-days before construction. The location of any nests will be recorded and the USFWS will be consulted to determine mitigation measures to avoid disturbance of the nest. Measures may include applying an appropriate avoidance buffer to the nest or delaying construction in that area until the nest is fledged.
- Construction will be stopped if whooping cranes are sighted within one mile of the construction activity and not resume until the birds have left the area. Any sightings will be immediately reported to the USFWS, NDGFD, and the BIA.

#### **3.4.7 Utilities**

Oil, natural gas, and produced water pipelines along with underground electric and fiber optic utilities will be constructed within the evaluated corridor. Efforts will be made to install utilities at one time, coinciding with interim reclamation of the pad site.

#### **3.4.8 Dust Control**

WPX will practice watering and/or application of a dust suppressant as necessary on access roads during construction, especially during periods of high winds and/or low precipitation.

### **3.4.9 Fire Control**

WPX implements fire prevention and control measures including, but not limited to, the following:

- Requiring construction crews to carry fire extinguishers in their vehicles and/or equipment.
- Training construction crews in the proper use of fire extinguishers.
- Contracting with the local fire district to provide fire protection.

### **3.4.10 Traffic and Roads**

Cooperative efforts by operators, agencies, and the MHA Nation are currently being developed and implemented across the FBIR. These measures include the following:

- Requiring construction personnel to stay within the ROW or follow designated access roads.
- Increasing pipeline infrastructure, centralizing water depots, and developing salt water disposal wells to reduce overall truck traffic and road degradation.
- Utilizing Tribal TERO fees for oil and gas activities, TAT Tribal funds, and IRR funds to increase the pace of maintenance and repair of roads impacted by increased truck traffic and adverse weather conditions.

### **3.4.11 Cultural Resources**

If cultural resources are discovered during construction or operation, the operator shall immediately stop work, secure the affected site and notify the BIA and THPO. Unexpected or inadvertent discoveries of cultural resources or human remains trigger mandatory federal procedures that include work stoppage and BIA consultation with all appropriate parties. Following any such discovery, operations will not resume without written authorization from the BIA. Project personnel are prohibited from collecting any artifacts or disturbing cultural resources in the area under any circumstances. Individuals outside the right-of-way are trespassing.

## 4.0 Consultation and Coordination

Project scoping letters and maps were mailed on February 14, 2012. Direct mail recipients and a record of comments received are listed in Table 14. An example scoping letter and responses are found in Appendices B and C. A letter stating concurrence of species effect determinations was received from USFWS on February 24, 2012 and is found in Appendix C.

**Table 14. Scoping Record**

<b>Recipient</b>	<b>Comments</b>
Bureau Of Land Management	No Response
Bureau of Reclamation	No federal Reclamation facilities are located within project area. If project crosses water pipeline contact Bureau of Reclamation engineer and the Fort Berthold Rural Water Director.
Dunn County	No Response
EPA	No Response
FAA Bismarck	No Response
FAA Minneapolis	No Response
FEMA	Consult local Land use official for McKenzie County
Fort Berthold Rural Water Supply	No Response
McKenzie Ranger District	No Response
McLean County Board of Commissioners	No Response
MHA Nation	No Response
MHA Nation District Rep	No Response
MHA Nation Chairman	No Response
MHA Nation Game & Fish	No Response
MHA Nation Natural Resources Dept.	No Response
MHA Nation THPO	No Response
Montana Dakota Utilities	No Response
Mountrail Board of Commissioners	No Response
National Park Service	No Response
ND DOT	No Response
ND Game and Fish	Avoid fragmentation and destruction of native prairie, wooded draws, riparian, and wetland areas.
ND NRCS	No action required in regards to the Farmland Protection Policy Act. Follow NRCS guidelines for the installation of buried utilities to minimize impacts to wetland(s).
NDIAC	No Response
New Town Municipal Airport	No Response
NoDak Electric Cooperative, Inc.	No Response
North Dakota Department of Health	Minimize dust, minimize emissions, ensure road aggregate does not contain erionite, minimize degradation to waterways, ensure proper storm water management, and develop a spill response plan.

<b>Recipient</b>	<b>Comments</b>
North Dakota Parks and Recreation Dept.	No species of concern or significant ecological communities within one mile.
Parshall-Hankins Field Airport	No Response
Reservation Telephone Co-op	No Response
Southwest Water Authority	No Response
Spirit Lake Tribe	No Response
Standing Rock Sioux Tribe	No Response
State Historical Society	Request for cultural resource survey results.
Turtle Mountain Band of Chippewa	No Response
USACOE - Bismarck	No Response
USACOE - Riverdale	Recommend down slope trenching to contain hazardous wastes, impervious liner be placed on well pad prior to construction, use of closed loop drilling system, weed free fill material, clean equipment prior to construction to prevent the distribution of noxious or undesirable vegetation, NSO ½ mile of T&E species, construct Aug 15-April 1 to reduce disruption during breeding season, and asses cumulative impacts.
USFWS	Concurrence with mitigation efforts and T&E species determinations
Ward County Board of Commissioners	No Response

## 5.0 List of Preparers

An interdisciplinary team contributed to this document, following guidance in Part 1502.6 of CEQ regulations. Portions of the documents were drafted by Carlson McCain, Inc, under the direction of the BIA. Federal officials, oil and gas representatives, and consultants included the following:

### **Bureau of Indian Affairs**

Marilyn Bercier  
Mark Herman

### **WPX Energy Williston, LLC**

Nelson Klitzka, Regulatory Specialist  
Jennifer Head, Regulatory Manager

### **Carlson McCain, Inc.**

Todd Hartleben, Senior Engineer  
Ryan Krapp, Wildlife Biologist/GIS Specialist  
Miranda Meehan, Natural Resource Specialist

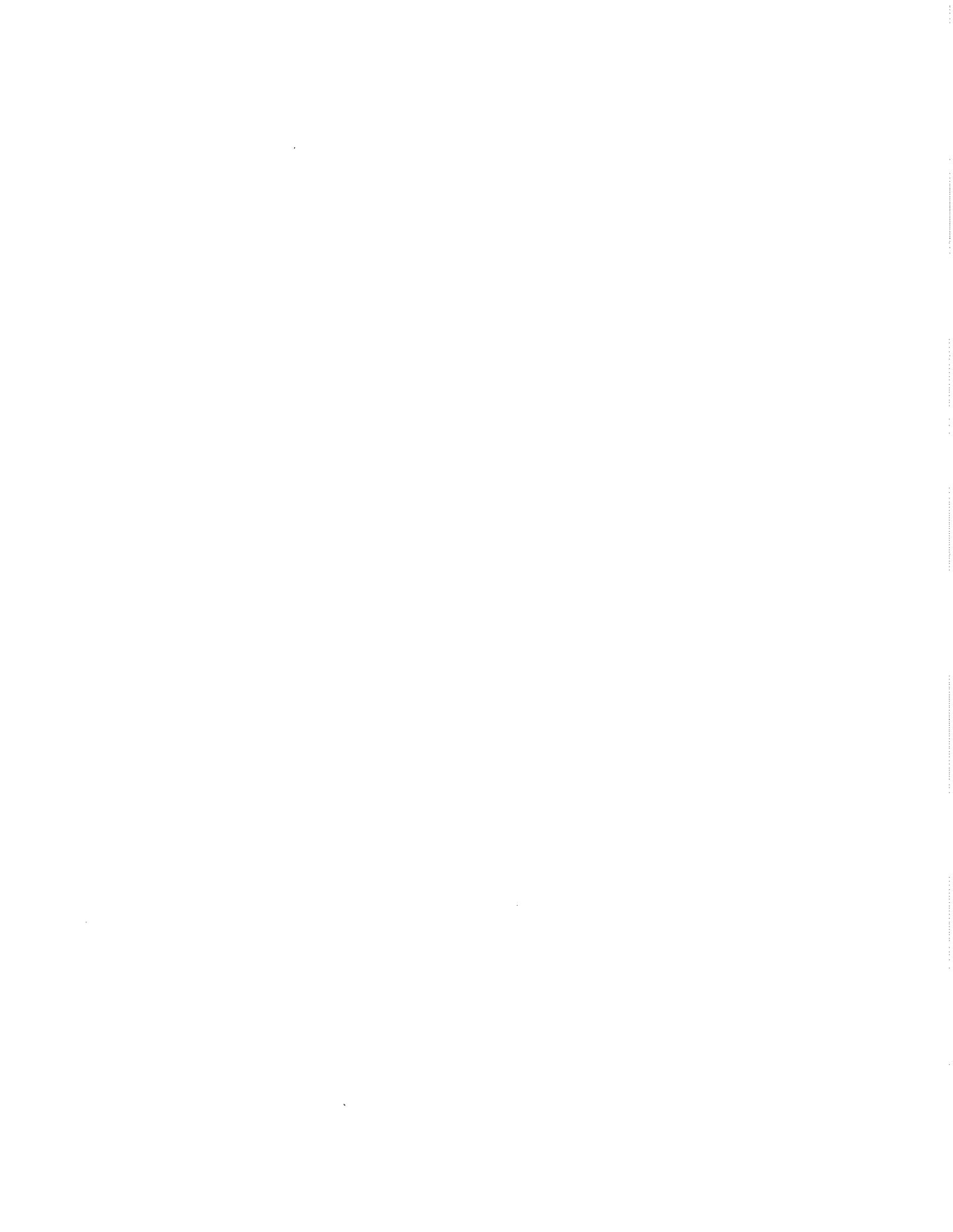
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***Appendix A***

***Scoping and Concurrence Request***



ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

February 14, 2012

US Fish and Wildlife Service  
Mr. Jeffrey Towner  
Field Supervisor  
3425 Miriam Avenue  
Bismarck, ND 58501

**Re: Request for Comments  
Proposed Oil & Gas Well Pad  
Omaha Woman 13-12H  
WPX Energy Williston, LLC**

Dear Mr. Towner:

On behalf of WPX Energy Williston, LLC, Carlson McCain, Inc. is submitting information concerning development of a proposed oil and gas extraction well pad to drill multiple horizontal wells on the Fort Berthold Reservation (Reservation). The well pad, the access road and the utility corridor (Project) is located on the Fort Berthold Reservation in Section 24, T149N, R95W in McKenzie County (Figure 1).

An on-site biological assessment of the project was conducted on February 13, 2012, with the Bureau of Indian Affairs (BIA). At the initial on-site visit the proposed well site and access road/utility corridor right-of-way (ROW) were "soft" staked and the location was reviewed in consideration of topography, natural drainage and erosion control, vegetation, T&E species, migratory birds, wildlife and habitats, historical and cultural resources and other surface impacts. Site-specific mitigation measures were discussed and incorporated into the final project design to minimize impacts to evaluated resources.

#### **Project Description**

The proposed project is for the development of an oil and gas extraction well pad to drill multiple horizontal wells under Sections 13 and 12. The proposed well pad working surface will initially be constructed approximately 680-feet by 480-feet in size, or approximately 9.0 acres (Figure 2). The maximum disturbance area (fenced) for pad construction, including fill slopes and temporary soil piles, will be approximately 11.2 acres. Interim site reclamation after well completions will reduce the pad working surface size to approximately half (4.63 acres) of the original size and the surrounding area will be recontoured and seeded.

The access route will begin at the southeast side of the pad and proceeds south approximately 5,500 feet where it connects to the access road for the Kale Bad Brave well site. A ROW of 130-feet (maximum disturbance width) will result in approximately 16.0 acres of surface disturbance.

WPX commits to drilling this well utilizing a closed-loop drilling (pit-less) system, with the possibility of a contingency pit for emergencies. Drilling materials will be contained in tanks and disposed of properly at an approved waste disposal facility. Additionally a 24-inch high containment berm will be constructed on top of the pad to contain pad surface runoff. The topsoil from the site will be removed at a depth of eight-inches and stored on the south side of the pad. The topsoil pile will act as secondary containment during drilling. The topsoil will then be spread at interim and final reclamation. Best Management Practices (BMP's) including the use of a containment berm(s), fiber rolls, fiber matting, soil compaction and seeding of native species will be utilized during construction, and at interim and final reclamation. Pipelines (gas, oil) and utilities (electrical and fiber optic) will be installed underground in the same access road ROW corridor. The proposed pipeline located within the ROW to the pad site will connect to the established Saddle Butte Gathering System.

### High Value Habitat Avoidance

The ND Parks and Recreation Department (NDPRD) maintains the North Dakota Natural Heritage biological conservation database. A request for record review will be done to determine if any historic plant or animal species of concern or other significant ecological communities have been documented within an approximate one-mile radius of the project area.

The proposed pad site is located on rolling hills within a native prairie community which is dissected by native wooded draw communities. Little bluestem (*Schizachyrium scoparium*), western wheatgrass (*Agropyron smithii*), blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipedula*), and green needlegrass (*Stipa viridula*) are the dominant grasses. Common forbs included fringed sagewort (*Artemisia frigid*), purple coneflower (*Echinacea angustifolia*), silver leaf scurfpea (*Psoralea argophylla*), white sagewort (*Artemisia ludoviciana*), and stiff sunflower (*Helianthus rigidus*). Pans dominated by western wheatgrass and blue grama are common across the site. Patches of buffalo berry (*Shepherdia argentea*) are scattered along the south and east sides of the pad site. A small temporary wetland dominated by woolly sedge (*Carex lanuginosa*) is located on the south side of the pad site. A wooded draw characterized by bur oak (*Quercus macrocarpa*), green ash (*Fraxinus pennsylvanica*), and buffalo berry dissects the west side of the pad site.

There is a potential loss of high value wildlife habitat associated with the construction of this well pad and access road. At the time of the field visit, potential habitat for raptor species and sensitive plant species was noted; however, due to the timing of the survey these species were not present.

Disturbed areas and spoil piles will be seeded with a native seed mix as specified by the BIA. WPX and the BIA will monitor the seeding success and weed species control over life of project.

### Migratory Birds and Raptors

Proposed oil and gas development in the area may affect raptor and migratory bird species through direct mortality, habitat degradation, and/or displacement of individual birds. These impacts are regulated in part through the *Migratory Bird Treaty Act* (916 USC 703-711) and the *Bald and Golden Eagle Protection Act* (BGEPA).

A ground survey for cliff, tree, and ground raptor nests was conducted within line-of sight of the proposed project. Three nests were observed in a draw adjacent to the proposed access road during the on-site review on; however, no raptors were observed during the site visit.

The project area was also evaluated for the potential of other migratory bird species. At the time of the site visit no wildlife was observed using the immediate area. Due to the timing of the survey and the location of the proposed project in a native grassland community, a raptor and migratory bird nesting survey will be conducted five days prior to construction (February 1 - July 15) and/or if mowing and grubbing will take place on the site in the preceding fall. If mowing or grubbing does take place maintenance of the habitat in a degraded state will occur until construction begins. If nests are discovered during pre-construction survey, construction will be delayed in the immediate area and the BIA and USFWS will be consulted for additional information on how to proceed. Mitigation measures recommended will be taken to avoid any disturbance of raptor or migratory bird nesting sites.

**Cumulative Impacts**

The project will result in approximately 27.2 acres of disturbance. Potential impacts to wildlife, grasslands and wooded draw habitats within the immediate area will be minimal in the context of development. The access road and pad may negatively impact potential habitat for raptors, migratory birds, small and large mammals, and wildlife species.

There are no floodplains, or major drainage facilities that will be significantly negatively affected by the proposed project. However, there is a small (20' x 20') temporary (non-jurisdictional) wetland located on the south side of the proposed well pad. The wetland was a barren depression that had served as a wallow for livestock, thus it had very little vegetation. Mitigation efforts will reduce potential negative effects of the wells and access road. Current land uses are expected to continue with little change other than the acreage required for development. Increased truck traffic on adjacent roadways can be expected and has a documented negative, but manageable, impact on road conditions. The installation of a gathering system near to the same time as well drilling is proposed and will help alleviate heavy truck traffic.

**Biological Species Assessment**

Assessments for Federally listed threatened and endangered species were conducted by evaluating historic and present occurrences and by determining if potential habitat exists within the project area. A determination was made concerning direct and cumulative effects of the proposed activities on each species. Threatened and endangered species with documented occurrences in McKenzie County are listed in Table 1.

Table 1. McKenzie County Threatened, Endangered and Candidate Species List<sup>1</sup>

Species	Status
Interior Least Tern	Endangered
Whooping Crane	Endangered
Black-footed Ferret	Endangered
Pallid Sturgeon	Endangered
Gray Wolf	Endangered
Piping Plover and Designated Critical Habitat	Threatened
Sprague's Pipit	Candidate
Dakota Skipper	Candidate

<sup>1</sup> USFWS (list updated October 1, 2011)

Determinations made for federally listed species are:

- No effect
- May affect, is not likely to adversely affect
- May affect, is likely to adversely affect

### **Black-footed Ferret**

Black-footed ferrets were historically in the southwest portion of North Dakota but their occurrence is unlikely or questionable at this time. The black-footed ferret requires expansive black-tailed prairie dog colonies for food and den habitat. The Black-Footed Ferret Survey Guidelines (USFWS 1989) states that 80 acres is the minimum size prairie dog habitat needed to support black-footed ferret. Black-footed ferret reintroduction into the wild began in 1991 (Black-footed Ferret Recovery Implementation Team 2009). There have been 19 reintroduction sites, but none in North Dakota at this time. No potential habitat occurs in the area and the proposed project will have *no effect* on this species at this time.

### **Gray Wolf**

Gray wolves, an Endangered Species in North Dakota, were historically found throughout much of North America including the Upper Great Plains. Human activities have restricted their present range to the northern forests of Minnesota, Wisconsin, and Michigan and the Northern Rocky Mountains of Idaho, Montana, and Wyoming. They now only occur as occasional visitors in North Dakota. The most suitable habitat for the gray wolf is found around the Turtle Mountains region where documented and unconfirmed reports of gray wolves in North Dakota have occurred (Grondahl and Martin, no date). Due to the transient nature and no recent recorded sightings in the area the proposed project *may affect, is not likely to adversely affect* this species.

### **Interior Least Tern**

The interior least tern nests on midstream sandbars along the Yellowstone and Missouri River systems. Interior least terns construct bowl-shaped depression nests on sparsely vegetated sandbars and sandy beaches. Their nesting period occurs between mid-May through mid-August. During the nesting season the least tern has been documented to travel 7.5-miles or more from the lake to forage in wetlands. The proposed well site is located approximately 15-miles from and not within line-of-sight of the Missouri River system shoreline. Mitigation practices will be employed to protect drainages and lake. Following these guidelines, it is reasonable to expect that the proposed activities *may affect, is not likely to adversely affect* this species.

### **Pallid Sturgeon**

Pallid sturgeon are found in the Mississippi, Missouri, and Yellowstone River systems and are adapted for living close to the bottom of large, shallow rivers with sand and gravel bars. Pallid sturgeon populations in North Dakota have decreased since the 1960's (Grondahl and Martin no date). The proposed well site is located approximately 15-miles from and not within line-of-sight of Lake Sakakawea. BMP's will be implemented, including a containment berm surrounding the proposed well pad site and utilizing a closed-loop (pit-less) drilling system, as such the project will have *no effect* on this species.

### **Whooping Crane**

The primary nesting area for the whooping crane is in Canada's Wood Buffalo National Park. Arkansas National Wildlife Refuge in Texas is the primary wintering area for whooping cranes. In the spring and

fall, the cranes migrate primarily along the Central Flyway. During the migration, cranes make numerous stops, roosting in large shallow marshes, and feeding and loafing in harvested grain fields. The primary threats to whooping cranes are power lines, illegal hunting, and habitat loss (Texas Parks and Wildlife 2008).

The proposed well site is located within the Central Flyway. Approximately 75% of the whooping crane sightings in North Dakota occur within a 90-mile corridor that includes the proposed well location. Because collisions with power lines are the primary cause for fledgling mortality, it is BIA directive that any utility lines be constructed underground. Land use in the area is rolling native pasture dissected by treed drainages. The pad and access road are placed in a location that has little potential for whooping crane stop-over habitat. No individual whooping cranes were observed in the area during the on-site visits.

Construction activities may cause migratory cranes to divert from the area but are not likely to result in fatalities. If a crane is sighted within one mile of the project area, construction activities will cease and will be immediately reported to the US Fish and Wildlife Service (USFWS), North Dakota Game and Fish Department (NDGFD), and the BIA. In coordination with the USFWS and the BIA construction will resume once the bird(s) have left the area. Following these guidelines, it is reasonable to expect that the proposed activities **may affect, is not likely to adversely affect** whooping cranes.

#### **Piping Plover and Critical Habitat**

Piping plovers are found along the Missouri and Yellowstone River systems on gravel shorelines and sandbars and also on large alkaline wetlands. Nesting sites have been documented on the shorelines of Lake Sakakawea. In addition, critical habitat has been designated along Lake Sakakawea. NDPRD will be consulted on historic records indicating piping plover sightings and critical habitat within 2-miles of the project site.

The proposed well site is located in rolling native prairie dissected by wooded draws and is approximately 15-miles from and not within line-of-sight of the Missouri River system shoreline. Mitigation practices will be employed to protect drainages. Following these guidelines, it is reasonable to expect that the proposed activities **may affect, is not likely to adversely affect** this species.

#### **Sprague's Pipit**

The Sprague's pipit is a ground nesting bird that breeds and winters on open grasslands. It feeds mostly on insects and spiders and some seeds. The Sprague's pipit is closely tied with native prairie habitat and breeds in the north-central United States in Minnesota, Montana, North Dakota and South Dakota as well as south-central Canada. During the breeding season, Sprague's pipits prefer large patches of native grassland with a minimum size requirement thought to be approximately 145 ha (358.3 ac). The species prefers to breed in well-drained, open grasslands and avoids grasslands with excessive shrubs. Preferred grass height is estimated to be between 10 and 30 cm. They may avoid roads, trails, and habitat edges.

The proposed pad site will be developed within a native prairie dissected by drainages. The proposed access road follows a current two-track tail. The vegetation height was moderate to high (>30cm) at the time of the survey. Based upon these landscape conditions the proposed activities **may affect, is not likely to adversely affect** this species.

### Dakota Skipper

Dakota skippers are found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; and 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple coneflower and upright cone-flowers and blanket flower. Dakota skipper populations have declined historically due to widespread conversion of native prairie.

The proposed pad site will be developed within a native prairie pasture. The dominant graminoid species at the proposed well site includes little bluestem and needlegrasses. Coneflowers are a commonly occurring forb species within the native prairie community. Based upon these landscape conditions the proposed activities **may affect, is not likely to adversely affect** this species.

### Conclusion

The BIA has required the following site-specific construction procedures be implemented to help reduce potential impacts to wildlife and habitat:

- Use of a closed-loop drilling system (pit-less)
- Construction of a 24-inch high containment berm on the pad
- Raptor and migratory bird survey five-days prior to construction (Feb 1- July 15)
- Interim and final reclamation including:
  - Use of BMPs (soil compaction, fiber rolls, berms, sediment fences, fabric etc.) to reduce erosion potential
  - Monitoring and maintenance of potential erosion areas.
  - Seeding of native species.
  - Indefinite monitoring of seeding success and weed species control.

Based on a review of a list of federally listed or proposed endangered or threatened species under U.S. Fish and Wildlife Service jurisdiction, in addition to occasional transient individuals, we have determined that these actions will either have **no effect** or **may affect, but is not likely to adversely affect** listed threatened, endangered or candidate species and habitats.

Please call me at 701-255-1475 if you have any questions or need additional information.

Sincerely,



Miranda A. Meehan, Ph.D.  
Natural Resource Specialist



ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

February 14, 2012

Ronald Melhouse  
Bureau of Reclamation  
P.O. Box 1017  
Bismarck, ND 58502

**RE: Request for Comments  
WPX Energy Williston, LLC**

Dear Mr. Melhouse,

On behalf of WPX Energy Williston, LLC, Carlson McCain, Inc. is submitting information concerning development of a proposed oil and gas extraction well pad to drill multiple horizontal wells on the Fort Berthold Reservation (Reservation). The Bureau of Indian Affairs (BIA) is preparing an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the proposed action(s).

The proposed well is named the Omaha Woman and multiple wells will be drilled from the proposed well pad. The Omaha Woman well pad is located in the NE ¼ of the NE ¼ of Section 24, T149N, R95W in McKenzie County (See Attached Figures).

Associated appurtenances include pipelines (gas, oil) and utilities (electrical and fiber optic) will be installed underground in the same right-of-way as the access road. Oil and gas pipelines will connect to the established Saddle Butte Gathering System. A closed-loop drilling system will be utilized to drill the wells and BMPs will be utilized to protect the associated environment.

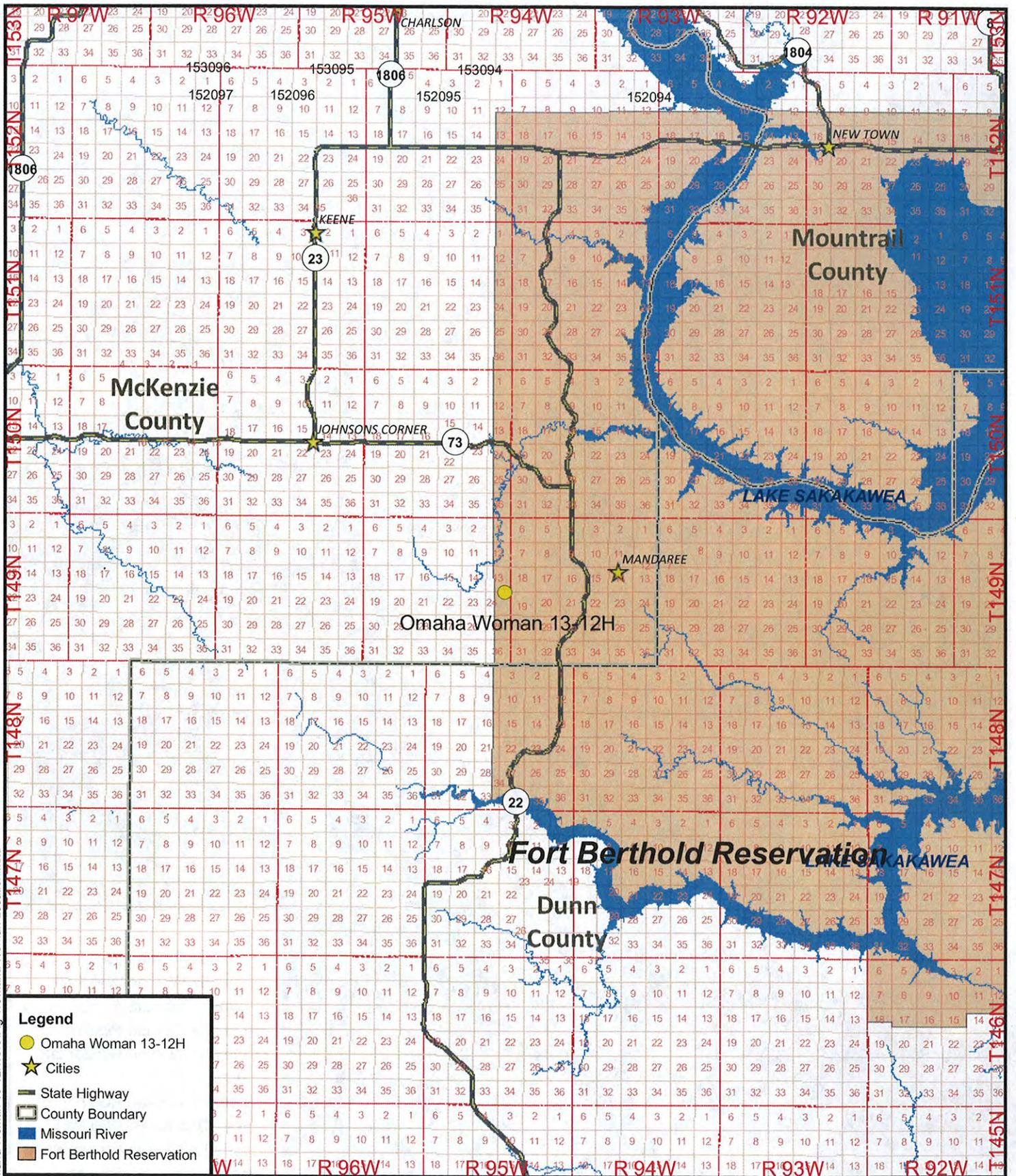
In accordance with NEPA requirements, we are requesting comments regarding the proposed project. Comments are requested to be sent before March 12, 2012, so they may be incorporated into the final decision making. Please send comments to my attention at the address located at the bottom of this letterhead.

Sincerely,

A handwritten signature in blue ink, appearing to read "Miranda A. Meehan", with a yellow highlight behind it.

Miranda A. Meehan, Ph.D.  
Natural Resource Specialist  
mmeehan@carlsonmccain.com

R:\projects\WIL\3814 - Omaha Woman 13-12H\GIS\Fig 1 Omaha Woman Location.mxd



**Legend**

- Omaha Woman 13-12H
- ★ Cities
- State Highway
- County Boundary
- Missouri River
- Fort Berthold Reservation

1:316,800

1 inch = 5 miles

0 1.25 2.5 5 Miles

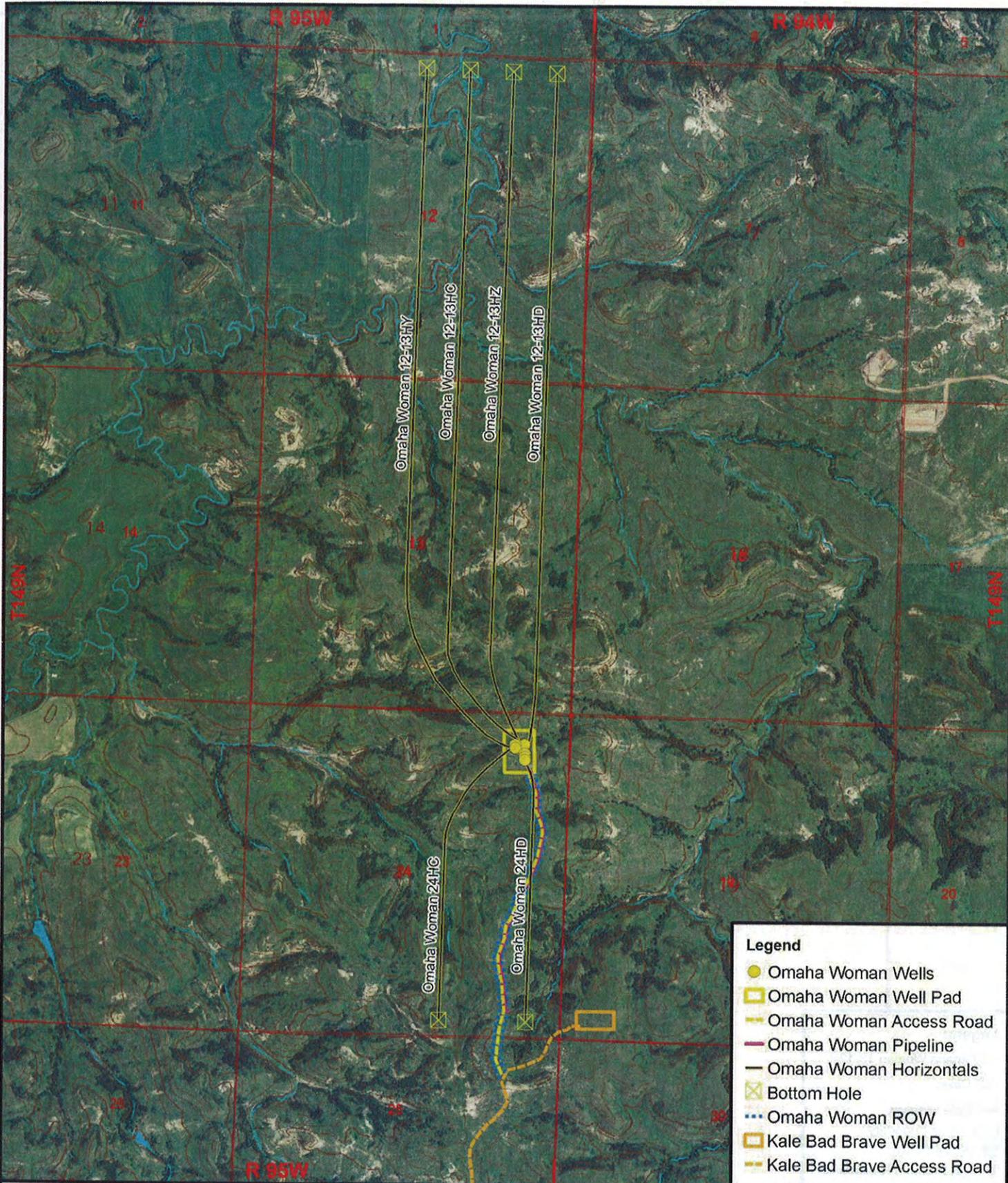
Base Data: ND GIS Hub

**WPX ENERGY**

Date: February 2012      Rev: 01

**Figure 1**

**Proposed Well Location  
Omaha Woman 13-12H  
WPX Energy Williston, LLC**



**Legend**

- Omaha Woman Wells
- Omaha Woman Well Pad
- Omaha Woman Access Road
- Omaha Woman Pipeline
- Omaha Woman Horizontals
- ⊗ Bottom Hole
- ⋯ Omaha Woman ROW
- Kale Bad Brave Well Pad
- Kale Bad Brave Access Road

1:24,000  
 1 inch = 2,000 feet  
 0 500 1,000 2,000 Feet

Basemap: USGS 24K Quadrangle  
 Sanish SE; NAIP 2010 McKenzie County



Date: February 2012

Rev: 02

**Figure 2**  
**Drill Plan**  
**Omaha Woman 13-12H**  
**WPX Energy Williston, LLC**

***Appendix B***

***Scoping Responses and Concurrence***



ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

February 14, 2012

US Fish and Wildlife Service  
Mr. Jeffrey Towner  
Field Supervisor  
3425 Miriam Avenue  
Bismarck, ND 58501

Re: Request for Comments  
Proposed Oil & Gas Well Pad  
Omaha Woman 13-12H  
WPX Energy Williston, LLC

Dear Mr. Towner:

U.S. FISH AND WILDLIFE SERVICE  
ECOLOGICAL SERVICES  
ND FIELD OFFICE

Project as described will have no significant impact on fish and wildlife resources. No endangered or threatened species are known to occupy the project area and/or are not likely to be adversely affected. IF PROJECT DESIGN CHANGES ARE MADE, PLEASE SUBMIT PLANS FOR REVIEW.

2-23-12 *Jeffrey K. Towner*  
Date Jeffrey K. Towner  
Field Supervisor

On behalf of WPX Energy Williston, LLC, Carlson McCain, Inc. is submitting information concerning development of a proposed oil and gas extraction well pad to drill multiple horizontal wells on the Fort Berthold Reservation (Reservation). The well pad, the access road and the utility corridor (Project) is located on the Fort Berthold Reservation in Section 24, T149N, R95W in McKenzie County (Figure 1).

An on-site biological assessment of the project was conducted on February 13, 2012, with the Bureau of Indian Affairs (BIA). At the initial on-site visit the proposed well site and access road/utility corridor right-of-way (ROW) were "soft" staked and the location was reviewed in consideration of topography, natural drainage and erosion control, vegetation, T&E species, migratory birds, wildlife and habitats, historical and cultural resources and other surface impacts. Site-specific mitigation measures were discussed and incorporated into the final project design to minimize impacts to evaluated resources.

#### Project Description

The proposed project is for the development of an oil and gas extraction well pad to drill multiple horizontal wells under Sections 13 and 12. The proposed well pad working surface will initially be constructed approximately 680-feet by 480-feet in size, or approximately 9.0 acres (Figure 2). The maximum disturbance area (fenced) for pad construction, including fill slopes and temporary soil piles, will be approximately 11.2 acres. Interim site reclamation after well completions will reduce the pad working surface size to approximately half (4.63 acres) of the original size and the surrounding area will be recontoured and seeded.

The access route will begin at the southeast side of the pad and proceeds south approximately 5,500 feet where it connects to the access road for the Kale Bad Brave well site. A ROW of 130-feet (maximum disturbance width) will result in approximately 16.0 acres of surface disturbance.

### Dakota Skipper

Dakota skippers are found in native prairie containing a high diversity of wildflowers and grasses. Habitat includes two prairie types: 1) low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas; and 2) upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple coneflower and upright coneflowers and blanket flower. Dakota skipper populations have declined historically due to widespread conversion of native prairie.

The proposed pad site will be developed within a native prairie pasture. The dominant graminoid species at the proposed well site includes little bluestem and needlegrasses. Coneflowers are a commonly occurring forb species within the native prairie community. Based upon these landscape conditions the proposed activities *may affect, is not likely to adversely affect* this species.

### Conclusion

The BIA has required the following site-specific construction procedures be implemented to help reduce potential impacts to wildlife and habitat:

- Use of a closed-loop drilling system (pit-less)
- Construction of a 24-inch high containment berm on the pad
- Raptor and migratory bird survey five-days prior to construction (Feb 1- July 15)
- Interim and final reclamation including:
  - Use of BMPs (soil compaction, fiber rolls, berms, sediment fences, fabric etc.) to reduce erosion potential
  - Monitoring and maintenance of potential erosion areas.
  - Seeding of native species.
  - Indefinite monitoring of seeding success and weed species control.

Based on a review of a list of federally listed or proposed endangered or threatened species under U.S. Fish and Wildlife Service jurisdiction, in addition to occasional transient individuals, we have determined that these actions will either have *no effect* or *may affect, but is not likely to adversely affect* listed threatened, endangered or candidate species and habitats.

Please call me at 701-255-1475 if you have any questions or need additional information.

Sincerely,



Miranda A. Meehan, Ph.D.  
Natural Resource Specialist



STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA

Jack Dalrymple  
Governor of North Dakota

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Department

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Director  
Department of Transportation

Merlan E. Paaverud, Jr.  
Director

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February 17, 2012

Miranda Meehan, Ph.D.  
Natural Resource Specialist  
Carlson McCain  
2718 Gateway Avenue, Suite 101  
Bismarck ND 58503

NDSHPO REF. 12-0622 BIA/BLM/MHAN THPO WPX Energy Williston, LLC, Carlson McCain, Inc. development of the Omaha Woman multi well pad, pipelines and road utility corridor in portions of [T149N R95W Section 24] McKenzie County, North Dakota

Dear Dr. Meehan,

We received your correspondence regarding NDSHPO REF. 12-0622 BIA/BLM/MHAN THPO WPX Energy Williston, LLC, Carlson McCain, Inc. development of the Omaha Woman multi well pad, pipelines and road utility corridor in portions of [T149N R95W Section 24] McKenzie County, North Dakota. We request that a copy of cultural resource site forms and reports be sent to this office so that the cultural resources archives can be kept current for researchers.

Thank you for your consideration. Consultation is with MHAN THPO. If you have any questions please contact Susan Quinnell, Review & Compliance Coordinator at (701)328-3576 or [squinnell@nd.gov](mailto:squinnell@nd.gov)

Sincerely,

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer (North Dakota)

c: Elgin Crows Breast, THPO MHAN  
c: Justin Peters, BLM, Dickinson, ND



*Jack Dallymple, Governor  
Mark A. Zimmerman, Director*

*1600 East Century Avenue, Suite 3  
Bismarck, ND 58503-0649  
Phone 701-328-5357  
Fax 701-328-5363  
E-mail [parkrec@nd.gov](mailto:parkrec@nd.gov)  
[www.parkrec.nd.gov](http://www.parkrec.nd.gov)*

March 2, 2012

Ms. Miranda A. Meehan  
Carlson McCain  
2718 Gateway Ave.  
Suite 101  
Bismarck, ND 58503

Re: Proposed Oil and Gas Well Pad, Omaha Woman 13-12H, WPX Energy Williston, LLC

Dear Ms. Meehan,

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced development of a proposed oil and gas extraction well pad to drill multiple horizontal wells on the Fort Berthold Reservation in McKenzie County.

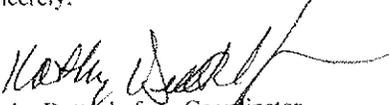
Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, there are no documented occurrences in our database within or adjacent to project area. Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

The Department recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact me at (701-328-5370 or [k.duttenhefner@nd.gov](mailto:k.duttenhefner@nd.gov)). Thank you for the opportunity to comment on this proposed project.

Sincerely,

  
Kathy Duttonhefner, Coordinator  
Natural Resources Division

R:\USND\NH\\*2012-039 KD\3/2/2012\DI.3.2.2012

*Play in our backyard!*



"VARIETY IN HUNTING AND FISHING"

## NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

March 9, 2012

Miranda A. Meehan, Ph.D.  
Natural Resource Specialist  
Carlson McCain, Inc.  
2718 Gateway Ave, Suite 101  
Bismarck, ND 58503

Dear Ms. Meehan:

RE: Omaha Woman 13-12H

WPX Energy Williston, LLC is proposing multiple oil and gas wells located on a single well pad on the Fort Berthold Reservation in McKenzie County, North Dakota.

Our primary concern with oil and gas development is the fragmentation and loss of wildlife habitat associated with construction of the well pads and access roads. We recommend that construction be avoided to the extent possible within native prairie, wooded draws, riparian corridors, and wetland areas.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Link".

Greg Link  
Chief  
Conservation & Communication Division

js

United States Department of Agriculture



Natural Resources Conservation Service  
P.O. Box 1458  
Bismarck, ND 58502-1458

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February 28, 2012

Miranda A. Meehan  
Carlson McCain  
2718 Gateway Avenue, Suite 101  
Bismarck, ND 58503

RE: Request for Comments -- Omaha Woman  
McKenzie County, ND  
WPX Energy Williston, LLC

Dear Ms. Meehan:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated February 14, 2012, concerning proposed oil and gas wells on Omaha Woman well pad in McKenzie County, North Dakota.

*Important Farmlands* - NRCS has a major responsibility with Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., prime, statewide, and local importance) to non-agricultural use when the project utilizes federal funds. It appears your proposed project is not supported by federal funding; therefore, FPPA does not apply and no further action is needed.

*Wetlands* -- The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose of, or to have the effect of, making agricultural production possible, loss of USDA benefits could occur. NRCS has developed the following guidelines for the installation of buried utilities. If these guidelines are followed, the impacts to the wetland(s) will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements: 1) Disturbance to the wetland(s) must be temporary, 2) no drainage of the wetland(s) is allowed (temporary or permanent), 3) mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained, 4) temporary side cast material must be placed in such a manner not to be dispersed in the wetland, and 5) all trenches must be backfilled to the original wetland bottom elevation.

*Helping People Help the Land*

An Equal Opportunity Provider and Employer

Ms. Meehan  
Page 2

NRCS would recommend that impacts to wetlands be avoided. If the alignment of the project requires passage through a wetland, NRCS can complete a certified wetland determination, if requested by the landowner/operator.

If you have additional questions pertaining to FPPA, please contact Steve Sieler, State Soil Liaison, NRCS, Bismarck, North Dakota (701-530-2019).

Sincerely,

A handwritten signature in cursive script that reads "Michael G. Ulmer".

MICHAEL G. ULMER (Acting)  
State Soil Scientist/MO 7 Leader



February 27, 2012

Miranda Meehan, Ph.D.  
Natural Resource Specialist  
Carlson McCain  
2718 Gateway Ave., Suite 101  
Bismarck, ND 58503

Re: Proposed Omaha Woman 13-12H Well Pad; WPX Energy Williston, LLC  
Fort Berthold Reservation, McKenzie County

Dear Dr. Meehan:

This department has reviewed the information concerning the above-referenced project submitted under date of February 14, 2012, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. Development of the production facilities and any access roads, well pads or pipelines should have a minimal effect on air quality provided measures are taken to minimize fugitive dust. However, operation of the wells has the potential to release air contaminants capable of causing or contributing to air pollution. We encourage the development and operation of the wells in a manner that is consistent with good air pollution control practices for minimizing emissions. Detailed guidance is available at [www.ndhealth.gov/AQ/OilAndGasWells.htm](http://www.ndhealth.gov/AQ/OilAndGasWells.htm).

Any questions about air pollution control or permitting requirements should be addressed to Ms. Kathleen Paser at the U.S. Environmental Protection Agency, Region 8. She may be reached at (303) 312-6526 or [Paser.Kathleen@epa.gov](mailto:Paser.Kathleen@epa.gov).

2. Aggregate to be used for road construction should not contain any erionite. Aggregate sources should be tested for erionite following guidelines found at [www.ndhealth.gov/EHS/Erionite](http://www.ndhealth.gov/EHS/Erionite). For questions regarding erionite testing, please call Mark Dihle at 701-328-5188.
3. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.

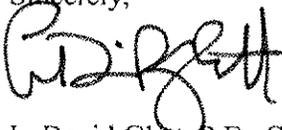
4. Oil and gas related construction activities located within tribal boundaries in North Dakota may be required to obtain a permit to discharge storm water runoff from the U.S. Environmental Protection Agency. Further information may be obtained from the U.S. EPA's website or by calling the U.S. EPA – Region 8 at (303) 312-6312. Also, cities or counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.
  
5. Projects that involve construction, drilling, completion and/or production of crude oil or natural gas wells should select locations that minimize the potential for environmental damage during development of the well and in the event of a spill; restrict fluids from reaching surface waters. Well placement should avoid close proximity to drainage areas and steep slopes. Environmental damage can be reduced by developing a spill response plan that emphasizes rapid deployment of prepositioned assets necessary to contain spills and subsequent cleanup. Proper surveillance and monitoring of pipelines is necessary for the early detection of leaks.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



L. David Glatt, P.E., Chief  
Environmental Health Section

LDG:cc  
Attach.



## Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

### Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

### Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

### Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

U.S. Department of Homeland Security  
Region VIII  
Denver Federal Center, Building 710  
P.O. Box 25267  
Denver, CO 80225-0267



**FEMA**

R8-Mitigation

February 17, 2012

Carlson McCain  
Miranda Meehan, Natural Resource Specialist  
2718 Gateway Ave., Suite 101  
Bismarck, ND 58503

Dear Ms Meehan:

Thank you for your invitation to comment on the Omaha Woman well pad WPX Energy Williston, LLC. For floodplain management purposes, FEMA's major concern is if the proposed project is located within a mapped Special Flood Hazard Area on a FEMA Flood Insurance Rate Map (FIRM). Under the National Flood Insurance Program (NFIP), development in these areas requires further consideration.

Our records show that McKenzie County is a non-participating community in the NFIP and has never been mapped. We recommend that you contact the local Land use official for McKenzie County to receive further guidelines regarding any special permits required in order to adhere to the regulations and policies of the County.

Please feel free to contact me at 303-235-4721 if you require additional assistance. Thank you for giving us the opportunity to assist you in the project in McKenzie County.

Sincerely,



*Dave Kynel*  
Dave Kynel,  
Natural Hazards Program Specialist



IN REPLY, REFER TO  
DK-5000  
ENV-6.00

## United States Department of the Interior

### BUREAU OF RECLAMATION

Dakotas Area Office

P.O. Box 1017

Bismarck, North Dakota 58502



FEB 27 2012

Miranda A. Meehan, Ph.D.  
Carlson McCain  
2718 Gateway Avenue Suite 101  
Bismarck, ND 58503

Subject: Solicitation for an Environmental Assessment by BIA for the Proposed Construction of Single Well Pad and Multiple Exploratory Horizontal Oil and Gas Wells for WPX Energy on the Fort Berthold Indian Reservation in McKenzie County, North Dakota

Dear Dr. Meehan:

This letter is written to inform you that we received your letter February 14, 2012, and the information and maps of your proposed well pad and wells have been reviewed by Bureau of Reclamation staff.

The proposed well pad is sited in:

Omaha Woman – NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  section 24, T. 149 N., R. 95 W., McKenzie County

There are no federal Reclamation facilities within section 24 or the sections directly adjacent to section 24. In this case, those facilities would be the rural water pipelines of the Fort Berthold Rural Water System. However, please note that municipal, rural, and industrial water lines commonly follow roads; therefore, it is possible you would need to cross a federal water line as you access your site from the south and likely section 36, T. 149 N., R. 95 W.

Our map should aid you in identification of potential for adverse effect to or need for crossing federal facilities while developing your well pad, access roads, pipelines, and utilities. Also, should you need to cross a Fort Berthold Rural Water System pipeline while accessing your proposed project, please contact our engineer Colin Nygaard, as shown below, and refer to the enclosed sheet for pipeline crossing specifications.

Since Reclamation is the lead federal agency for the Fort Berthold Rural Water System, we request that any work planned on the reservation be coordinated with Mr. Lester Crows Heart, Fort Berthold Rural Water Director, Three Affiliated Tribes, 308 4 Bears Complex, New Town, North Dakota 58763.

Thank you for providing the information and opportunity to comment on your proposal. If you have any further environmental questions, please contact me at 701-221-1287 or for engineering questions Colin Nygaard, Civil Engineer, at 701-221-1260.

Sincerely,

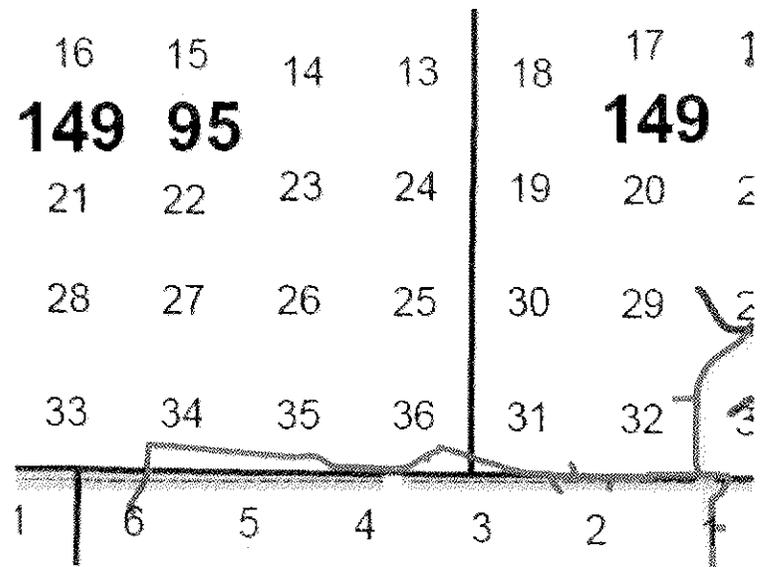


Kelly B. McPhillips  
Environmental Specialist

Enclosure

cc: Bureau of Indian Affairs  
Great Plains Regional Office  
Ms. Marilyn Bercier  
Supervisory Environmental Protection Specialist  
115 Fourth Avenue S.E.  
Aberdeen, SD 57401

Mr. Lester Crows Heart  
Fort Berthold Rural Water Director  
Three Affiliated Tribes  
308 4 Bears Complex  
New Town, ND 58763  
(w/encl)



Omaha Woman – NE ¼ NE ¼ Section 24,  
T149N, R95W, McKenzie County





DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, OMAHA DISTRICT  
GARRISON PROJECT OFFICE  
PO BOX 527  
RIVERDALE, NORTH DAKOTA 58565-0527

February 21, 2012

Natural Resource Section

Miranda A. Meehan  
Carlson McCain  
2718 Gateway Avenue  
Suite 101  
Bismarck, North Dakota, 58503

Dear Ms. Meehan

Thank you for letting the U.S. Army Corps of Engineers Garrison Dam/Lake Sakakawea Project comment on WPX Energy Williston LLC proposed Omaha Woman well pad, located on the Fort Berthold Indian Reservation.

At this time the U.S. Army Corps of Engineers Garrison Dam/Lake Sakakawea Project would request that WPX Energy Williston LLC consider and implement the following management practices during the exploration phase of the aforementioned well.

Due to the close proximity of the well location to lands managed by the U.S. Army Corps of Engineers (USACE) there is a high risk that any storm water runoff from the well location will enter the Missouri River/Lake Sakakawea. As such the USACE would request that WPX Energy Williston LLC construct an impervious lined trench located on the down sloping side of each of the thirteen well pads to catch and hold any surface run off from the well pads. Fluids that accumulate in the trench should be pumped/removed from the trench and disposed of properly. In addition to the catch trench, the USACE also recommends that the entire well pad have an impervious type liner placed on the well pads prior to the construction of the pads.

As the proposed well sites are extremely close to lands managed by the USACE and as such there exists a possibility of contamination to the Missouri River/Lake Sakakawea from both runoff as well as possible oil or salt water once the wells have gone into production. This possibility of contamination from both the well pads and possible producing wells is a great concern to this agency. To aid in the prevention of hazardous wastes from entering the Missouri River/Lake Sakakawea, the USACE would strongly recommend that a Closed Loop Drilling Method be used in the exploration phase of the well to include all drilling fluids and cuttings.

Should living quarters be established onsite it is requested that all sewage collection systems be of a closed design and all holding tanks are to be either double walled or contained in a secondary containment system. All sewage waste removed from the well site location should be disposed of properly.

Should additional fill material required for the construction of the well pad said material should be obtained from a private supplier whose material has been certified as being free of all noxious weeds.

Prior to the drilling rig and associated equipment being moved/ placed on the well location that all equipment associated with the well be either pressure washed or air blasted to prevent the possible transportation of noxious or undesirable vegetation onto Tribal lands as well as USACE managed lands. The cleaning of the equipment should be done prior to the equipment entering tribal lands.

That no surface occupancy be allowed within ¼ mile of any known Threatened or Endangered Species critical habitat.

If possible, all construction activities should occur between August 15th and April 1st.

Cumulative impacts are often overlooked, in the completion of NEPA compliance. To adequately assess cumulative impacts, the following activities should consider.

- a. Has the project area already been degraded, and if so, to what extent?
- b. Are other ongoing activities in the area causing impacts, and if so, to what extent?
- c. What is the likelihood that this project will lead to a number of associated projects?
- d. What are the trends for activities and impacts in the area?

If you have any questions regarding the above recommendations please feel free to contact me at P.O. Box 527 Riverdale, North Dakota or by phone at (701) 654 7411 ext. 232

Sincerely



Charles Sorensen  
Natural Resource Specialist





# 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

MAR 01 2012

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 well pad and a well pad expansion in McKenzie County, North Dakota. Approximately 139.74 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. Two archaeological sites (32MZ2306, 32MZ2320) were located that may 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 reached a determination of **no historic properties affected** for these undertakings, as the archaeological sites are outside the project Areas of Potential Effect. Catalogued as **BIA Case Number AAO-2065/FB/12**, the proposed undertakings, locations, and project dimensions are described in the following reports:

Reinhart, Damien S.

(2012) A Class I and Class III Cultural Resource Inventory of the Omaha Woman #13-12H Well Pad and Utility Corridor, Fort Berthold Indian Reservation, McKenzie County, North Dakota. SWCA Environmental Consultants for WPX Energy Williston, LLC, Tulsa, OK.

Yost, Scott

(2012) A Class I and Class III Cultural Resource Inventory of the Cross #2-13H Well Pad Expansion, Fort Berthold Indian Reservation, McKenzie County, North Dakota. SWCA Environmental Consultants for WPX Energy Williston, LLC, Tulsa, OK.

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

Enclosures

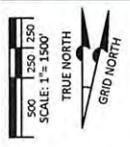
cc: Chairman, Three Affiliated Tribes  
Superintendent, Fort Berthold Agency



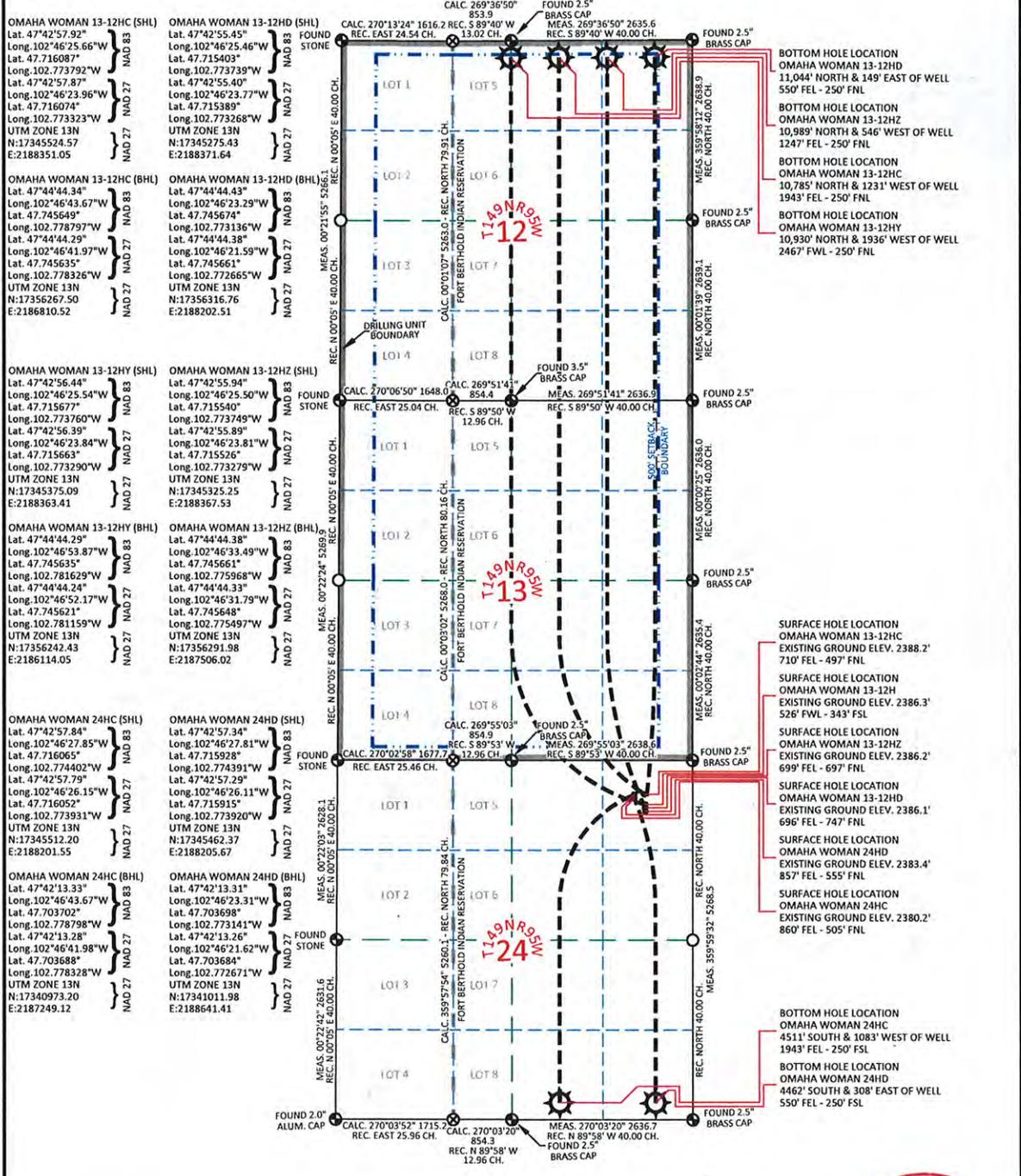
## **Appendix C**

Omaha Woman 13-12H Plat Package





**WELL LOCATION PLAT**  
 DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HC  
 OMAHA WOMAN 13-12HD  
 OMAHA WOMAN 13-12HY  
 OMAHA WOMAN 13-12HZ  
 OMAHA WOMAN 24HC  
 OMAHA WOMAN 24HD



I, William H. Dolinar, Professional Land Surveyor, ND, RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Locations and Elevations of the above platted wells being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Locations being located within Sections 12 and 24, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcosm.

Vertical Datum used is of NAVD 88. Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M. Distances shown are Ground Distances using a combined scale factor of 1.000151275. Location shown here on is not an "ASBUILT" location.



**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 1500 EAST SECOND NORTH GREEN RIVER, WY 82901  
 PHONE: 307-875-3638 307-875-3639  
 www.williamhsmith.com

DRAWN BY: CED  
 PROJECT NO: N/A  
 REVISIONS:

CHECKED BY: WHD  
 JOB NO: 2011500

**CONFIDENTIALITY NOTES:**  
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**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

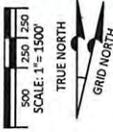
**LOCATION OF PLATTED WELLS**  
 NE1/4 NE1/4, SECTION 24, T149N, R 95 W, 5TH PM, MCKENZIE COUNTY, NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

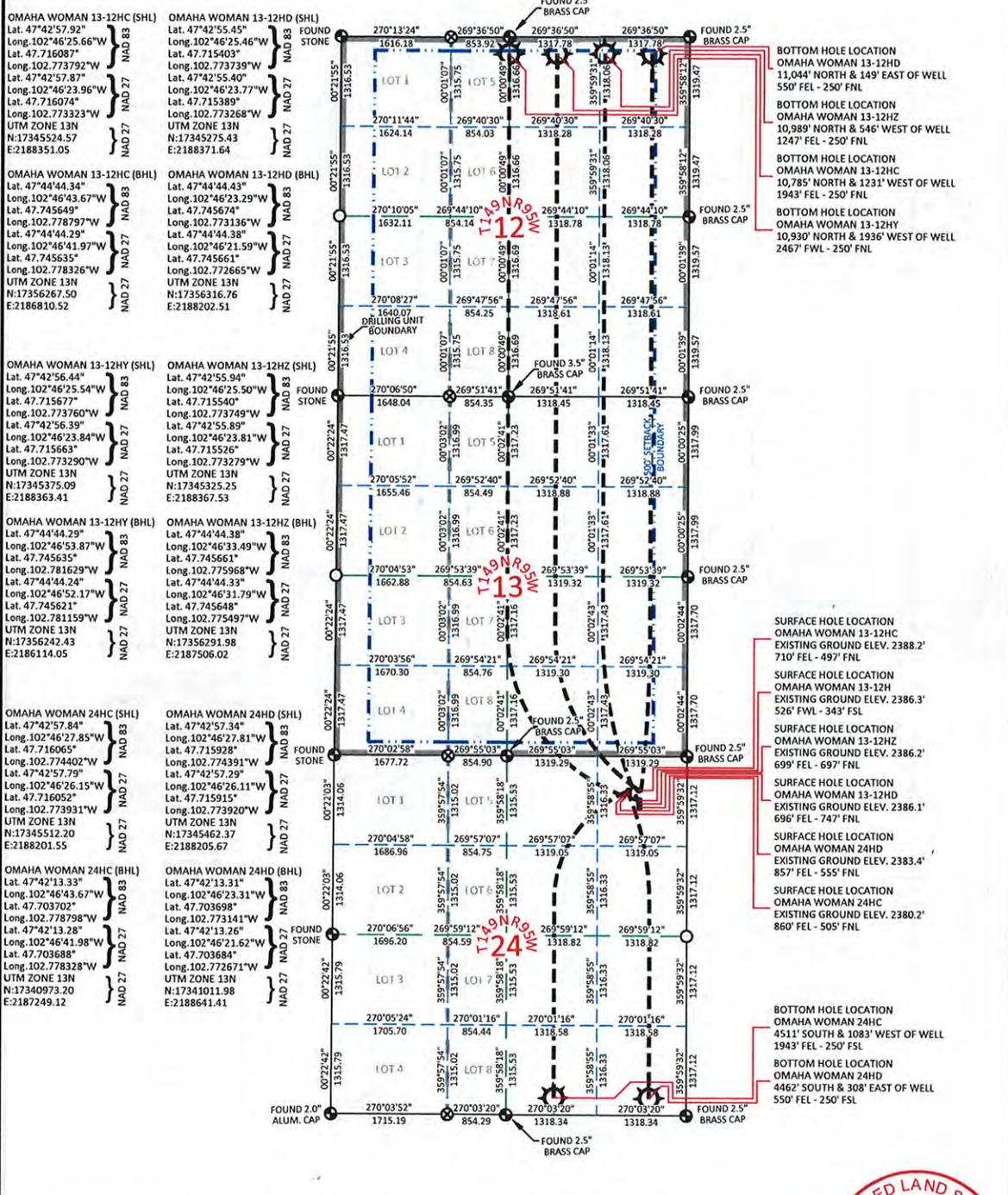
**WELL LOCATION PLAT**

SCALE: 1"=1000'  
 DATE: 02/27/2012

EXHIBIT "G"  
 SHEET 1 OF 2



**WELL LOCATION PLAT**  
 DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HC  
 OMAHA WOMAN 13-12HD  
 OMAHA WOMAN 13-12HY  
 OMAHA WOMAN 13-12HZ  
 OMAHA WOMAN 24HC  
 OMAHA WOMAN 24HD



I, William H. Dolinar, Professional Land Surveyor, ND. RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Locations and Elevations of the above platted wells being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Locations being located within Sections 12 and 24, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcorpn.  
 Vertical Datum used is of NAVD 88.  
 Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
 Location shown here on is not an "ASBUILT" location.

**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 13-12HD  
 11,044' NORTH & 149' EAST OF WELL  
 550' FEL - 250' FNL

**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 13-12HZ  
 10,989' NORTH & 546' WEST OF WELL  
 1247' FEL - 250' FNL

**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 13-12HC  
 10,785' NORTH & 1231' WEST OF WELL  
 1943' FEL - 250' FNL

**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 13-12HY  
 10,930' NORTH & 1936' WEST OF WELL  
 2467' FNL - 250' FNL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 13-12HC  
 EXISTING GROUND ELEV. 2388.2'  
 710' FEL - 497' FNL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 13-12H  
 EXISTING GROUND ELEV. 2386.3'  
 526' FNL - 343' FSL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 13-12HZ  
 EXISTING GROUND ELEV. 2386.2'  
 699' FEL - 697' FNL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 13-12HD  
 EXISTING GROUND ELEV. 2386.1'  
 696' FEL - 747' FNL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 24HD  
 EXISTING GROUND ELEV. 2383.4'  
 857' FEL - 555' FNL

**SURFACE HOLE LOCATION**  
 OMAHA WOMAN 24HC  
 EXISTING GROUND ELEV. 2380.2'  
 860' FEL - 505' FNL

**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 24HC  
 4511' SOUTH & 1083' WEST OF WELL  
 1943' FEL - 250' FNL

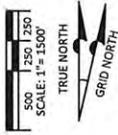
**BOTTOM HOLE LOCATION**  
 OMAHA WOMAN 24HD  
 4462' SOUTH & 308' EAST OF WELL  
 550' FEL - 250' FNL



 <b>WILLIAM H. SMITH &amp; ASSOCIATES P.C.</b> SURVEYING CONSULTANTS 1015 13th St NW RIVER, WY 82901 PHONE: 307-875-1638 FAX: 307-875-1639 www.whsurvey.com	<b>CONFIDENTIALITY NOTES:</b> The information contained in this plat is legally privileged and confidential information intended only for the use of the recipients. If you are not the intended recipient, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.	<b>LEGEND</b> FOUND MONUMENT MONUMENT SEARCHED FOR NOT FOUND SURFACE HOLE LOCATION BOTTOM HOLE LOCATION	<b>LOCATION OF PLATTED WELLS</b> NE1/4 NE1/4, SECTION 24, T. 149 N, R. 95 W, 5TH PM, MCKENZIE COUNTY, NORTH DAKOTA	<b>DAKOTA-3 E&amp;P COMPANY LLC</b>  <b>WELL LOCATION PLAT</b> SCALE: 1"=1000' DATE: 02/27/2012	EXHIBIT "G" SHEET 1 OF 2

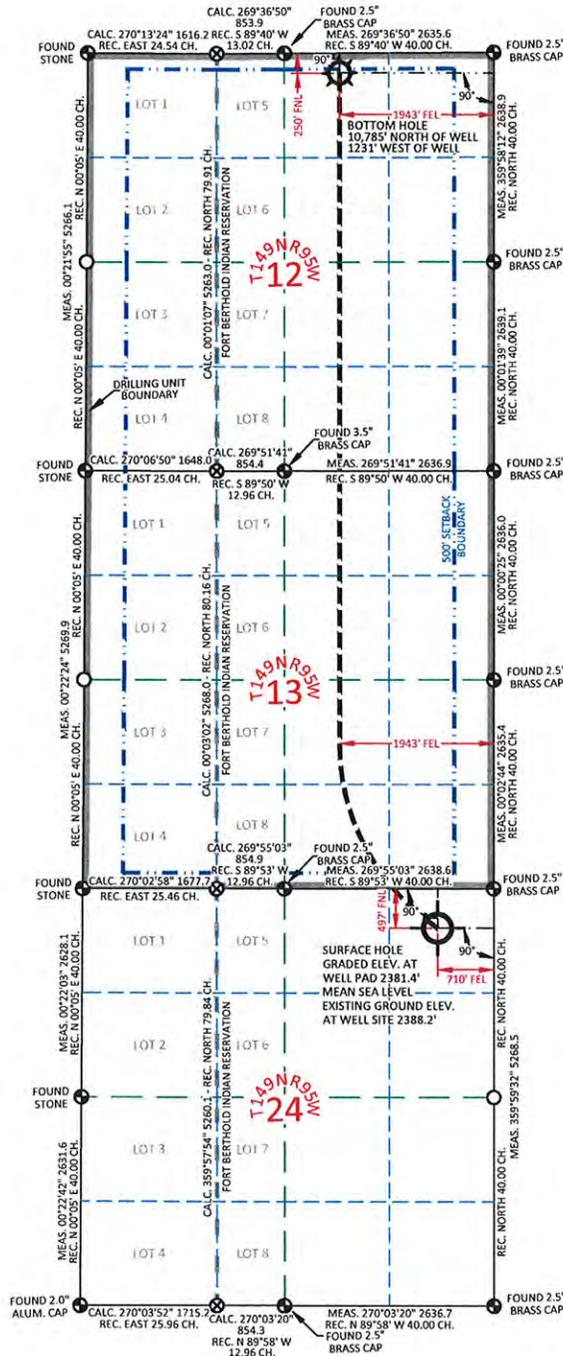
# WELL LOCATION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HC  
 710 FEET FROM THE EAST LINE AND 497 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 1943 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'57.92"  
 Long. 102°46'25.66"W  
 Lat. 47.716087°  
 Long. 102.773792°W  
 Lat. 47°42'57.87"  
 Long. 102°46'23.96"W  
 Lat. 47.716074°  
 Long. 102.773323°W  
 UTM ZONE 13N  
 N:17345524.57  
 E:2188351.05

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.34"  
 Long. 102°46'43.67"W  
 Lat. 47.745649°  
 Long. 102.778797°W  
 Lat. 47°44'44.29"  
 Long. 102°46'41.97"W  
 Lat. 47.745635°  
 Long. 102.778326°W  
 UTM ZONE 13N  
 N:17356267.50  
 E:2186810.52



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Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPLUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcssn.

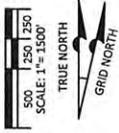
Vertical Datum used is of NAVD 88.  
 Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
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<p><b>WILLIAM H. SMITH &amp; ASSOCIATES P.C.</b>                  SURVEYING CONSULTANTS                  500 EAST SECOND NORTH                  GREEN RIVER, WY                  PHONE: 307-875-3638                  307-875-3639                  WWW.WHSNHDPC.COM</p>	<p><b>CONFIDENTIALITY NOTES:</b>                  The information contained in this plat is legally privileged and confidential information intended only for the use of the recipients. If you are not the intended recipient, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li> FOUND MONUMENT</li> <li> MONUMENT SEARCHED FOR NOT FOUND</li> <li> SURFACE HOLE LOCATION</li> <li> BOTTOM HOLE LOCATION</li> </ul>	<p><b>LOCATION OF PLATTED WELL</b>                  NE1/4 NE1/4, SECTION 24,                  T 149 N, R 95 W, 5TH P.M.,                  MCKENZIE COUNTY,                  NORTH DAKOTA</p>	<p><b>DAKOTA-3 E&amp;P COMPANY LLC</b></p>	
				<p><b>WELL LOCATION PLAT</b></p>	
<p>DRAWN BY: CED                  PROJECT NO: N/A                  REVISIONS:</p>	<p>CHECKED BY: WHD                  JOB NO: 2011500</p>			<p>DATE: 02/27/2012</p>	<p>SHEET 1 OF 2</p>

# HORIZONTAL SECTION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HC  
 710 FEET FROM THE EAST LINE AND 497 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 1943 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



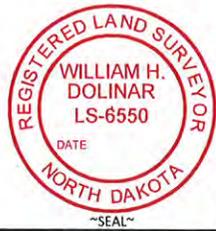
**SURFACE HOLE LOCATION**  
 Lat. 47°42'57.92"  
 Long. 102°46'25.66"W  
 Lat. 47.716087°  
 Long. 102.773792°W  
 Lat. 47°42'57.87"  
 Long. 102°46'23.96"W  
 Lat. 47.716074°  
 Long. 102.773323°W  
 UTM ZONE 13N  
 N:17345524.57  
 E:2188351.05

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.34"  
 Long. 102°46'43.67"W  
 Lat. 47.745649°  
 Long. 102.778797°W  
 Lat. 47°44'44.29"  
 Long. 102°46'41.97"W  
 Lat. 47.745635°  
 Long. 102.778326°W  
 UTM ZONE 13N  
 N:17356267.50  
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 Vertical Datum used is of NAVD 88.  
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 Location shown here on is not an "ASBUILT" location.



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 SURVEYING CONSULTANTS  
 100 EAST SECOND NORTH GREEN RIVER, WY 82901  
 PHONE: 307-875-3638  
 WWW.WHSMITHPC.COM  
 307-875-3639

DRAWN BY: CED  
 PROJECT NO: N/A  
 REVISIONS:

CHECKED BY: WHD  
 JOB NO: 2011500

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**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH PM.  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**HORIZONTAL SECTION PLAT**

SCALE: 1"=1000'  
 DATE: 02/27/2012

EXHIBIT "A"  
 SHEET 2 OF 2

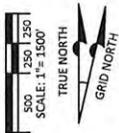
# WELL LOCATION PLAT

DAKOTA-3 E&P COMPANY LLC  
OMAHA WOMAN 13-12HD

696 FEET FROM THE EAST LINE AND 747 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
SECTION 24, T 149 N, R 95 W, 5TH P.M.

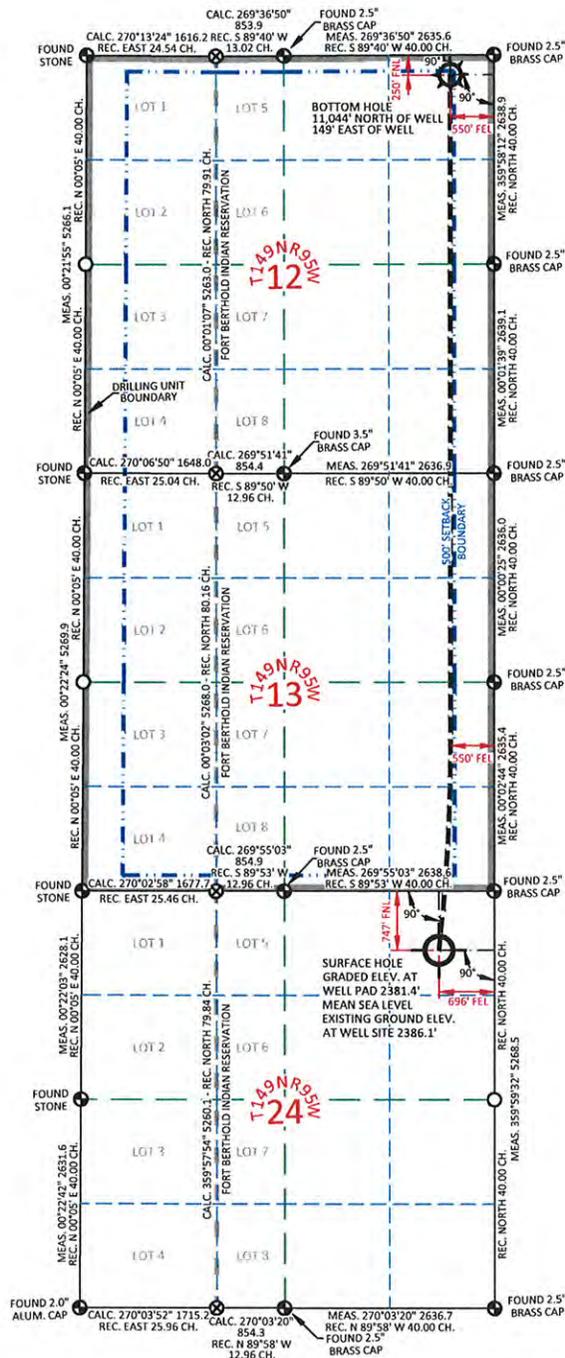
550 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
SECTION 12, T 149 N, R 95 W, 5TH P.M.

MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
Lat. 47°42'55.45"  
Long. 102°46'25.46"W  
Lat. 47.7154033  
Long. 102.7737399  
Lat. 47°42'55.40"  
Long. 102°46'23.77"W  
Lat. 47.7153899  
Long. 102.7732688  
UTM ZONE 13N  
N:17345275.43  
E:2188371.64

**BOTTOM HOLE LOCATION**  
Lat. 47°44'44.43"  
Long. 102°46'23.29"W  
Lat. 47.745674  
Long. 102.773136  
Lat. 47°44'44.38"  
Long. 102°46'21.59"W  
Lat. 47.745661  
Long. 102.772665  
UTM ZONE 13N  
N:17356316.76  
E:2188202.51



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SURVEYING CONSULTANTS  
350 EAST SECOND NORTH GREEN RIVER, WY 82901  
PHONE: 307-875-3638 307-875-3639  
WWW.WHSMITHPC.COM

DRAWN BY: CED  
PROJECT NO: N/A  
REVISIONS:

CHECKED BY: WHD  
JOB NO: 2011500

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**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
NE1/4 NE1/4, SECTION 24, T 149 N, R 95 W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

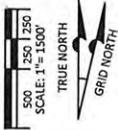
**WELL LOCATION PLAT**

SCALE: 1"=1000'  
DATE: 02/27/2012

EXHIBIT "B"  
SHEET 1 OF 2

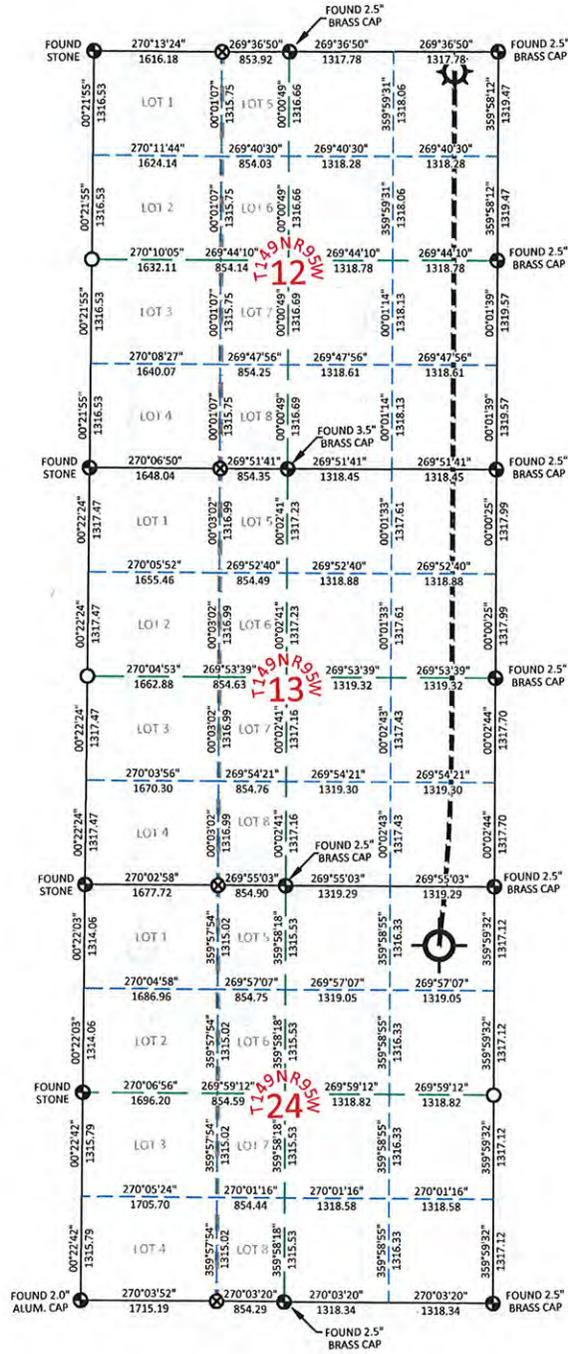
# HORIZONTAL SECTION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HD  
 696 FEET FROM THE EAST LINE AND 747 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 550 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'55.45"  
 Long. 102°46'25.46"W  
 Lat. 47°15'40.3"  
 Long. 102.773739"W  
 Lat. 47°42'55.40"  
 Long. 102°46'23.77"W  
 Lat. 47.715389°  
 Long. 102.773268"W  
 UTM ZONE 13N  
 N:17345275.43  
 E:2188371.64

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.43"  
 Long. 102°46'23.29"W  
 Lat. 47.745674°  
 Long. 102.773136"W  
 Lat. 47°44'44.38"  
 Long. 102°46'21.59"W  
 Lat. 47.745661°  
 Long. 102.772665"W  
 UTM ZONE 13N  
 N:17356316.76  
 E:2188202.51



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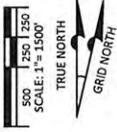
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<p><b>WILLIAM H. SMITH &amp; ASSOCIATES P.C. SURVEYING CONSULTANTS</b>                  500 EAST SECOND NORTH PHONE: 307-875-3618                  GREEN RIVER, WY 82901 307-875-3639                  www.williamhsurvey.com</p>	<p><b>CONFIDENTIALITY NOTES:</b>                  The information contained in this plat is legally privileged and confidential information intended only for the use of the recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.</p>	<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>● FOUND MONUMENT</li> <li>○ MONUMENT SEARCHED FOR NOT FOUND</li> <li>⊙ SURFACE HOLE LOCATION</li> <li>⊙ BOTTOM HOLE LOCATION</li> </ul>	<p><b>LOCATION OF PLATTED WELL</b>                  NE1/4 NE1/4, SECTION 24,                  T 149 N, R 95 W, 5TH P.M.                  MCKENZIE COUNTY,                  NORTH DAKOTA</p>	<p><b>DAKOTA-3 E&amp;P COMPANY LLC</b></p>
				<p><b>HORIZONTAL SECTION PLAT</b></p>
<p>SCALE: 1"=1000'</p>	<p>EXHIBIT "B"</p>	<p>DATE: 02/27/2012</p>	<p>SHEET 2 OF 2</p>	<p>~SEAL~</p>

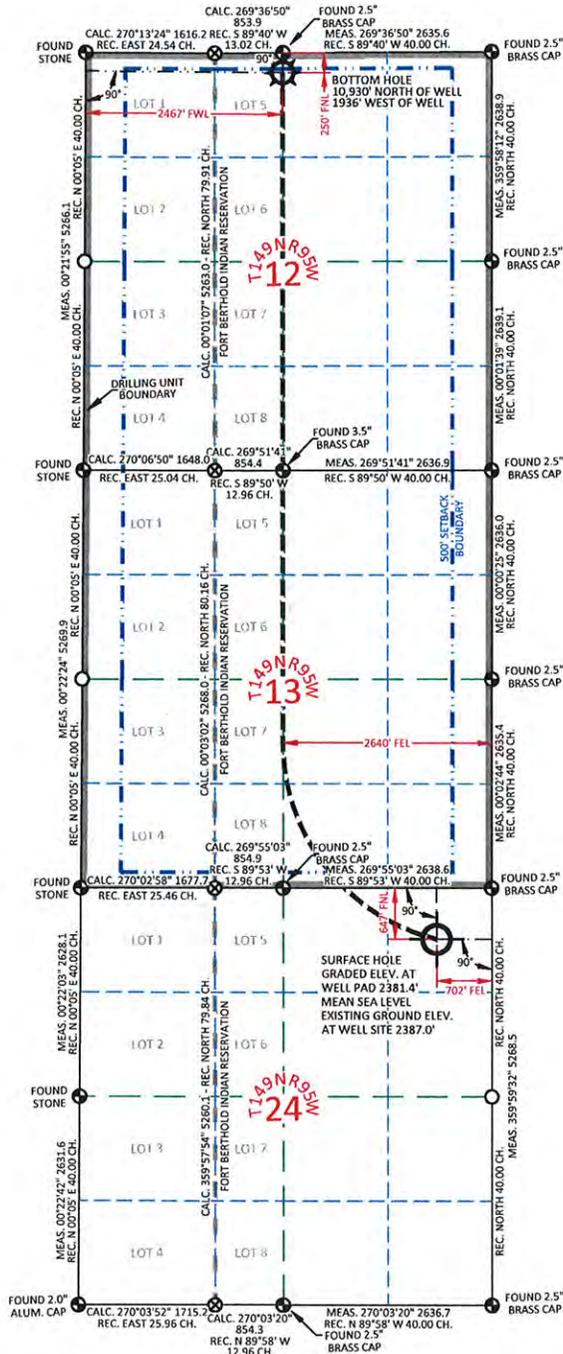
# WELL LOCATION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HY  
 702 FEET FROM THE EAST LINE AND 647 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 2467 FEET FROM THE WEST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'56.44"  
 Long. 102°46'25.54"W  
 Lat. 47.715677°  
 Long. 102.773760°W  
 Lat. 47°42'56.39"  
 Long. 102°46'23.84"W  
 Lat. 47.715663°  
 Long. 102.773290°W  
 UTM ZONE 13N  
 N:17345375.09  
 E:2188363.41

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.29"  
 Long. 102°46'53.87"W  
 Lat. 47.745635°  
 Long. 102.781629°W  
 Lat. 47°44'44.24"  
 Long. 102°46'52.17"W  
 Lat. 47.745621°  
 Long. 102.781159°W  
 UTM ZONE 13N  
 N:17356242.43  
 E:2186114.05



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 500 EAST SECOND NORTH  
 GREEN RIVER, WY 82901  
 PHONE: 307-875-3638  
 307-875-3639  
 www.whsnllpc.com

DRAWN BY: CED  
 PROJECT NO: N/A  
 REVISIONS:

CHECKED BY: WHD  
 JOB NO: 2011500

**CONFIDENTIALITY NOTES:**  
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**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH PM,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

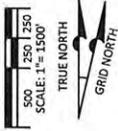
**WELL LOCATION PLAT**

SCALE: 1"=1000'  
 DATE: 02/27/2012

EXHIBIT "C"  
 SHEET 1 OF 2

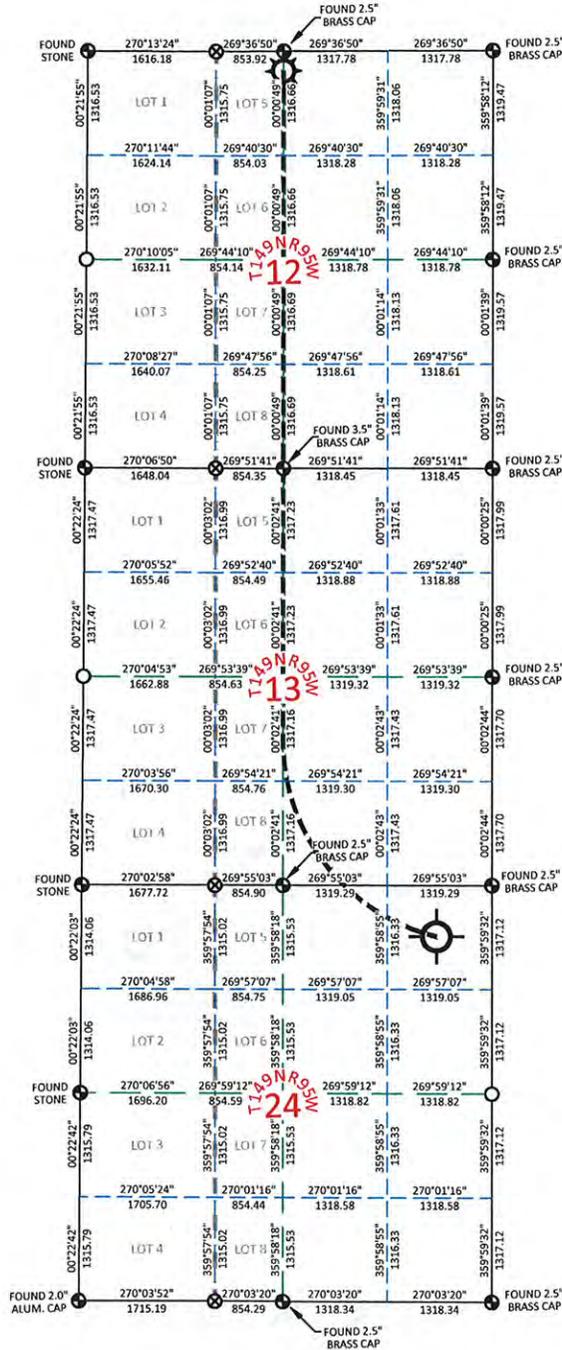
# HORIZONTAL SECTION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HY  
 702 FEET FROM THE EAST LINE AND 647 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 2467 FEET FROM THE WEST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'56.44"  
 Long. 102°46'25.54"W  
 Lat. 47.715677°  
 Long. 102.773760°W  
 Lat. 47°42'56.39"  
 Long. 102°46'23.84"W  
 Lat. 47.715663°  
 Long. 102.773290°W  
 UTM ZONE 13N  
 N:17345375.09  
 E:2188363.41

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.29"  
 Long. 102°46'53.87"W  
 Lat. 47.745635°  
 Long. 102.781629°W  
 Lat. 47°44'44.24"  
 Long. 102°46'52.17"W  
 Lat. 47.745621°  
 Long. 102.781159°W  
 UTM ZONE 13N  
 N:17356242.43  
 E:2186114.05



I, William H. Dolinar, Professional Land Surveyor, ND. RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Location and Elevation of platted well being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Location being located within Lot 5, of Section 12, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcson.  
 Vertical Datum used is of NAVD 88.

Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
 Location shown here is not an "ASBUILT" location.



**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 650 EAST SECOND NORTH GREEN RIVER, WY  
 PHONE: 307-875-3618 307-875-3639  
 www.williamhs.com

DRAWN BY: CED CHECKED BY: WHD  
 PROJECT NO: N/A JOB NO: 2011500  
 REVISIONS:

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**LEGEND**

- ⊙ FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- ⊙ SURFACE HOLE LOCATION
- ⊙ BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

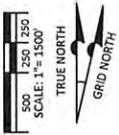
**DAKOTA-3 E&P COMPANY LLC**

**HORIZONTAL SECTION PLAT**

SCALE: 1"=1000' EXHIBIT "C"  
 DATE: 02/27/2012 SHEET 2 OF 2

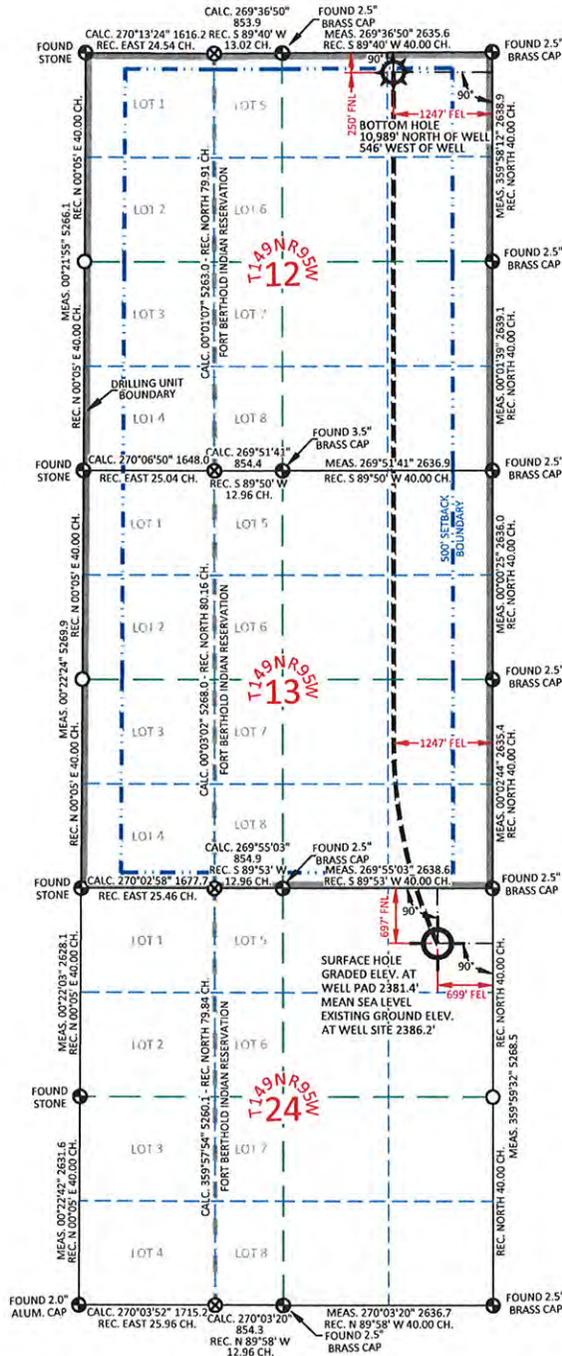
# WELL LOCATION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HZ  
 699 FEET FROM THE EAST LINE AND 697 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 1247 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'55.94"  
 Long. 102°46'25.50"W  
 Lat. 47.715540°  
 Long. 102.773749°W  
 Lat. 47°42'55.89"  
 Long. 102°46'23.81"W  
 Lat. 47.715526°  
 Long. 102.773279°W  
 UTM ZONE 13N  
 N:17345325.25  
 E:2188367.53

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.38"  
 Long. 102°46'33.49"W  
 Lat. 47.745661°  
 Long. 102.775968°W  
 Lat. 47°44'44.33"  
 Long. 102°46'31.79°W  
 Lat. 47.745648°  
 Long. 102.775497°W  
 UTM ZONE 13N  
 N:17356291.98  
 E:2187506.02



I, William H. Dolinar, Professional Land Surveyor, ND, RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Location and Elevation of platted well being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Location being located within the NE1/4 NE1/4, of Section 12, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West Vertical Datum used is of NAVD 88.

Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
 Location shown here on is not an "ASBUILT" location.



**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 150 EAST SECOND NORTH GREEN RIVER, WY 82901  
 PHONE: 307-875-3638 307-875-3639  
 www.wshsmithpc.com

DRAWN BY: CED CHECKED BY: WHD  
 PROJECT NO: N/A JOB NO: 2011500  
 REVISIONS:

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**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

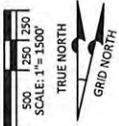
**WELL LOCATION PLAT**

SCALE: 3"=1000'  
 DATE: 02/27/2012

EXHIBIT "D"  
 SHEET 1 OF 2

# HORIZONTAL SECTION PLAT

DAKOTA-3 E&P COMPANY LLC  
 OMAHA WOMAN 13-12HZ  
 699 FEET FROM THE EAST LINE AND 697 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION)  
 SECTION 24, T 149 N, R 95 W, 5TH P.M.  
 1247 FEET FROM THE EAST LINE AND 250 FEET FROM THE NORTH LINE (BOTTOM HOLE LOCATION)  
 SECTION 12, T 149 N, R 95 W, 5TH P.M.  
 MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'55.94"  
 Long. 102°46'25.50"W  
 Lat. 47°47'15.540"  
 Long. 102°46'23.81"W  
 Lat. 47°42'55.89"  
 Long. 102°46'23.81"W  
 Lat. 47°47'15.526"  
 Long. 102°46'23.79"W  
 UTM ZONE 13N  
 N:17345325.25  
 E:2188367.53

**BOTTOM HOLE LOCATION**  
 Lat. 47°44'44.38"  
 Long. 102°46'33.49"W  
 Lat. 47°44'56.61"  
 Long. 102°46'31.79"W  
 Lat. 47°44'56.648"  
 Long. 102°46'31.79"W  
 UTM ZONE 13N  
 N:17356291.98  
 E:2187506.02



I, William H. Dolinar, Professional Land Surveyor, ND, RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Location and Elevation of plated well being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Location being located within the NE1/4 NE1/4, of Section 12, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcorss.  
 Vertical Datum used is of NAVD 88.  
 Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
 Location shown here on is not an "ASBUILT" location.

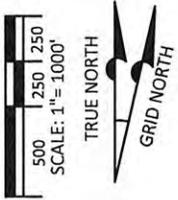


 WILLIAM H. SMITH & ASSOCIATES P.C. SURVEYING CONSULTANTS 100 EAST SECOND NORTH GREEN RIVER, WY 82901 PHONE: 307-875-3638 307-875-3639 WWW.WHSMITHPC.COM	<b>CONFIDENTIALITY NOTES:</b> The information contained in this plat is legally privileged and confidential information intended only for the use of the recipients. If you are not the intended recipient, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.	<b>LEGEND</b> FOUND MONUMENT MONUMENT SEARCHED FOR NOT FOUND SURFACE HOLE LOCATION BOTTOM HOLE LOCATION	LOCATION OF PLATTED WELL NE1/4 NE1/4, SECTION 24, T 149 N, R 95 W, 5TH PM. MCKENZIE COUNTY, NORTH DAKOTA	DAKOTA-3 E&P COMPANY LLC
				HORIZONTAL SECTION PLAT SCALE: 1"=1000' DATE: 02/27/2012

# WELL LOCATION PLAT

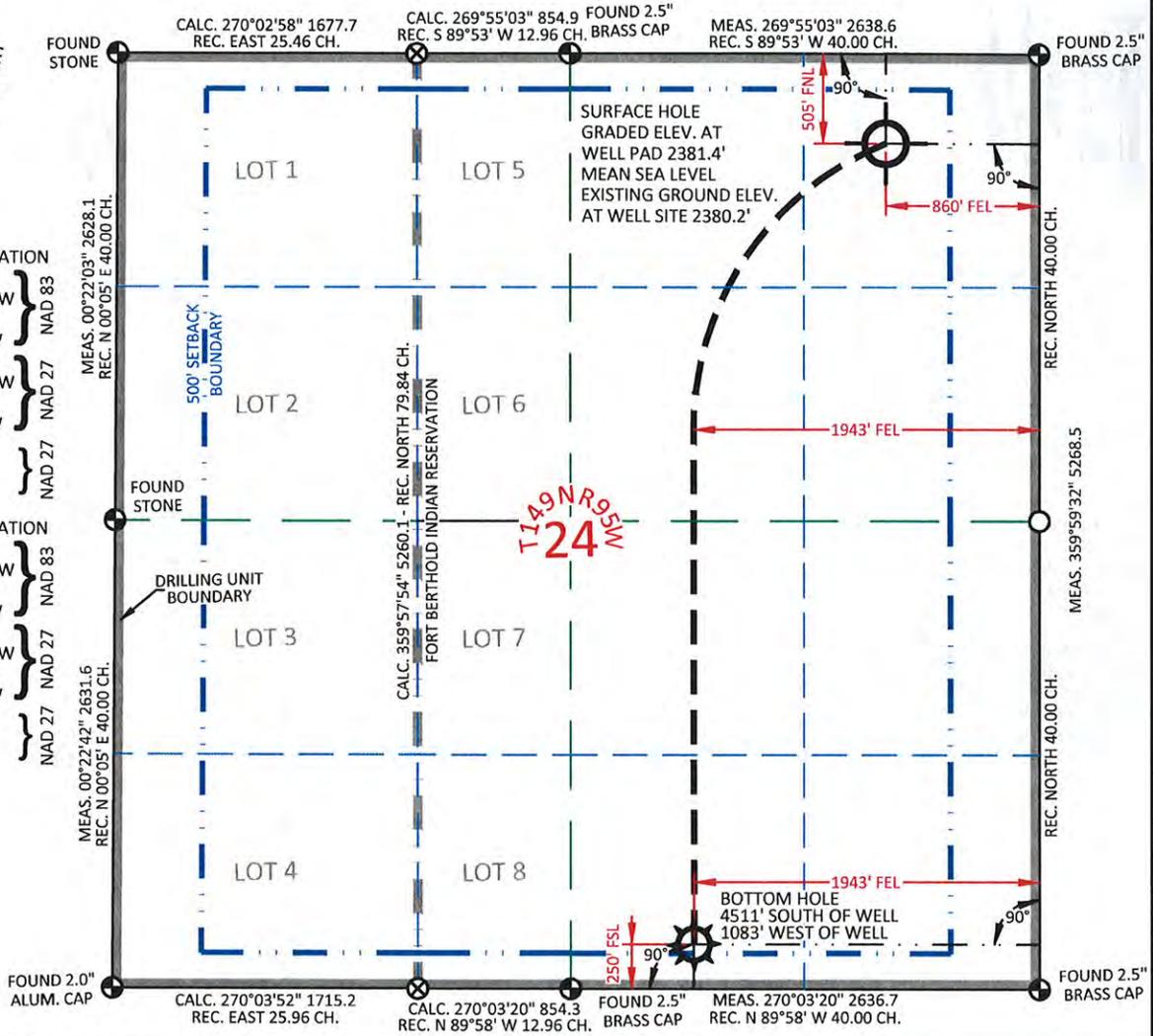
DAKOTA-3 E&P COMPANY LLC  
OMAHA WOMAN 24HC

860 FEET FROM THE EAST LINE AND 505 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
1943 FEET FROM THE EAST LINE AND 250 FEET FROM THE SOUTH LINE (BOTTOM HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
MCKENZIE COUNTY, NORTH DAKOTA



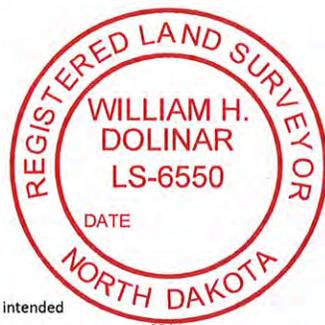
**SURFACE HOLE LOCATION**  
 Lat. 47°42'57.84"  
 Long. 102°46'27.85"W  
 Lat. 47.716065°  
 Long. 102.774402°W  
 Lat. 47°42'57.79"  
 Long. 102°46'26.15"W  
 Lat. 47.716052°  
 Long. 102.773931°W  
 UTM ZONE 13N  
 N:17345512.20  
 E:2188201.55

**BOTTOM HOLE LOCATION**  
 Lat. 47°42'13.33"  
 Long. 102°46'43.67"W  
 Lat. 47.703702°  
 Long. 102.778798°W  
 Lat. 47°42'13.28"  
 Long. 102°46'41.98"W  
 Lat. 47.703688°  
 Long. 102.778328°W  
 UTM ZONE 13N  
 N:17340973.20  
 E:2187249.12



I, William H. Dolinar, Professional Land Surveyor, ND. RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Location and Elevation of platted well being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Location being located within the SW1/4 SE1/4, of Section 24, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

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 Vertical Datum used is of NAVD 88.  
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 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
 Location shown here on is not an "ASBUILT" location.



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**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH    PHONE: 307-875-3638  
 GREEN RIVER, WY    307-875-3639  
[www.whsmithpc.com](http://www.whsmithpc.com)

DRAWN BY: CED	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH PM.  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

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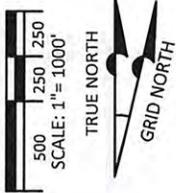
**WELL LOCATION PLAT**

SCALE: 1"=1000'	EXHIBIT "E"
DATE: 02/27/2012	SHEET 1 OF 2

**WELL LOCATION PLAT**

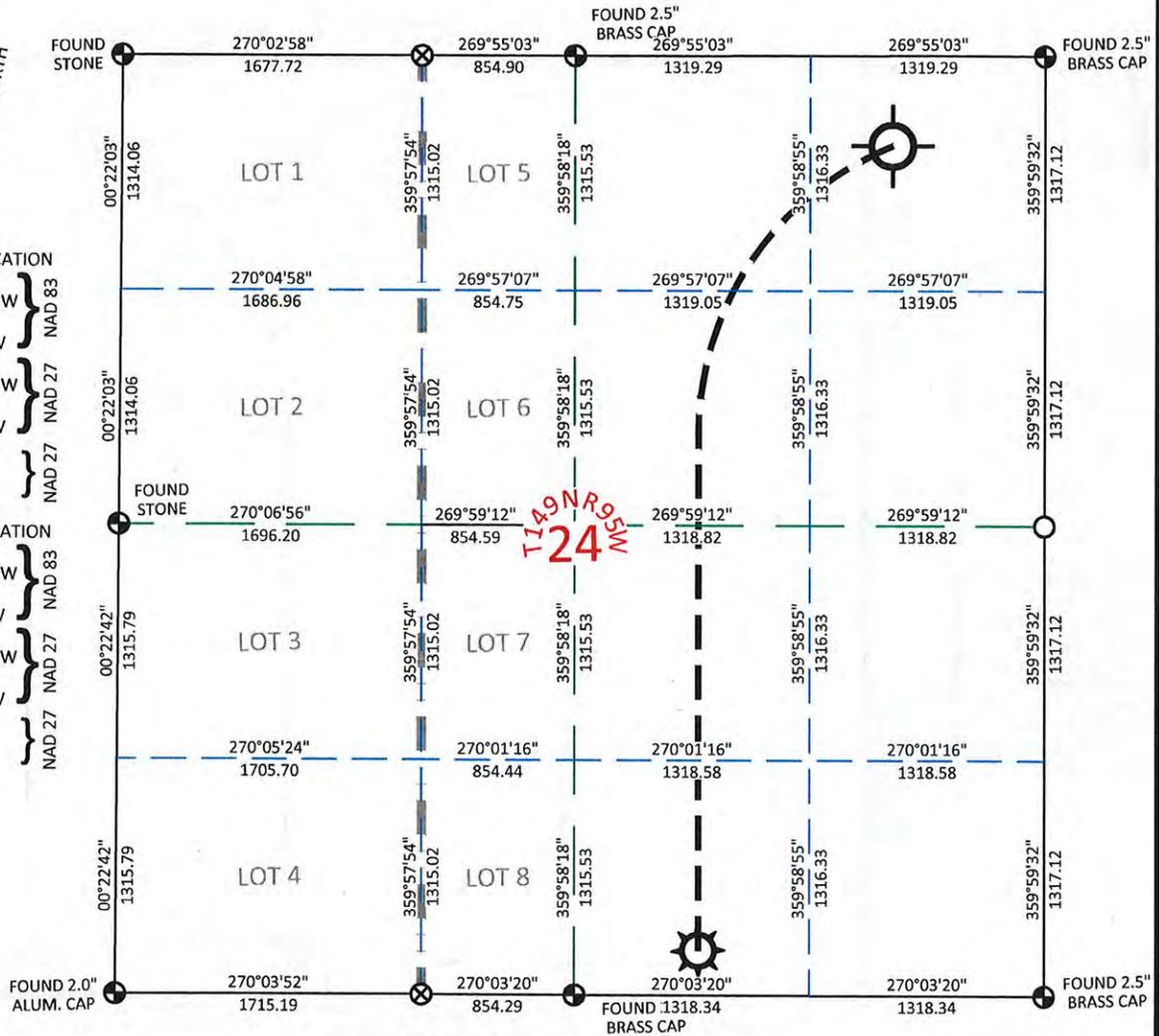
DAKOTA-3 E&P COMPANY LLC  
OMAHA WOMAN 24HC

860 FEET FROM THE EAST LINE AND 505 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
1943 FEET FROM THE EAST LINE AND 250 FEET FROM THE SOUTH LINE (BOTTOM HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
Lat. 47°42'57.84"  
Long. 102°46'27.85"W }  
Lat. 47.716065° } NAD 83  
Long. 102.774402°W }  
Lat. 47°42'57.79" }  
Long. 102°46'26.15"W }  
Lat. 47.716052° } NAD 27  
Long. 102.773931°W }  
UTM ZONE 13N }  
N: 17345512.20 }  
E: 2188201.55 }

**BOTTOM HOLE LOCATION**  
Lat. 47°42'13.33"  
Long. 102°46'43.67"W }  
Lat. 47.703702° } NAD 83  
Long. 102.778798°W }  
Lat. 47°42'13.28" }  
Long. 102°46'41.98"W }  
Lat. 47.703688° } NAD 27  
Long. 102.778328°W }  
UTM ZONE 13N }  
N: 17340973.20 }  
E: 2187249.12 }

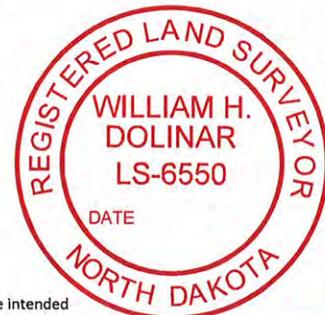


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Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcon.  
Vertical Datum used is of NAVD 88.  
Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
Distances shown are Ground Distances using a combined scale factor of 1.000151275  
Location shown here on is not an "ASBUILT" location.

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**WILLIAM H. SMITH & ASSOCIATES P.C.**  
SURVEYING CONSULTANTS  
1550 EAST SECOND NORTH PHONE: 307-875-3638  
GREEN RIVER, WY 307-875-3639  
www.wsmithpcc.com

DRAWN BY: CED	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
NE1/4 NE1/4, SECTION 24,  
T 149 N, R 95 W, 5TH PM.  
MCKENZIE COUNTY,  
NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

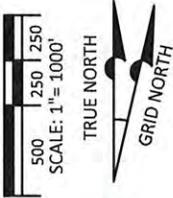
**WELL LOCATION PLAT**

SCALE: 1"=1000'	EXHIBIT "E"
DATE: 02/27/2012	SHEET 2 OF 2

# WELL LOCATION PLAT

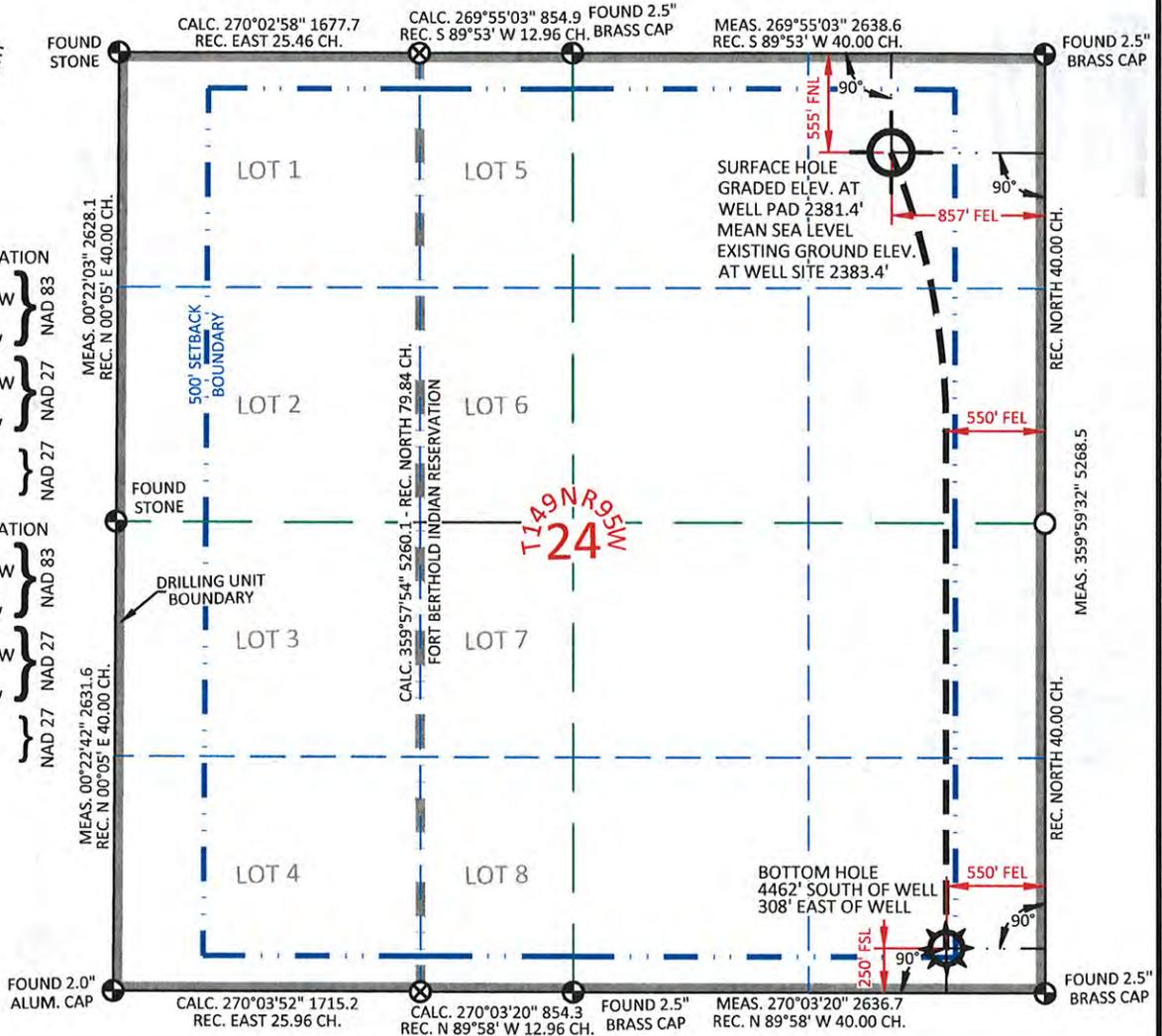
DAKOTA-3 E&P COMPANY LLC  
OMAHA WOMAN 24HD

857 FEET FROM THE EAST LINE AND 555 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
550 FEET FROM THE EAST LINE AND 250 FEET FROM THE SOUTH LINE (BOTTOM HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.  
MCKENZIE COUNTY, NORTH DAKOTA



**SURFACE HOLE LOCATION**  
 Lat. 47°42'57.34"  
 Long. 102°46'27.81"W  
 Lat. 47.715928°  
 Long. 102.774391°W  
 Lat. 47°42'57.29"  
 Long. 102°46'26.11"W  
 Lat. 47.715915°  
 Long. 102.773920°W  
 UTM ZONE 13N  
 N:17345462.37  
 E:2188205.67

**BOTTOM HOLE LOCATION**  
 Lat. 47°42'13.31"  
 Long. 102°46'23.31"W  
 Lat. 47.703698°  
 Long. 102.773141°W  
 Lat. 47°42'13.26"  
 Long. 102°46'21.62"W  
 Lat. 47.703684°  
 Long. 102.772671°W  
 UTM ZONE 13N  
 N:17341011.98  
 E:2188641.41



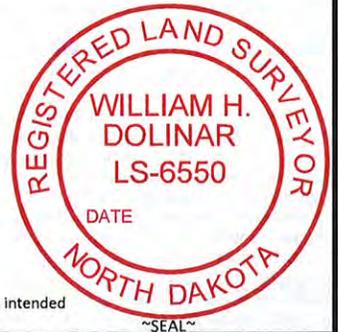
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Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpscon.

Vertical Datum used is of NAVD 88.  
 Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.  
 Distances shown are Ground Distances using a combined scale factor of 1.000151275  
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**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH GREEN RIVER, WY  
 PHONE: 307-875-3638 307-875-3639  
 www.whsmithpc.com

DRAWN BY: CED CHECKED BY: WHD  
 PROJECT NO: N/A JOB NO: 2011500

**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED
- MONUMENT NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH PM.  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**WELL LOCATION PLAT**

SCALE: 1"=1000' EXHIBIT "F"  
 DATE: 02/27/2012 SHEET 1 OF 2

### WELL LOCATION PLAT

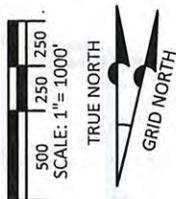
DAKOTA-3 E&P COMPANY LLC

OMAHA WOMAN 24HD

857 FEET FROM THE EAST LINE AND 555 FEET FROM THE NORTH LINE (SURFACE HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.

550 FEET FROM THE EAST LINE AND 250 FEET FROM THE SOUTH LINE (BOTTOM HOLE LOCATION) SECTION 24, T 149 N, R 95 W., 5TH P.M.

MCKENZIE COUNTY, NORTH DAKOTA

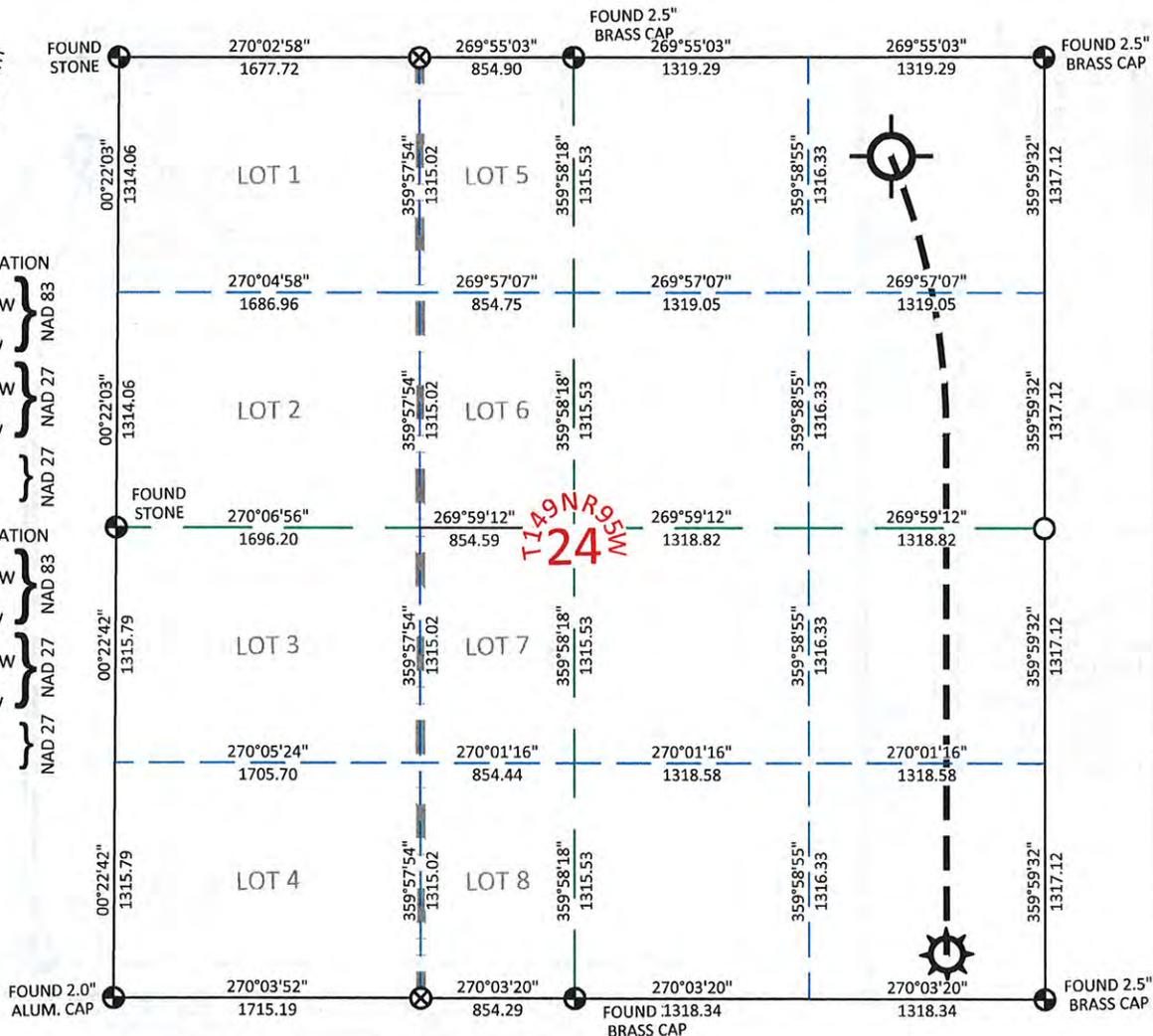


**SURFACE HOLE LOCATION**

Lat. 47°42'57.34"  
 Long. 102°46'27.81"W  
 Lat. 47.715928°  
 Long. 102.774391°W  
 Lat. 47°42'57.29"  
 Long. 102°46'26.11"W  
 Lat. 47.715915°  
 Long. 102.773920°W  
 UTM ZONE 13N  
 N: 17345462.37  
 E: 2188205.67

**BOTTOM HOLE LOCATION**

Lat. 47°42'13.31"  
 Long. 102°46'23.31"W  
 Lat. 47.703698°  
 Long. 102.773141°W  
 Lat. 47°42'13.26"  
 Long. 102°46'21.62"W  
 Lat. 47.703684°  
 Long. 102.772671°W  
 UTM ZONE 13N  
 N: 17341011.98  
 E: 2188641.41



I, William H. Dolinar, Professional Land Surveyor, ND, RLS # 6550 hereby certify that (in accordance with a request from Josh Walker with Dakota-3 E&P Company LLC) I and or personnel under my direction made a survey on the 11th day of February 2012, for the Surface Hole Location and Elevation of platted well being located within the NE1/4 NE1/4, of Section 24, T149N R95W and the Bottom Hole Location being located within the SE1/4 SE1/4, of Section 24, T149N, R95W, both being of the 5th P.M., McKenzie County, State of North Dakota.

Notes: All Azimuths are based on the North line of the Northeast quarter of Section 24, T149N R95W of the 5th P.M., being an Azimuth of 269°55'03" using GPS observations, occupying a WHS control point (5/8" rebar) and having the Location and Elevation derived from an OPUS Solution. Azimuths shown have been rotated 1°41'23.49656" West from SPC Grid bearings to Geodetic North, based on convergence angle provided by a conversion using Corpcon.

Vertical Datum used is of NAVD 88.

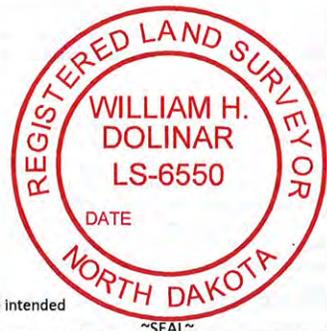
Control Point is located 129°20'00" 4090.65 ft. from the Northeast Corner of Section 24, T149N R95W of the 5th P.M.

Distances shown are Ground Distances using a combined scale factor of 1.000151275

Location shown here on is not an "ASBUILT" location.

**CONFIDENTIALITY NOTES:**

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**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH GREEN RIVER, WY  
 PHONE: 307-875-3638 307-875-3639  
 www.whsmithpc.com

DRAWN BY: CED CHECKED BY: WHD  
 PROJECT NO: N/A JOB NO: 2011500

REVISIONS:

**LEGEND**

- FOUND MONUMENT
- MONUMENT SEARCHED FOR NOT FOUND
- SURFACE HOLE LOCATION
- BOTTOM HOLE LOCATION

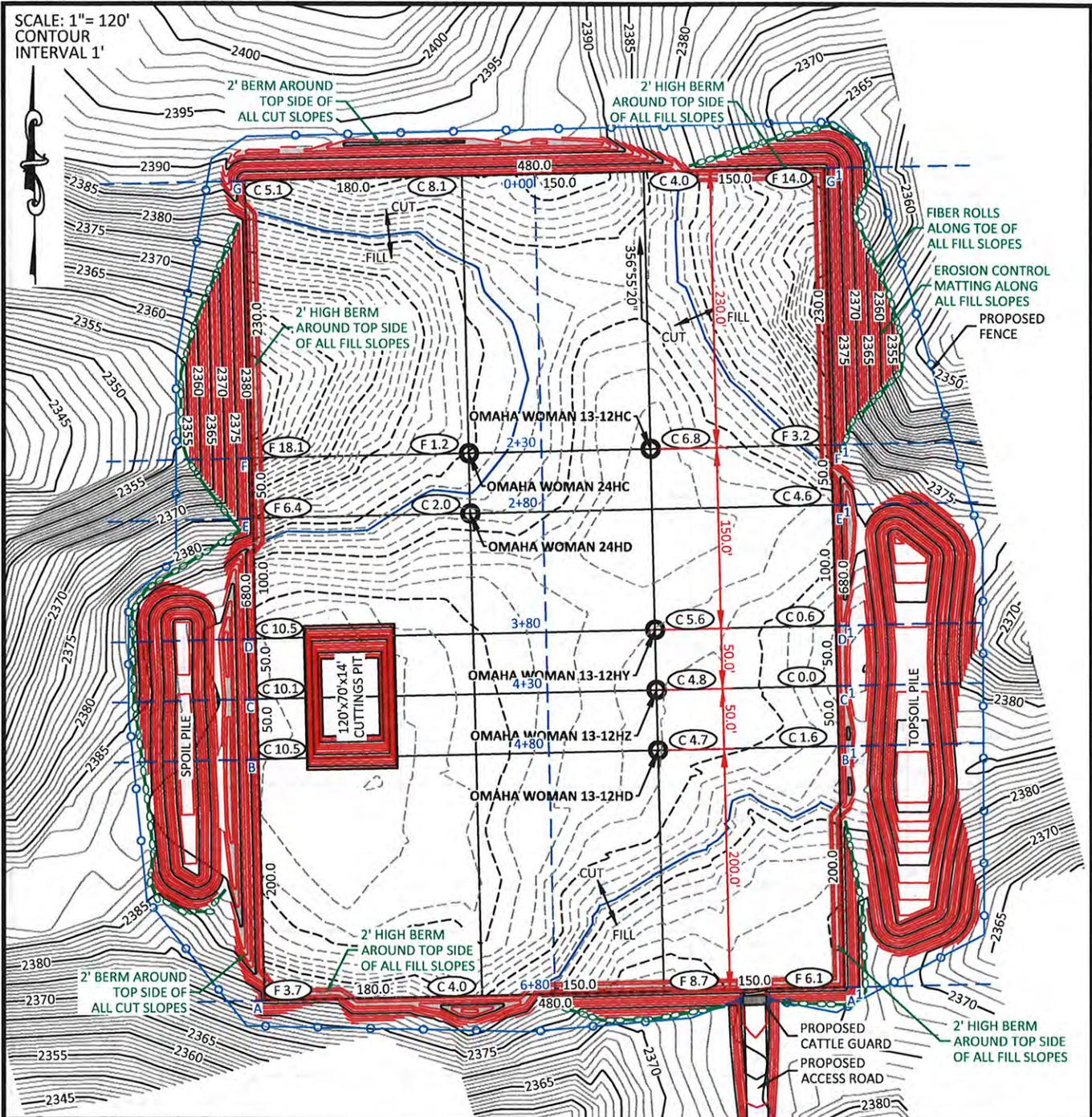
**LOCATION OF PLATTED WELL**  
 NE1/4 NE1/4, SECTION 24,  
 T 149 N, R 95 W, 5TH PM.  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**WELL LOCATION PLAT**

SCALE: 1"=1000' EXHIBIT "F"  
 DATE: 02/27/2012 SHEET 2 OF 2

SCALE: 1" = 120'  
CONTOUR  
INTERVAL 1'



**NOTES:**

- All Fill/Embankment areas shall be compacted to at least 95% of maximum density as determined by ASTM D689 (Standard Proctor).
- Elevation of pad shown on plans are to constructed pad without final gravel padding placement. Depth, volume, and padding material to be determined by operator.
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DAKOTA-3 E&P COMPANY LLC

LOCATION:  
**OMAHA WOMAN 13-12H**  
NE1/4, SEC. 24, T149N, R95W,  
MCKENZIE COUNTY, NORTH DAKOTA



**WILLIAM H. SMITH  
& ASSOCIATES P.C.**  
SURVEYING CONSULTANTS  
550 EAST SECOND NORTH PHONE: 307-875-3638  
GREEN RIVER, WY 307-875-3639  
www.wsmithpc.com

**PAD CONSTRUCTION DATA**

CUT SLOPE:	2:1
FILL SLOPE:	2:1
TOTAL CUT:	58,885 CU. YDS.
TOTAL FILL +30% SHRINK:	45,629 CU. YDS.
TOP SOIL AT 8"	9,490 CU. YDS.
SPOIL	3,766 CU. YDS.
DISTURBED AREA	382,450 SQ. FT.
DISTURBED AREA	8.78 ACRES
FENCED IN AREA	10.95 ACRES

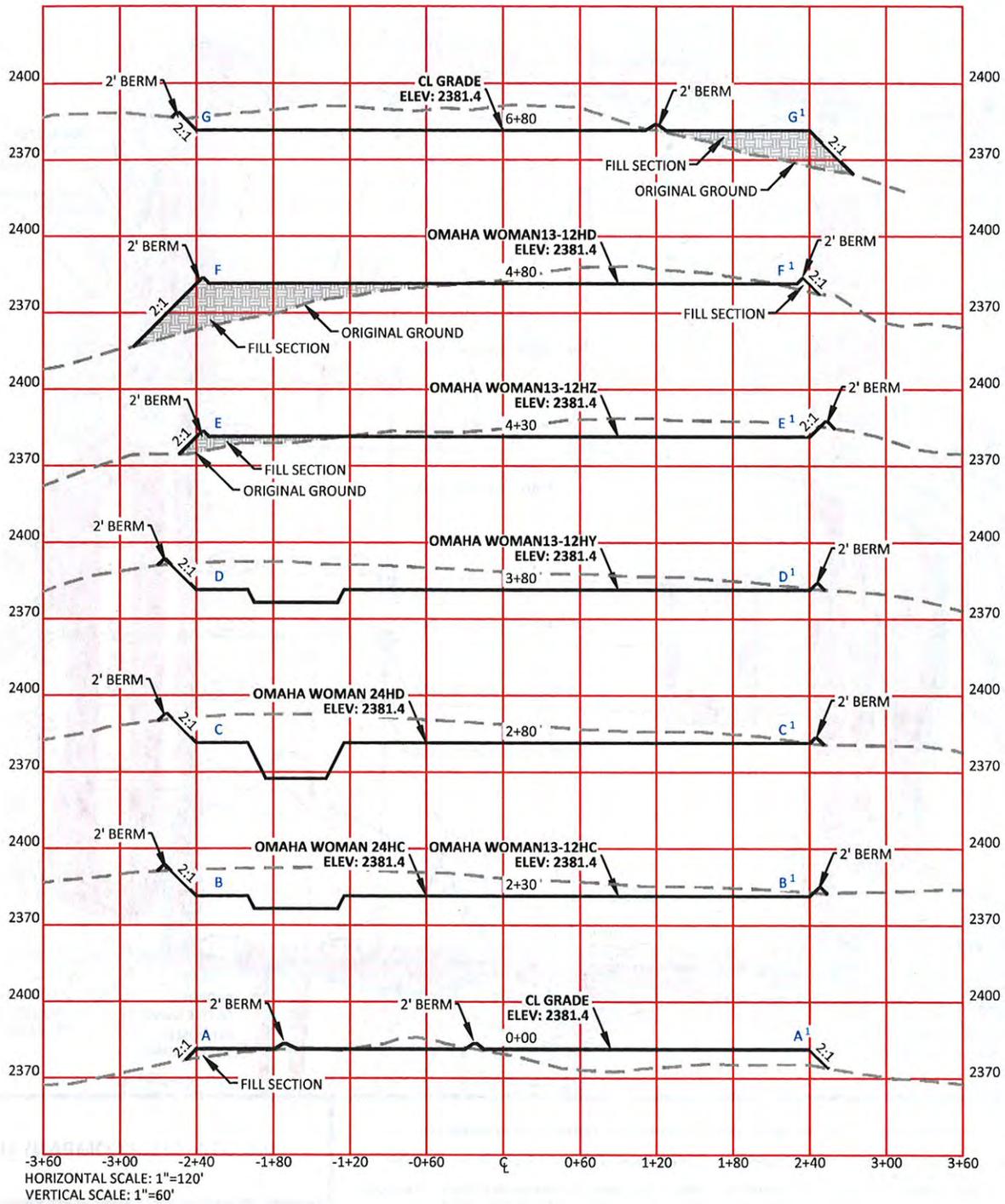
**FOOTAGES**

13-12HC	710' FEL	497' FNL	13-12HZ	699' FEL	697' FNL
13-12HD	696' FEL	747' FNL	24HC	860' FEL	505' FNL
13-12HY	702' FEL	647' FNL	24HD	857' FEL	555' FNL

DRAWN BY: CED	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

SCALE: 1" = 120'  
DATE: 03/06/2012

EXHIBIT "A"  
SHEET 1 OF 5



**WILLIAM H. SMITH  
& ASSOCIATES P.C.**  
SURVEYING CONSULTANTS

950 EAST SECOND NORTH PHONE: 307-875-3638  
GREEN RIVER, WY 307-875-3639  
www.wsmithpc.com

DRAWN BY: CED

CHECKED BY: WHD

PROJECT NO: N/A

JOB NO: 2011500

REVISIONS:

**NOTES:**

- All Fill/Embankment areas shall be compacted to at least 95% of maximum density as determined by ASTM D689 (Standard Proctor).
- Elevation of pad shown on plans are to constructed pad without final gravel padding placement. Depth, volume, and padding material to be determined by operator.
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**LOCATION:  
OMAHA WOMAN  
13-12H**

NE1/4, SEC. 24,  
T149N, R95W,  
MCKENZIE COUNTY,  
NORTH DAKOTA

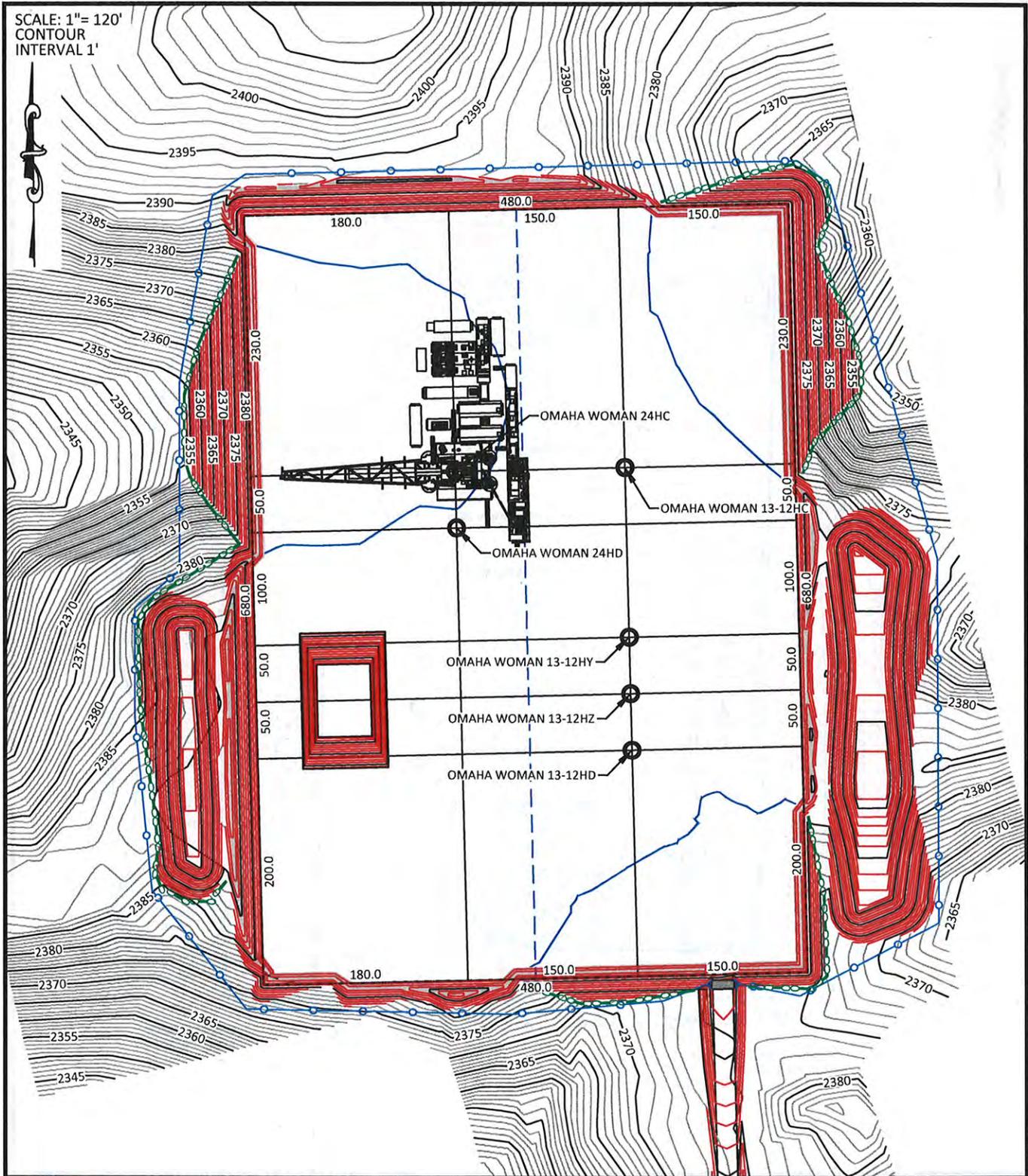
**DAKOTA-3 E&P  
COMPANY LLC**

**CONSTRUCTION LAYOUT  
CROSS SECTIONS**

SCALE: NOTED EXHIBIT "A"

DATE: 03/06/2012 SHEET 2 OF 5

SCALE: 1"= 120'  
CONTOUR  
INTERVAL 1'



**WILLIAM H. SMITH  
& ASSOCIATES P.C.**  
SURVEYING CONSULTANTS  
350 EAST SECOND NORTH    PHONE: 307-875-3638  
GREEN RIVER, WY            307-875-3639  
www.whsmithpc.com

DRAWN BY: CDC	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

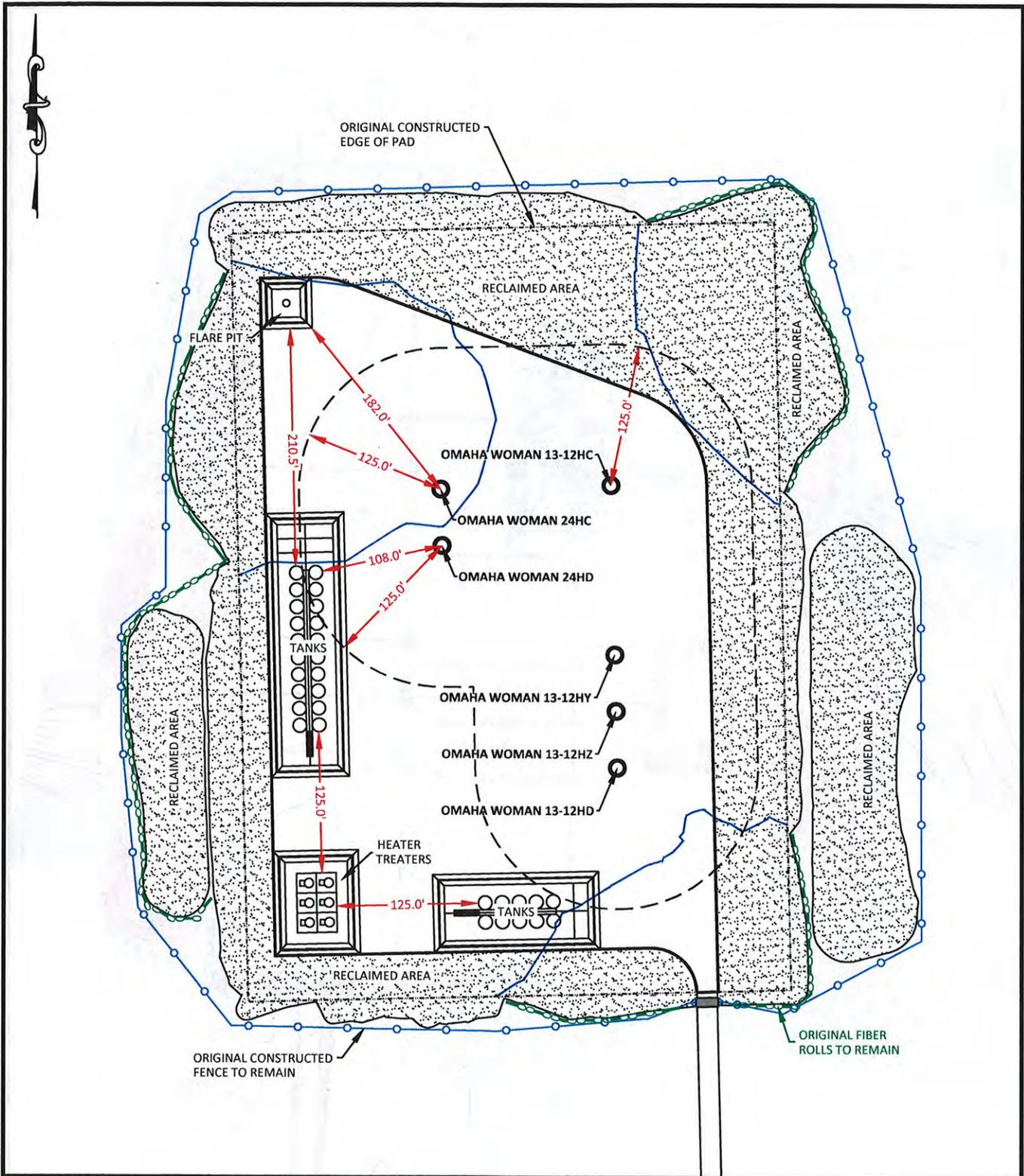
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**LOCATION:**  
**OMAHA  
WOMAN 13-12H**  
NE1/4, SEC. 24,  
T149N, R95W,  
MCKENZIE COUNTY,  
NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**DRILLING FACILITIES**

SCALE: 1"=120'	EXHIBIT "F"
DATE: 03/06/2012	SHEET 3 OF 5



**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH    PHONE: 307-875-3638  
 GREEN RIVER, WY            307-875-3639  
 www.wsmithpc.com

DRAWN BY: CED	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

**LEGEND**

INTERIM RECLAMATION

**DATA**

REMAINING WORKING SURFACE 4.88 ACRES  
 RECLAIMED AREA 4.97 ACRES

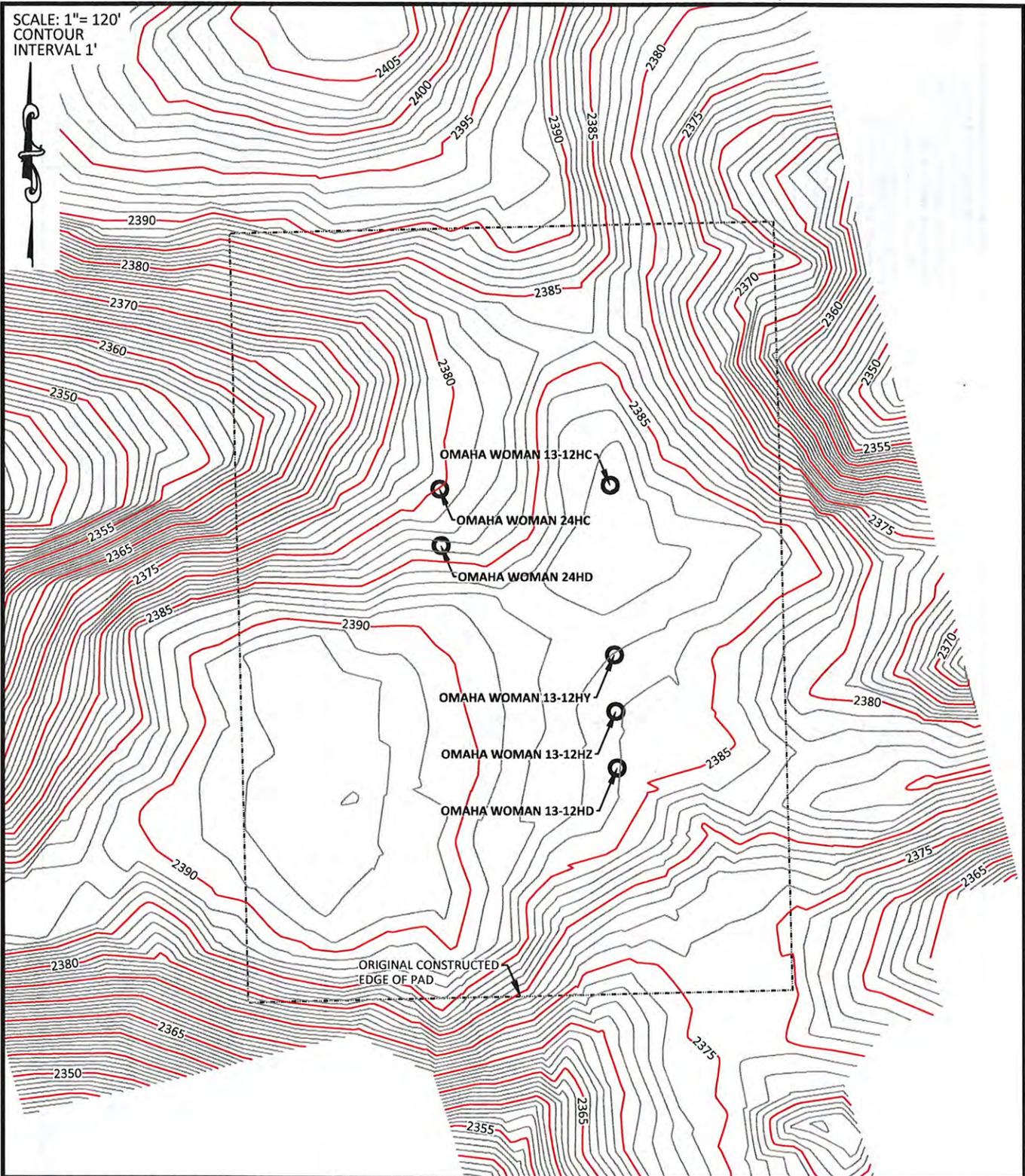
**LOCATION:**  
**OMAHA WOMAN 13-12H**  
 NE1/4, SEC. 24,  
 T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**PRODUCTION FACILITY LAYOUT**

SCALE: 1"=120'	EXHIBIT "A"
DATE: 03/06/2012	SHEET 4 OF 5

SCALE: 1"= 120'  
 CONTOUR  
 INTERVAL 1'



**WILLIAM H. SMITH  
 & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS

550 EAST SECOND NORTH PHONE: 307-875-3638  
 GREEN RIVER, WY 307-875-3639  
 www.whsmithpc.com

DRAWN BY: CED	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

**CONFIDENTIALITY NOTES:**  
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**LOCATION:  
 OMAHA WOMAN  
 13-12H**

NE1/4, SEC. 24,  
 T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**FINAL RECLAMATION**

SCALE: 1"=120'	EXHIBIT "A"
DATE: 03/06/2012	SHEET 5 OF 5

**DAKOTA-3 E&P COMPANY, LLC.  
PAD, ROAD, PIPELINE, UTILITY, FIBER OPTIC, & ABOVE GROUND  
APPURTENANCES RIGHT-OF-WAY ON TRIBAL LANDS  
(FOR OMAHA WOMAN 13-12HC, 13-12HD,  
13-12HY, 13-12HZ, 24HC, & 24HD)**

A strip of land located in the Northeast quarter (NE1/4) of the Northeast quarter (NE1/4) of Section 25, the East half (E1/2) of the East half (E1/2) of Section 24, Township 149 North, Range 95 West, of the 5th Principal Meridian, McKenzie County, State of North Dakota, being one hundred thirty three (133) in width, lying sixty five feet (65') on each side of the following described center line:

Commencing at the Northeast Corner of Section 25, Township 149 North, Range 95 West (Found 2.5" Brass Cap); thence South 59°52'03" East, a distance of 1056.91 feet to the POINT OF BEGINNING;  
thence, North 22°19'51" West a distance of 251.22 feet (Sta. 2+51.22);  
thence, North 05°33'21" East a distance of 329.53 feet (Sta. 5+80.75); to a point on the North line of the Northeast quarter of Section 25, Township 149 North, Range 95 West, said point being located North 88°15'16" West a distance of 978.09 feet from the Northeast corner of said Section 25 (Found 2.5" Brass Cap);  
thence, N 05°33'21" E a distance of 176.90 feet (Sta. 7+57.65);  
thence, N 14°46'30" E a distance of 306.56 feet (Sta. 10+64.21);  
thence, N 04°39'00" W a distance of 445.25 feet (Sta. 15+09.46);  
thence, N 11°13'44" W a distance of 292.74 feet (Sta. 18+02.20);  
thence, N 00°05'30" E a distance of 166.44 feet (Sta. 19+68.64);  
thence, N 19°21'14" E a distance of 285.11 feet (Sta. 22+53.75);  
thence, N 07°20'29" E a distance of 208.49 feet (Sta. 24+43.24);  
thence, N 30°46'44" E a distance of 207.53 feet (Sta. 26+49.77);  
thence, N 18°04'03" E a distance of 290.80 feet (Sta. 29+40.57);  
thence, N 20°49'42" E a distance of 329.86 feet (Sta. 32+70.43);  
thence, N 20°49'42" E a distance of 329.86 feet (Sta. 36+84.38);  
thence, N 11°02'13" W a distance of 198.15 feet (Sta. 40+79.58);  
thence, N 11°02'13" W a distance of 198.15 feet (Sta. 44+44.14);  
thence, N 02°25'56" W a distance of 281.67 feet (Sta. 47+25.81);  
thence, N 20°11'20" W a distance of 281.51 feet (Sta. 50+47.32);  
thence, N 01°23'17" W a distance of 75.32 feet (Sta. 50+82.64); to the POINT OF ENDING; said ending point being located South 34°36'57" West a distance of 1123.93 feet from the Northeast Corner of Section 24, Township 149 North, Range 95 West (Found 2.5" Brass Cap).

Said centerline is 5982.64 feet or 398.04 rods and contains 15.17 Acres more or less.  
Bearings and grid bearings based on the North Dakota State Plane Coordinate System North Zone NAD 83 from GPS observations using a WGS 84 control point (5/8" rebar) and having the location and Elevation derived from an OPUS Solution.  
Control Point is located South 48°58'37" East, a distance of 4,090.03 ft. from the Northeast corner of Section 24, T149N, R95W, of the 5th P.M.

Distances shown are Ground Distances using a combined scale factor of 1.000151275  
Location shown here on is not an "ASBUILT" location.

**SURVEYOR'S CERTIFICATE:**

I, William H. Dolinar, a Registered Land Surveyor, N.D. RLS No. 6550, do hereby certify that the survey plat shown herein was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief. The field survey was performed on the 23rd day of February, 2022.

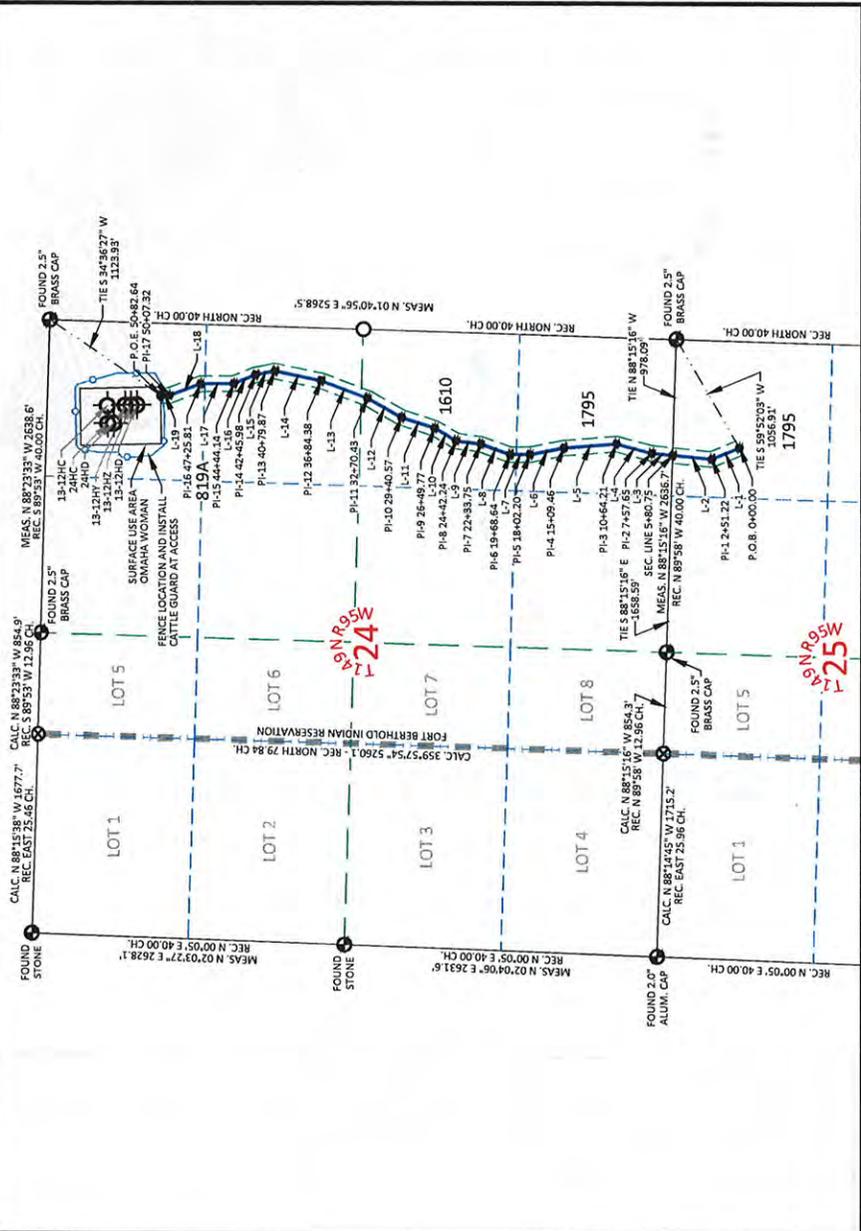


**WILLIAM H. SMITH & ASSOCIATES P.C.**  
SURVEYING CONSULTANTS  
500 EAST SECOND NORTH  
GRAND FORTY, WY  
WWW.WHSMITHPC.COM  
PHONE: 307-872-3898

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500 EAST SECOND NORTH  
GRAND FORTY, WY  
WWW.WHSMITHPC.COM  
PHONE: 307-872-3898

**DAKOTA-3 E&P COMPANY LLC**  
PAD, ROAD, PIPELINE, UTILITY, FIBER OPTIC, &  
ABOVE GROUND APPURTENANCES  
RIGHT-OF-WAY ON TRIBAL LANDS  
NE1/4 NE1/4 SEC. 25 &  
E1/2 E1/2 SEC. 24, T149N, R95W,  
MCKENZIE COUNTY, NORTH DAKOTA.

**DAKOTA-3 E&P COMPANY LLC**  
DRAWN BY: CEA  
PROJECT NO.: N/A  
JOB NO.: 20211500  
SCALE: 1" = 1000'  
DATE: 03/06/2022  
SHEET 1 OF 1  
REVISIONS:



**RIGHT-OF-WAY LENGTHS**

ALLOTTEE	FEET	ACRES	RODS
1795 - NE1/4 SEC. 25 & SE1/4 SEC. 24, T149N, R95W	1915.83	5.72	116.11
1610 - NE1/4 SEC. 24, T149N, R95W	1408.24	4.20	85.35
T149N, R94W	1798.57	5.25	106.58
819A - E1/2 NE1/4 SEC. 24, T149N, R94W	1798.57	5.25	106.58

- LEGEND:**
- FOUND MONUMENT
  - MONUMENT NOT FOUND
  - ⊗ CORNER SEARCHED
  - ⊙ CALCULATED CORNER
  - POINT OF INTERSECTION
  - FOUND MONUMENT
  - CENTER LINE OF R-O-W
  - MONUMENT NOT FOUND
  - EDGE OF R-O-W

**DISTURBANCE SUMMARY**

ALLOTTEE 1795	5.72 ACRES
R-O-W DISTURBANCE	5.72 ACRES
TOTAL DISTURBANCE - 1795	5.72 ACRES
ALLOTTEE 1610	4.20 ACRES
R-O-W DISTURBANCE	4.20 ACRES
TOTAL DISTURBANCE - 1610	4.20 ACRES
ALLOTTEE 819A	10.97 ACRES
DRILLING PAD DISTURBANCE (FENCED AREA)	5.25 ACRES
R-O-W DISTURBANCE	16.22 ACRES
TOTAL DISTURBANCE - 819A	16.22 ACRES
TOTAL DISTURBANCE	10.97 ACRES
DRILLING PAD DISTURBANCE (FENCED AREA)	15.17 ACRES
R-O-W DISTURBANCE	25.34 ACRES
TOTAL DISTURBANCE	25.34 ACRES

**LINE TABLE**

PI #	STATION	LINE	BEARING	DISTANCE
P.O.B.	0+00.00	L1	N 22°19'51" W	251.22
P1-1	2+51.22	L2	N 05°33'21" E	329.53
SEC. LINE	5+80.75	L3	N 11°02'13" W	306.56
P1-2	7+57.65	L4	N 14°46'30" E	306.56
P1-3	10+64.21	L5	N 04°39'00" W	445.25
P1-4	15+09.46	L6	N 11°13'44" W	292.74
P1-5	18+02.20	L7	N 00°05'30" E	166.44
P1-6	19+68.64	L8	N 19°21'14" E	285.11
P1-7	22+53.75	L9	N 07°20'29" E	208.49
P1-8	24+43.24	L10	N 30°46'44" E	207.53
P1-9	26+49.77	L11	N 18°04'03" E	290.80
P1-10	29+40.57	L12	N 20°49'42" E	329.86
P1-11	32+70.43	L13	N 20°49'42" E	329.86
P1-12	36+84.38	L14	N 11°02'13" W	198.15
P1-13	40+79.58	L15	N 11°02'13" W	198.15
P1-14	44+44.14	L16	N 02°25'56" W	281.67
P1-15	47+25.81	L17	N 20°11'20" W	281.51
P1-16	50+47.32	L18	N 01°23'17" W	75.32
P.O.E.	50+82.64	L19	N 01°23'17" W	75.32



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DAKOTA-3 E&P COMPANY, LLC.  
OMAHA WOMAN 13-12HC, 13-12HD,  
13-12HY, 13-12HZ, 24HC, & 24HD  
PAD, ROAD, PIPELINE, UTILITY, FIBER OPTIC, & ABOVE GROUND APPURTENANCES RIGHT-OF-WAY  
SECTIONS 24 & 25, TOWNSHIP 149 NORTH, 5TH P.M.  
MCKENZIE COUNTY, NORTH DAKOTA

PAD, ROAD, PIPELINE, UTILITY, FIBER OPTIC, & ABOVE GROUND APPURTENANCES  
RIGHT-OF-WAY ON TRIBAL LANDS

Total length of Right-Of-Way is 5082.64 feet or 0.963 miles. Width of Right-Of-Way is 130' (65' perpendicular on each side of the centerline). Contains 15.17 Acres more or less. Total Pad Right-Of-Way Contains 10.97 Acres more or less. Total combined Pad, Road, Pipeline, Utility, Fiber Optic, and Above Ground Appurtenances Right-Of-Way contains 26.14 Acres more or less.

SURVEYOR'S AFFIDAVIT

STATE OF NORTH DAKOTA }  
COUNTY OF MCKENZIE } SS

William H. Dolinar, 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, utility, fiber optic and above ground appurtenances 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, 0.963 miles in length beginning and ending as shown on this map is accurately represented.



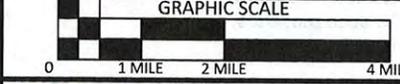
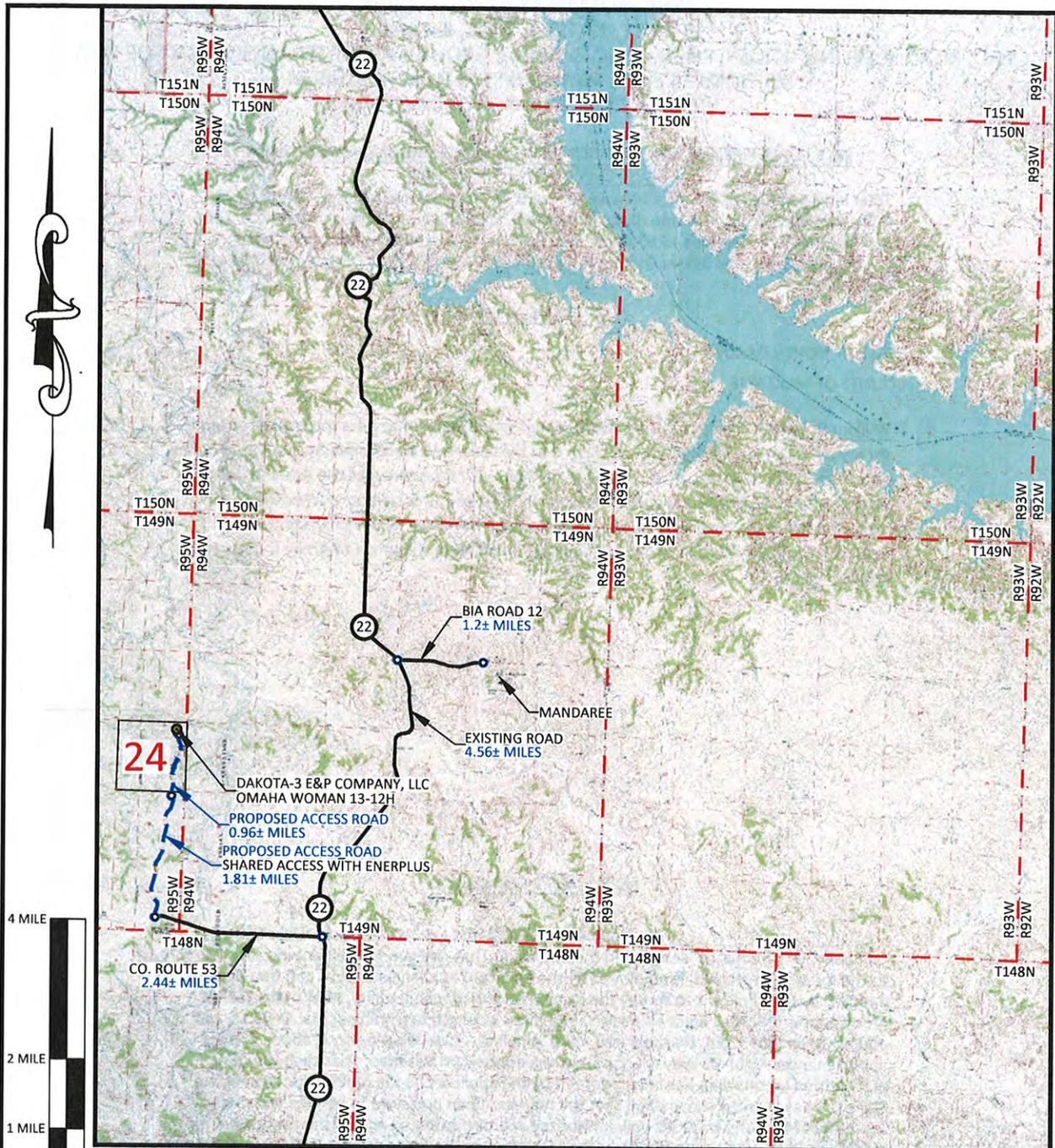
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 6550  
STATE OF NORTH DAKOTA

APPLICANT'S CERTIFICATE

I, \_\_\_\_\_, do hereby certify that I am the agent for Dakota-3 E&P Company, LLC, herinafter designated the applicant; That William H. Dolinar 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, utility, fiber optic, & above ground appurtenances Right-Of-Way, 0.963 miles in length beginning at Sta. 0+00.00 and ending at Sta. 50+82.64, that said pad, road, pipeline, utility, fiber optic, & above ground appurtenances 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 assigned, grant, or otherwise.

\_\_\_\_\_  
APPLICANT

\_\_\_\_\_  
TITLE



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**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH PHONE: 307-875-3638  
 GREEN RIVER, WY 307-875-3639  
 www.whsmithpc.com

DRAWN BY: RAW	CHECKED BY: WHD
PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

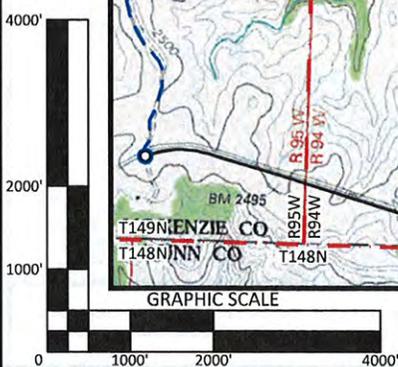
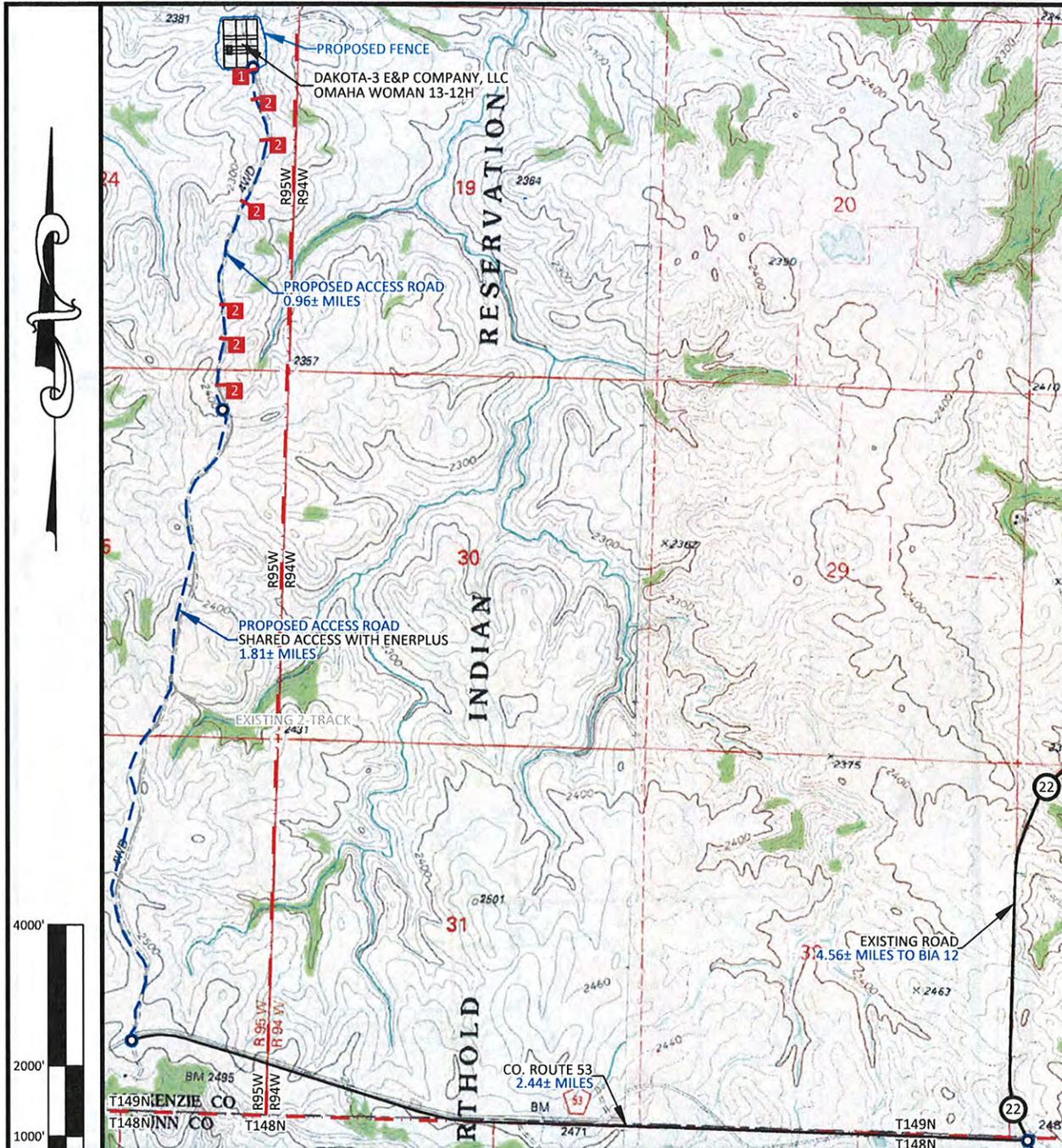
**LEGEND**  
 PROPOSED ACCESS   
 EXISTING ROAD

**LOCATION:**  
**OMAHA WOMAN 13-12H**  
 NE1/4 NE1/4,  
 SEC. 24, T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**AREA MAP**

SCALE: 1"= 2 MILE	EXHIBIT "E"
DATE: 2/23/2012	SHEET 1 OF 4



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**LEGEND**  
 PROPOSED ACCESS ————  
 EXISTING ROAD ————  
 PROPOSED FENCE ————  
 EXISTING 2-TRACK ————

**LOCATION:**  
**OMAHA WOMAN 13-12H**  
 NE1/4 NE1/4,  
 SEC. 24, T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

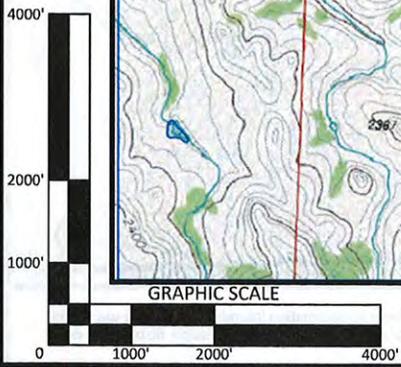
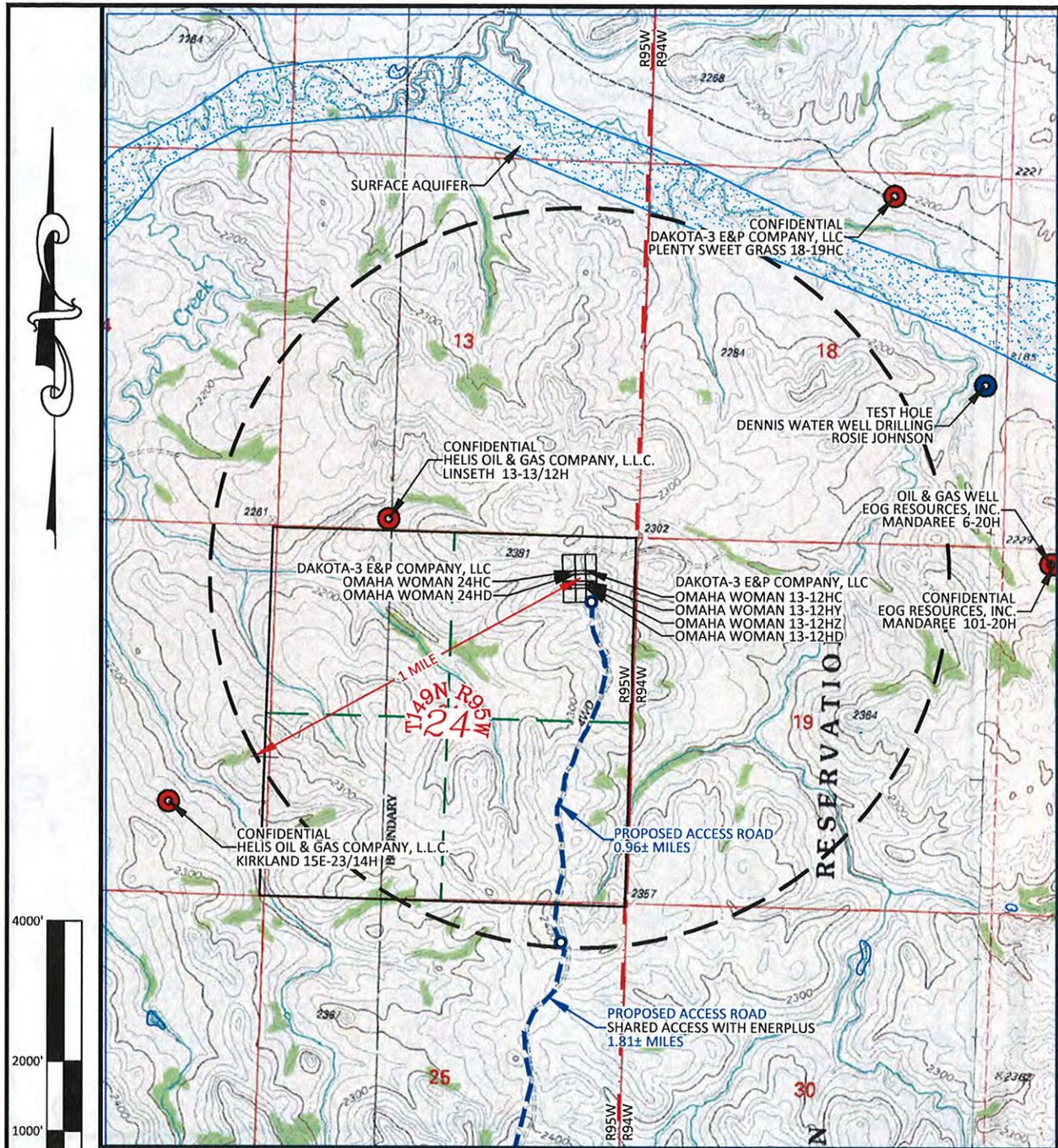
**DAKOTA-3 E&P COMPANY LLC**

DRAWN BY: RAW  
 PROJECT NO: N/A  
 REVISIONS:

CHECKED BY: WHD  
 JOB NO: 2011500

- 1 INSTALL CATTLE GAURD
- 2 INSTALL CMP

**ACCESS ROAD MAP**  
 SCALE: 1"=2000'  
 DATE: 2/23/2012  
 EXHIBIT "E"  
 SHEET 2 OF 4



**CONFIDENTIALITY NOTES:**  
 The information contained in this plat is legally privileged and confidential information intended only for the use of the recipients. If you are not the intended recipients, you are hereby notified that any use, dissemination, distribution or copying of this information is strictly prohibited.

**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH GREEN RIVER, WY  
 PHONE: 307-875-3638 307-875-3639  
 www.whsmithpc.com

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REVISIONS:	

**LEGEND**

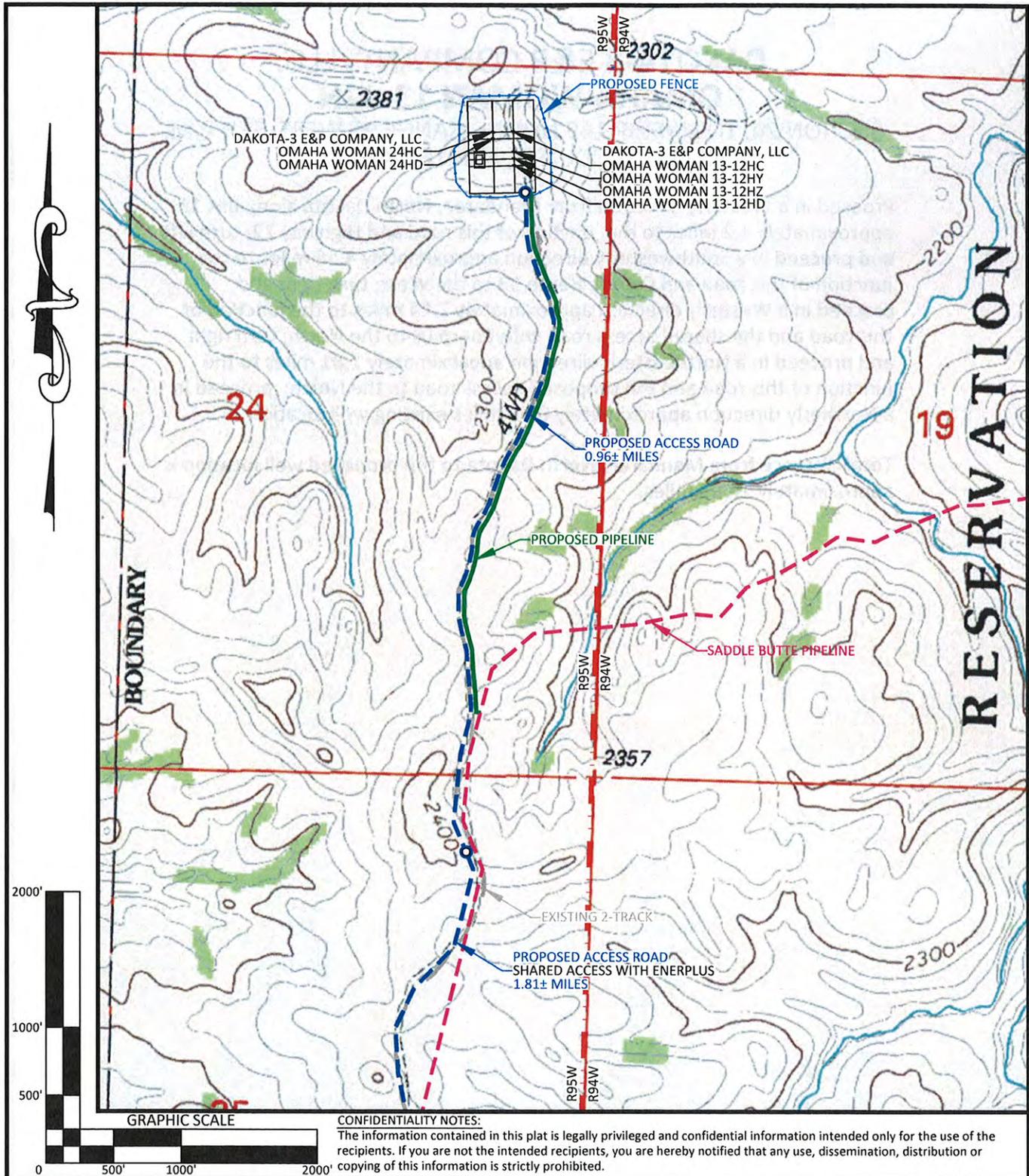
- PROPOSED ACCESS ROAD 0.96± MILES (dashed blue line)
- SECTION LINE (dashed black line)
- 1/4 LINE (dotted black line)
- WETLANDS (green hatched area)
- AQUIFER (blue hatched area)

**LOCATION:**  
**OMAHA WOMAN 13-12H**  
 NE1/4 NE1/4,  
 SEC. 24, T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**WELL LOCATION MAP**

SCALE: 1"=2000'	EXHIBIT "E"
DATE: 2/23/2012	SHEET 3 OF 4



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PROJECT NO: N/A	JOB NO: 2011500
REVISIONS:	

**LEGEND**

- PROPOSED ACCESS ————
- PROPOSED FENCE ————
- PROPOSED PIPELINE ————
- EXISTING 2-TRACK ————
- SADDLE BUTTE PL ————

**LOCATION:**  
**OMAHA WOMAN 13-12H**  
 NE1/4 NE1/4,  
 SEC. 24, T149N, R95W,  
 MCKENZIE COUNTY,  
 NORTH DAKOTA

**DAKOTA-3 E&P COMPANY LLC**

**PIPELINE DRAWING**

SCALE: 1"=1000'	EXHIBIT "E"
DATE: 2/23/2012	SHEET 4 OF 4

**DAKOTA-3 E&P COMPANY, LLC.**

**OMAHA WOMAN 13-12H**

**SECTION 24, TOWNSHIP 149 NORTH, RANGE 95 WEST, 5TH P.M.  
MCKENZIE COUNTY, NORTH DAKOTA**

Proceed in a Westerly direction from Mandaree, North Dakota along BIA 12 approximately 1.2 miles to the junction of this road and Highway 22; turn left and proceed in a Southwesterly direction approximately 4.56 miles to the junction of this road and County Route 53 to the West; turn right and proceed in a Westerly direction approximately 2.44 miles to the junction of this road and the shared access road with Enerplus to the North; turn right and proceed in a Northeasterly direction approximately 1.81 miles to the junction of this road and the proposed access road to the North; proceed in a Northerly direction approximately 0.96 miles existing well location.

Total distance from Mandaree, North Dakota to the proposed well location is approximately 10.97 miles.

# **Notice of Availability and Appeal Rights**

WPX Energy: Omaha Woman 13-12H Well Pad, Access Road, Pipeline and Utility Corridor

**The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals to Authorize Land Use for the Omaha Woman 13-12H Well Pad, Access Road, Pipeline and Utility Corridor on the Fort Berthold Reservation as shown on the attached map. Construction by WPX Energy is expected to begin in 2012.**

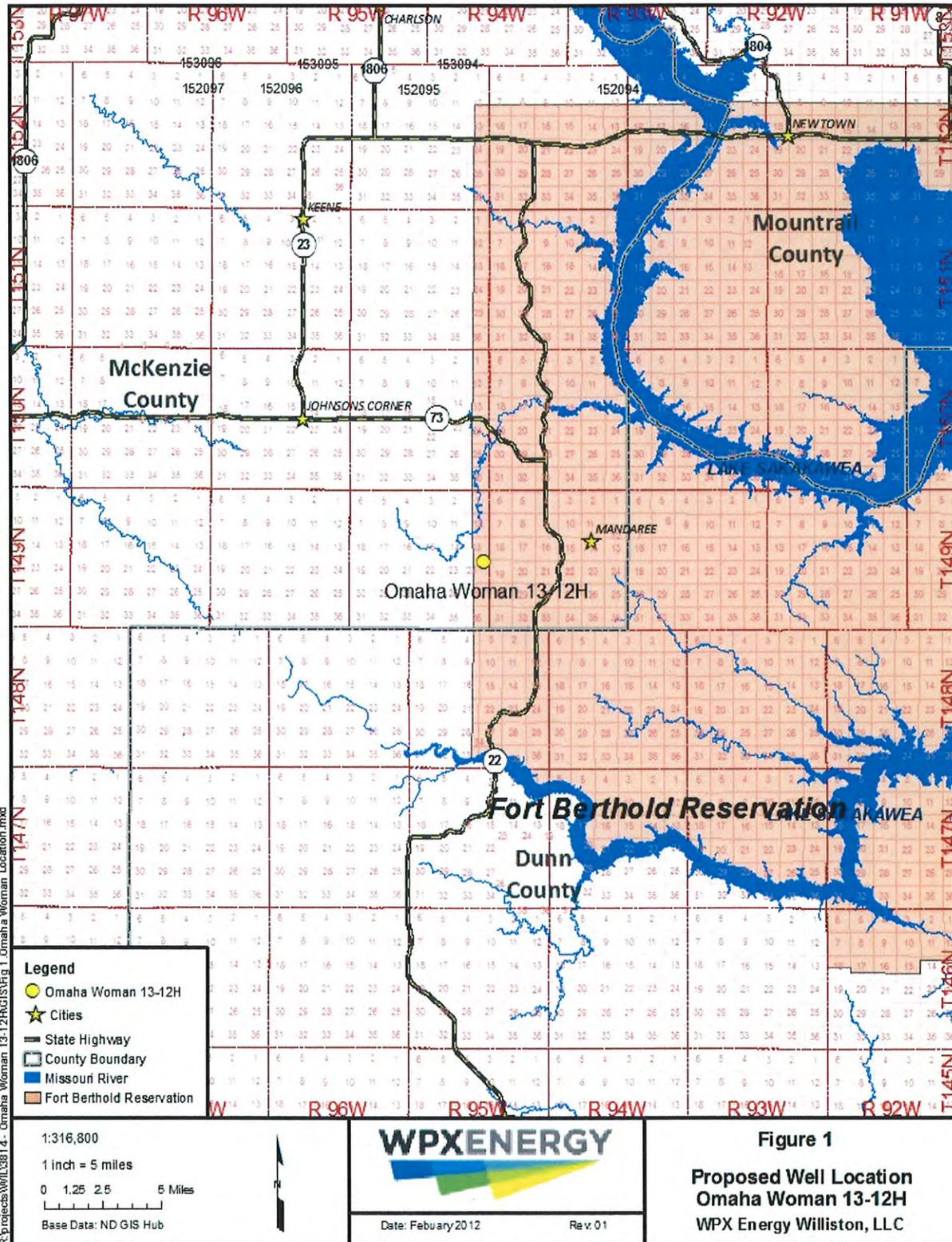
**An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant 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 June 20, 2012, 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.



R:\projects\will3814 - Omaha Woman 13-12H\GIS\Eg. 1 Omaha Woman Location.mxd