



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

OCT 23 2012

MEMORANDUM

TO: ^{Acting} Superintendent, Fort Berthold Agency

FROM: 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 has been completed and a Finding of No Significant Impact (FONSI) has been issued. The EA authorizes land use for three Bakken oil and gas wells located atop one 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)
Daniel Velder, BLM, Bureau of Land Management (with attachment)
Grady Wolf, KLJ (with attachment)
Eric Wortman, EPA (with attachment)
Carson Hood/Fred Fox, MHA Energy Dept. (with attachment)
Jonathon Shelman, Corps of Engineers (e-mail)
Jeff Hunt, Fort Berthold Agency (e-mail)

Finding of No Significant Impact

Marathon Oil Company (Marathon)

**Environmental Assessment for
Drilling of TAT USA 11-23TFH/TAT USA 12-23H/TAT USA 12-23TFH
Oil & Gas Wells**

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

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to drill three oil and gas wells located atop a triple well pad as follows:

- TAT USA 11-23TFH, TAT USA 12-23H and TAT USA 12-23TFH located in T151N, R94W, 5th P.M., Section 22

Associated federal actions by BIA include determinations of effect regarding environmental resources and positive recommendations to the Bureau of Land Management regarding the Applications for Permit to Drill.

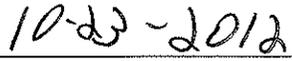
The potential of the proposed action to impact the human environment is analyzed in the following Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the EA, I have determined that the proposed project will not significantly affect the quality of the human or natural 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 solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.
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 alternatives.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed action is 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 project will improve the socio-economic condition of the affected Indian community.

Acting 
Regional Director


Date

ENVIRONMENTAL ASSESSMENT

United States Bureau of Indian Affairs

Great Plains Regional Office
Aberdeen, South Dakota



Marathon Oil Company

Drilling of TAT USA 11-23TFH/TAT USA 12-23H/TAT USA 12-23TFH Oil & Gas Wells

Fort Berthold Indian Reservation

October 2012

For information contact:

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CHAPTER 1 PURPOSE AND NEED FOR ACTION

1.1 Introduction

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the regulations of the Council on Environmental Quality (CEQ), 40 CFR parts 1500 through 1508. An EA is an informational document intended for use by both decision-makers and the public. It discloses relevant environmental information concerning the proposed action and the no-action alternative.

1.2 Description of the Proposed Action

The Fort Berthold Reservation encompasses 988,000 acres, 457,837 of which are in tribal and individual Indian ownership by the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) and its members. The reservation is located in west central North Dakota and is split into three areas by Lake Sakakawea, which traverses the center of the reservation. It occupies sections of six counties: Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward.

The Fort Berthold Reservation lies atop the Bakken Formation, a geologic formation rich in oil and gas deposits that extends approximately 25,000 square miles beneath North Dakota and Montana, United States and Saskatchewan, and Manitoba, Canada. Approximately two-thirds of the Bakken Formation is beneath North Dakota. The Three Forks Formation lies beneath the Bakken. The North Dakota Department of Mineral Resources estimates that there are approximately two billion barrels of recoverable oil in each of these formations¹. The Department's director estimates that there are 30–40 remaining years of production, or more if technology improves.

The proposed action includes a positive recommendation by the Bureau of Indian Affairs (BIA) and approval by the Bureau of Land Management (BLM) for Marathon Oil Company (Marathon) to drill and complete one triple well pad on the Fort Berthold Reservation, resulting in the drilling and completion of three wells. The well pad is proposed to be positioned in the following location and as shown on *Figure 1.1, Project Location Map*.

- TAT well pad located in the NE¼ of Section 22, T151N, R94W, 5th P.M. and containing the following wells:
 - TAT USA #11-23TFH
 - TAT USA #12-23H
 - TAT USA #12-23TFH

¹ The Bakken contains about 169 billion barrels of oil and the Three Forks contains about 20 billion barrels; however, most of this is not expected to be developed.

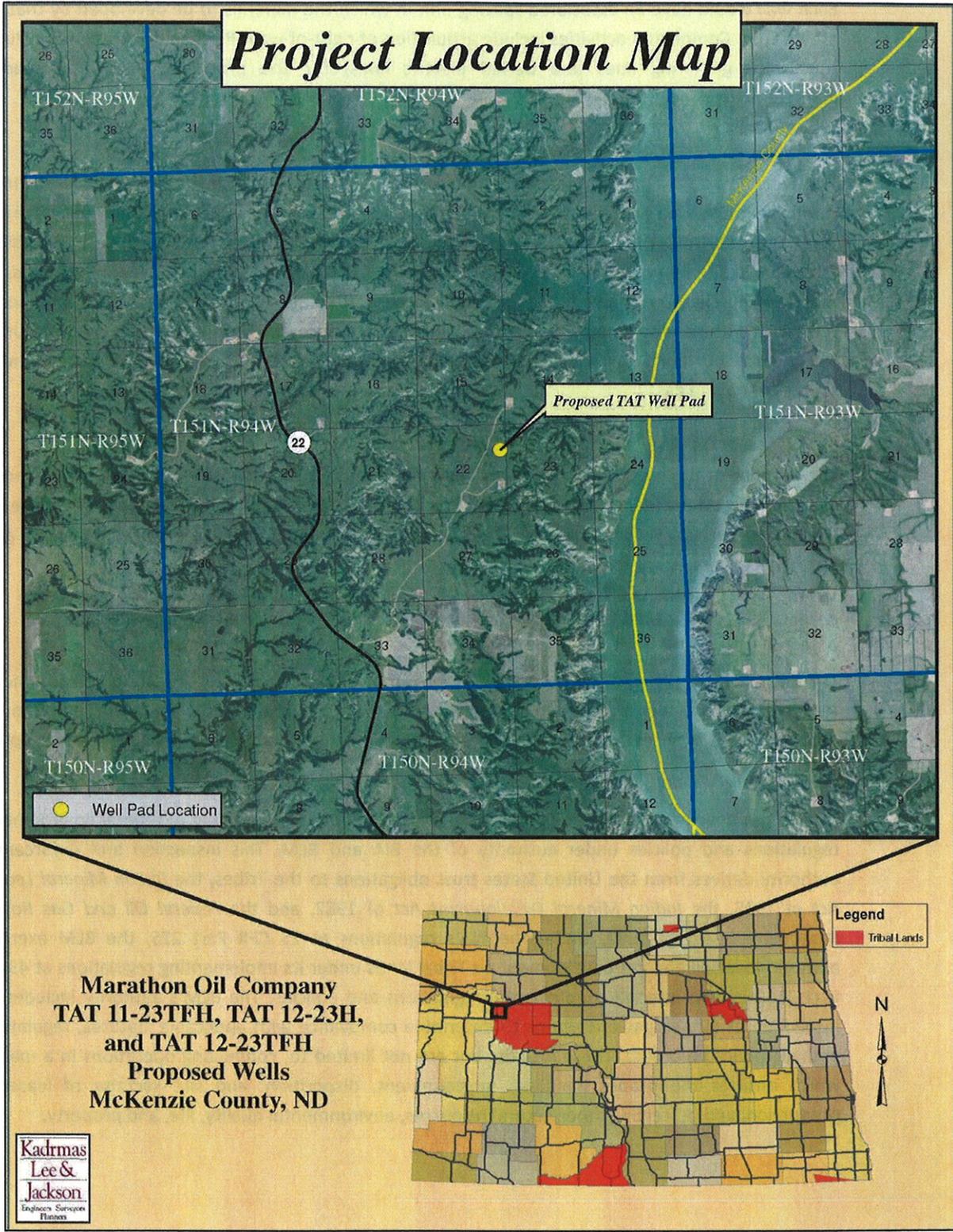


Figure 1.1, Project Location Map

Each well would have an associated spacing unit in which the minerals to be developed by that well are located. Completion activities include acquisition of right-of-way (ROW), infrastructure (including subsurface gathering lines and buried electric lines) for the proposed wells, and roadway improvements.

1.3 Need for the Proposed Action

The Tribes own their mineral resources, which are held in trust by the United States government through the BIA. The BIA's positive recommendation to the BLM for approval of the Applications for Permit to Drill (APDs) for the three wells would provide important benefits to the Three Affiliated Tribes, including revenue that could contribute to the Tribal Budgets, satisfy Tribal obligations, and fund land purchase programs to stabilize its land base. It would also provide individual members of the Tribes with needed employment and income. Furthermore, the proposed action gives the United States an opportunity to reduce its dependence on foreign oil and gas by developing domestic sources of oil and gas.

1.4 Purpose of the Proposed Action

The purpose of the proposed action is to allow the Three Affiliated Tribes to provide for oil and gas development on the identified lands on the Fort Berthold Reservation. Additionally, the purpose is to access commercially recoverable oil and gas resources on the lands subject to Marathon's lease areas by drilling three wells at the identified location.

1.5 Regulations that Apply to Oil and Gas Development Activities

The BIA must comply with NEPA before it issues a determination of effect regarding environmental resources and provides a recommendation to the BLM regarding the APDs. Therefore, an EA for the proposed wells is necessary to analyze the direct, indirect, and cumulative impacts of the proposed project.

Oil and gas development activities on Indian lands are subject to a variety of federal environmental regulations and policies under authority of the BIA and BLM. This inspection and enforcement authority derives from the United States trust obligations to the Tribes, the *Indian Mineral Leasing Act of 1938*, the *Indian Mineral Development Act of 1982*, and the *Federal Oil and Gas Royalty Management Act of 1982*. Under the BIA's regulations at 25 CFR Part 225, the BLM exercises authority over oil and gas development on Tribal lands under its implementing regulations at 43 CFR Part 3160 and its internal supplemental regulations and policies. The BLM's authority includes the inspection of oil and gas operations to determine compliance with applicable statutes, regulations, and all applicable orders. These include, but are not limited to, conducting operations in a manner which ensures the proper handling, measurement, disposition, and site security of leasehold production; and protecting other natural resources, environmental quality, life, and property.

CHAPTER 2 ALTERNATIVES

2.1 Introduction

This chapter provides information on the development and evaluation of project alternatives. The development of alternatives is directly related to the purpose and need for the project. Two alternatives are being considered for this project: a no action alternative and a proposed action alternative.

2.2 Alternative A: No Action

Under the no action alternative (Alternative A), the BIA would not provide a positive recommendation and the BLM would not authorize the development of the three proposed wells atop a single well pad. There would be no environmental impacts associated with Alternative A. However, the Three Affiliated Tribes would not receive potential royalties on production, or other economic benefits from oil and gas development on the reservation. Further, the oil and gas resources targeted by the proposed action would not be explored for commercial production or recovered and made available for domestic energy use.

2.3 Alternative B: Proposed Action

The proposed action (Alternative B) includes a positive recommendation by the BIA and authorization by the BLM to drill three wells atop one well pad and complete the associated ROW acquisition, roadway improvements, and infrastructure for the wells. Infrastructure may include subsurface oil and gas gathering pipelines and buried electrical lines, both of which would be located within the road ROW.

The well site would consist of a well pad, access road, associated infrastructure, and spacing units. The well pad is where the actual surface disturbance caused by drilling activities would occur. The spacing unit is the location of the minerals that are to be developed. The location of the proposed well pad, access road, and proposed horizontal drilling techniques were chosen to minimize surface disturbance. To initiate early communication and coordination, an early notification package was submitted to tribal, federal, state, and local agencies and other interested parties which will be discussed further in Chapter 4. This package included two proposed double well pad locations. Since that mailing, one of the well pads was removed and the remaining well pad discussed has become a triple well pad which is to be discussed further in this document. The well pad size has remained the same as disclosed in the early notification package.

The well pad and access road would require new ROW for the site area, access point, and associated infrastructure. ROW would be located to avoid sensitive surface resources and any cultural resources identified in site surveys. Infrastructure may include electrical, telecommunication, and water lines, as well as subsurface oil and gas gathering pipelines, all of which would be located underground within the ROW acquired by Marathon, or if outside of proposed ROW would require additional NEPA compliance to acquire. The access road would be improved as necessary to eliminate overly steep grades, maintain current drainage patterns, and provide all-weather driving surfaces.

An intensive, pedestrian resource survey of the proposed well pad and access road was conducted on October 21, 2010 by Kadrmass, Lee & Jackson (KL&J). The purpose of the survey was to gather site-

specific data and photos with regard to botanical, biological, threatened and endangered species, eagle, and water resources. A study area of 10 acres centered on the well pad center point and a 200-foot wide access road corridor were evaluated at the site. Resources were evaluated using visual inspection and pedestrian transects across the site. In addition, a follow-up eagle survey was conducted on November 3, 2010 by KL&J. A 0.50 mile wide buffer around all areas of project disturbance was used to evaluate the presence of eagles and eagle nests. Resources were evaluated using visual inspection and pedestrian transects across the site. Wooded draws were observed both from the upland areas overlooking the draws and from the bottomlands within the actual draws.

The BIA EA on-site assessment of the well pad and access road was also conducted on October 21, 2010. The BIA Environmental Protection Specialist, as well as representatives from the Tribal Historic Preservation Office (THPO), Marathon, and KL&J participated in the assessment. During the assessment, construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. Well pad and access road locations were finalized, and the BIA gathered information needed to develop site-specific mitigation measures and best management practices (BMPs) to be incorporated into the final APD. Those present at the on-site assessment agreed that the chosen location, along with the minimization measures Marathon plans to implement, are positioned to minimize impacts to sensitive wildlife and botanical resources. In addition, comments received from the United States Fish and Wildlife Service (USFWS) have been considered in the development of this project.

The proposed site would consist of a triple well pad located in the SE¼NE¼ of Section 22, Township 151 North, Range 94 West, 5th P.M. to access potential oil and gas resources within the spacing unit consisting of the N½ of Sections 23 and 24, Township 151 North, Range 94 West, 5th P.M., and the NW¼ of Section 19, Township 151 North, Range 93 West, 5th P.M. Please refer to *Figure 2.1, Site Overview*.

The site would be accessed from the southwest. A new access road approximately 0.21 miles long would be constructed to connect the site to an existing Marathon haul road. Minor spot grading may be needed to flatten existing landscape grades along the proposed access road alignment. Culverts and cattle guards would be installed at the pad entrance and the connection point with the existing oilfield access road.



Figure 2.1, Site Overview

2.3.1 Activities that Apply to Development of All Wells

The following includes a discussion of items that would be consistent for construction of all three proposed wells:

2.3.1.1 Field Camps

Self-contained trailers may temporarily house key personnel on-site during drilling operations. No long-term residential camps are proposed. Sewage would be collected in standard portable chemical toilets or service trailers on-site and then transported off-site to a State-approved wastewater treatment facility. Other solid waste would be collected in enclosed containers and disposed of at a State-approved facility.

2.3.1.2 Access Roads

Existing roadways would be used to the extent possible to access the proposed wells; however, the construction of a new access road would also be required. The running surface of the access road would be surfaced with crushed gravel or scoria from a previously approved location, and erosion control measures including reseeding and/or blanket matting would be installed on all fill slopes. A

permanent ROW width of 100 feet would be required for access road construction, consisting of a 20 to 28-foot wide roadway with the remainder of the disturbed area due to borrow ditches and construction slopes. The ROW would be wide enough to accommodate future utility installation and snow removal/storage efforts. The outslope portions of the constructed access road would be re-seeded upon completion of construction to reduce access road related disturbance. Access road construction shall follow road design standards outlined in the BLM's Gold Book.

All efforts would be made to complete construction outside the migratory bird nesting season (February 1 through July 15) in order to avoid impacts to migratory birds during the breeding/nesting season. In the event that construction needs to take place during the migratory bird nesting season, a pre-construction survey for migratory birds or their nests would be conducted by a qualified biologist within five days prior to the initiation of all construction activities or the sites would be mowed the previous fall to deter birds from nesting in the project area.

2.3.1.3 Well Pad

The proposed well pad would consist of a leveled area surfaced with several inches of gravel or crushed scoria. The pad would be used for the drilling rig and related equipment, as well as an excavated, reinforced lined² pit to store drill cuttings. The drill cuttings pit would be reclaimed to BLM and North Dakota Industrial Commission (NDIC) standards immediately upon finishing completion operations. The level well pad, plus cut and fill slope areas, required for drilling and completing operations (including cuttings pit for drill cuttings) would be approximately 500x400 feet (approximately 5.4 acres). The total quantity of land within the well pad fence would be approximately 8.0 acres. All fill slopes on the edge of the well pad would be designed with 3:1 slopes. All cut slopes on the edge of the well pad would be 2:1 where less than eight feet and 3:1 where eight feet or greater. A berm would be placed around all cut slopes to prevent precipitation or meltwater from running onto the pad. The cuttings pit would be fenced and covered with netting to protect wildlife from hazardous areas.

The well pad area would be cleared of vegetation, stripped of topsoil, and graded to specifications in the APDs submitted to the BLM. Construction would comply with the standards and guidelines prescribed in the BLM's Gold Book. Topsoil would be stockpiled and stabilized until disturbed areas are reclaimed and re-vegetated. Excavated subsoil would be used in pad construction, with the finished well pad graded to ensure water drains away from the drill site. Erosion control at the site would be maintained through the use of BMPs, which may include, but are not limited to, water bars, bar ditches, diversion ditches, bio-logs, silt fences, and re-vegetation of disturbed areas.

All efforts would be made to complete construction outside the migratory bird nesting season (February 1 through July 15) in order to avoid impacts to migratory birds during the breeding/nesting season. In the event that construction needs to take place during the migratory bird nesting season, a pre-construction survey for migratory birds or their nests would be conducted by a qualified biologist within five days prior to the initiation of all construction activities or the sites would be mowed the previous fall to deter birds from nesting in the project area.

² The lining would have a minimum thickness of 20 mil.

2.3.1.4 Drilling

Following the access road construction and well pad preparation, a drilling rig would be rigged up at the well pad. The time for rigging up, drilling the well, and rigging down the well is anticipated to be about 30 days. During this phase, vehicles and equipment would access the site several times a day.

Initial drilling would be vertical to a depth of approximately 10,400 feet to reach the Bakken Formation and 10,500 feet to reach the Three Forks Formation, at which time it would angle to become horizontal. The laterals along the horizontal plane would extend approximately 12,800 feet. This horizontal drilling technique would minimize surface disturbance.

For the first 2,000 feet drilled at each well (commonly referred to as a "surface hole"), a fresh water based mud system with non-hazardous additives would be used to minimize contaminant concerns. Water would be obtained from a commercial source for this drilling stage. About eight gallons of water would be used per foot of hole drilled, for a total of about 40,000 gallons (20,000 gallons in the hole and 20,000 gallons as working volume at the surface). Upon drilling the "surface hole," 9-5/8" diameter surface casing would then be run and cemented from the casing shoe back to the surface to ensure protection of all known freshwater zones as required by BLM and NDIC regulations. An oil-based mud system consisting of about 80% diesel fuel and 20% saltwater would be used to drill the remainder of the vertical hole and curve. Seven-inch production casing would be set and cemented from the production casing shoe to a cement top depth that reaches above the Dakota Group at approximately 4600' ensuring that any zones known to contain oil, gas and other fluids are adequately isolated. A saltwater based drilling mud would then be utilized for the horizontal portion of the wellbore. Upon drilling completion of the horizontal lateral, a 4.5" production liner/packer assembly will be run in the lateral, tying back to the 7" casing to allow a staged fracture stimulation to be completed on the well.

A semi-closed loop drilling system would be utilized. As part of this, Marathon would implement a closed circulation drilling mud system, whereby drilling fluid is circulated from the well into steel mud tanks and the drill cuttings are separated from the drilling fluid. The cuttings would then be stabilized and placed in an on-site cuttings pit. Any minimal free fluid remaining in the cuttings pit would be removed and disposed of in accordance with BLM and NDIC regulations. The cuttings pit would be lined to prevent seepage and contamination of the adjacent and underlying soil. Prior to their use, the pits would be fenced on the non-working sides. The access sides would be fenced and netted immediately following drilling and completion operations in order to prevent wildlife and livestock from accessing the pit. In accordance with NDIC and BLM regulations and guidelines, drill cuttings would be stabilized into a solid mass using Class C fly ash. Upon well completion, the pit would be reclaimed and covered with at least four feet of backfill and surface sloped, when practicable, to promote surface drainage away from the reclaimed area.

2.3.1.5 Casing and Cementing

Casing and cementing methods would be used to isolate all near-surface aquifers and hydrocarbon zones encountered during drilling. Any portion of the bore occurring outside of the spacing unit would also be cased and cemented.

2.3.1.6 Completion and Evaluation

Once each well is drilled and cased, approximately 60 additional days would be required to complete and evaluate it. Completion and evaluation activities include cleaning out the well bores, pressure

testing the casings, perforating and fracturing to stimulate the horizontal portion of the wells, and running production tubing for potential future commercial production. Fluids utilized in the completion process would be captured in tanks and would be disposed of in accordance with BLM and NDIC rules and regulations. Once each well is completed, site activity and vehicle access would be reduced. If wells are determined to be successful, tank trucks would initially transport the product to market. It is anticipated that a pipeline gathering system will be installed within the area in the near future. Should pipeline connections become available, Marathon would make every effort to tie into natural gas, oil, and produced water gathering lines.

2.3.1.7 Commercial Production

If commercially recoverable oil and gas resources are found at any of the proposed wells, the well pad would become established as a production facility. Production equipment, including well pumping units, vertical heater treaters, storage tanks (eight 400 barrel steel oil tanks and two 400 barrel steel or fiberglass saltwater tanks) and flare systems with associated piping would be installed. The storage tanks and heater/treater would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. The cut side of the pad would be bermed to prevent run-on and run-off from the pad location. All permanent above ground production facilities would be painted to blend into the surrounding landscape, as determined by the BIA, based on standard colors recommended by the BLM.

During the initial phase of commercial production, oil would be collected in the storage tanks and periodically trucked to an existing oil terminal to be sold. Produced water would also be captured in storage tanks and periodically trucked to an approved disposal site. The frequency of trucking activities for both oil resources and produced water would be dependent upon volumes and rates of production. It is expected that oil would be trucked via existing oil field, BIA and/or County roads to Highway 23 near New Town and then west approximately 20 miles (off of the Fort Berthold Reservation) to a regional oil terminal. All haul routes used would be either private roads or roads that are approved for this type of transportation use by the local governing tribal, township, county, and/or state entities. All associated applicable permits would be obtained and restrictions complied with. Should regional oil, gas, and/or saltwater pipelines be installed, every attempt to tie production facilities at these sites to these pipelines would be made, thereby minimizing truck traffic. Any future oil, gas, or saltwater transportation pipelines would be constructed within the approved ROW or additional NEPA analysis and approval from the BIA would be undertaken.

Marathon Oil Company has chosen Saddle Butte Pipeline, LLC (Saddle Butte) as the pipeline provider for the wells proposed in this EA, should pipeline facilities for oil and gas gathering be constructed. As current estimates expect the Bakken field to remain active for 30 to 40 years, it is important that pipeline systems are designed to perform for this period of time. Pipelines, if designed effectively and well maintained, may have an indefinite life expectancy.

To ensure their long-term viability, all pipelines would be coated with between 14-16 mils of fusion bonded epoxy coating, which helps protect the pipelines against corrosive elements in the soil. The coating would be inspected thoroughly at the time of installation, both visually and by electronic testing means. Saddle Butte also utilizes specialty coatings that are applicable for underground fittings, bore crossings, etc. to provide additional levels of protection in areas that require it. Velocities and pressure drops for the pipeline system are carefully evaluated and lines are sized so as

to prevent erosion velocity. 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, Saddle Butte would immediately conduct a cathodic survey utilizing test stations, rectifier pads and other means designed by cathodic protection specialists. Saddle Butte would also install pig launchers and receivers on its trunk lines and primary laterals to identify pipeline conditions both internally and externally to maintain the integrity of the pipeline system.

All Saddle Butte installations are monitored by an inspection/construction management team as well as independent third party contract experts. Saddle Butte's construction specifications require contractors to allow for inspection, and no pipeline is laid and backfilled without appropriate approvals. Hydrotesting of pipelines would be used to assure no possibility of leakage at the time of installation.

In the event that a pipeline company other than Saddle Butte constructs within the proposed rights-of way, this company would be required to comply with all commitments and procedures set forth in this EA or additional NEPA analysis and approval would be required.

When any of the proposed wells cease to flow naturally, an artificial lift mechanism (typically a pump jack) would be installed. After production ceases, the wells would be plugged and abandoned, and the land would be fully reclaimed in accordance with BIA, BLM and NDIC requirements.

Marathon would mitigate the effects of these three wells by incorporating applicable conditions, mitigation measures, and BMPs from the BLM's regulations, BLM's Gold Book (4th Edition, 2006), and applicable BLM Onshore Oil and Gas Orders, including Numbers 1, 2, and 7.

2.3.1.8 Reclamation

The drill cuttings would be dried during drilling operations and placed into cuttings pits. Additional treatment of the cuttings, including stabilization with Class C fly ash, would be completed, and then the pits would be backfilled and buried as soon as possible upon well completion. Other interim reclamation measures to be implemented upon well completion include reduction of cut and fill slopes where necessary, redistribution of stockpiled topsoil, and re-seeding of the disturbed areas. If commercial production equipment is installed, the well site would be reduced in size to accommodate the production facilities, while leaving adequate room to conduct normal well maintenance and potential recompletion operations, with the remainder of the well pad reclaimed. Reclamation activities would include leveling, re-contouring, treating, backfilling, and re-seeding with native vegetation, or a seed mixture prescribed by the BIA. Erosion control measures, including the reseeded and/or installation of blanket matting on all fill slopes and placement of straw wattles in all adjacent drainages, would be installed. Stockpiled topsoil would be redistributed and re-seeded as recommended by the BIA.

Per BIA guidance, interim reclamation activities would begin six months after well completion, unless snow cover or the drilling schedule precludes this from happening. In the event that reclamation activities do not begin within six months of well completion, Marathon would request an extension from the BIA and would complete reclamation as soon as conditions allow.

If no commercial production is developed from the proposed wells, or upon final abandonment of commercial operations, all disturbed areas would be promptly reclaimed. As part of the final

reclamation process, all well facilities would be removed, the well bores would be plugged with cement, and dry hole markers would be set in accordance with NDIC and BLM requirements. The access road and well pad areas would be re-contoured to match topography of the original landscape, and re-seeded with a native grass seed mixture that is consistent with surrounding native species to ensure a healthy and diverse vegetative community that is free of noxious weeds. Erosion control measures, including the reseeding and/or installation of blanket matting on all exposed ground and placement of straw wattles in all adjacent drainages, would be installed. Maintenance of the grass seeding would continue until such time that the productivity of the stand is consistent with surrounding undisturbed vegetation and is free of noxious weeds. An exception to these reclamation measures may occur if the BIA approves assignment of the access road either to the BIA roads inventory or to concurring surface allottees.

If pipeline facilities were constructed in conjunction with the project proposed in this EA, the pipelines would also require approval for the associated ROW acquisition consisting of 50 feet of permanent ROW and 50 feet of temporary ROW for construction of the access road. Installation of the pipelines may require clearing and grading within the entire approved ROW along the entire pipeline corridor. Every effort would be made to minimize surface disturbance during the construction process. Topsoil would be separated and stockpiled along either side of any disturbed cross section to be used for prompt reseeding and reclamation of the disturbed area. If construction activities take place close to the end of construction season, topsoil would only be removed far enough in advance that the pipeline could be installed and the site re-graded prior to the end of the construction season. If topsoil cannot be spread in a timely manner that allows vegetation to reestablish prior to winter, topsoil would be spread the following spring and reseeded so as to not be susceptible to wind and/or water erosion over the winter.

For locations that are reclaimed in winter months or late fall such that no germination is possible, Saddle Butte would either use a sprayed reinforcement, lain matting reinforcement, spread and crimp straw and/or would minimize erosion issues with straw wattle and silt fence through winter months. Any temporary reclamation measures would remain until Saddle Butte can completely reclaim and re-vegetate the property in the spring. All temporary reclamation measures would be inspected on a monthly basis, or more frequently as necessary, throughout the winter. In addition, Saddle Butte would also install straw bales on slopes as needed to provide erosion breaks.

Continued use of pasture and livestock grazing areas would be maintained during construction via use of temporary fencing or cattle guards when crossing land with livestock present and temporary crossings, as needed. Trenches would be excavated to a depth sufficient to maintain a minimum of 48 inches of ground coverage over the pipeline. It is understood that other utilities, including phone and water pipelines, may be present in the immediate area and would need to be coordinated with the appropriate utilities accordingly.

2.4 Potential for Future Development

Development beyond the TAT USA #11-23TFH, TAT USA #12-23H, and TAT USA #12-23TFH wells discussed in this document are not included with this proposal. Further development would be subject to applicable regulations, including 43 CFR Part 3160, and the BLM's Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, and additional NEPA review would be required.

CHAPTER 3 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

3.1 Introduction

This chapter describes the existing conditions within the study area. The existing conditions, or affected environment, are the baseline conditions that may be affected by the proposed action. This chapter also summarizes the positive and negative direct environmental impacts of the project alternatives, as well as cumulative impacts. Indirect impacts are discussed in impact categories where relevant. Information regarding the existing environment, potential effects to the environment resulting from the proposed alternative, and avoidance, minimization, and/or mitigation measures for adverse impacts is included.

3.2 Climate, Geologic Setting, and Land Use

The proposed well pad and access road are situated geologically within the Williston Basin, where the shallow stratigraphy 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, which are targeted by the proposed project, are well-known sources of hydrocarbons. Although earlier oil and gas exploration activity within the Fort Berthold Reservation was limited and commercially unproductive, recent advances in drilling technologies, including horizontal drilling techniques, now make accessing oil in the Bakken and Three Forks Formations feasible.

According to Great Plains Regional Climate Center data collected at the Dunn Center weather station from 1918–2011, temperatures in excess of 80 degrees Fahrenheit are common in summer months. The area receives approximately 16.42 inches of rain annually, predominantly during spring and summer. Winters in this region are cold, with temperatures often falling near zero degrees Fahrenheit. Snow generally remains on the ground from November to March, and approximately 36 inches of snow are received annually.

The topography within the project area is primarily identified as part of the United States Geological Survey's (USGS's) Missouri Coteau Ecoregion, which consists of glaciated uplands, river breaks, valley wall side and footslopes, coulees, alluvial terraces and floodplains. The floodplains are primarily located in the bottomlands of the Missouri River.

The western and southern portions of the Fort Berthold Reservation consist of prairie grasslands and buttes. The northern and eastern areas of the Reservation provide fertile farmland. The proposed project area is located within a predominately rural area. According to National Agricultural Statistics Services (NASS) data, land within the proposed project area is approximately 100% grassland. Please refer to *Figure 3.1, Land Use*.

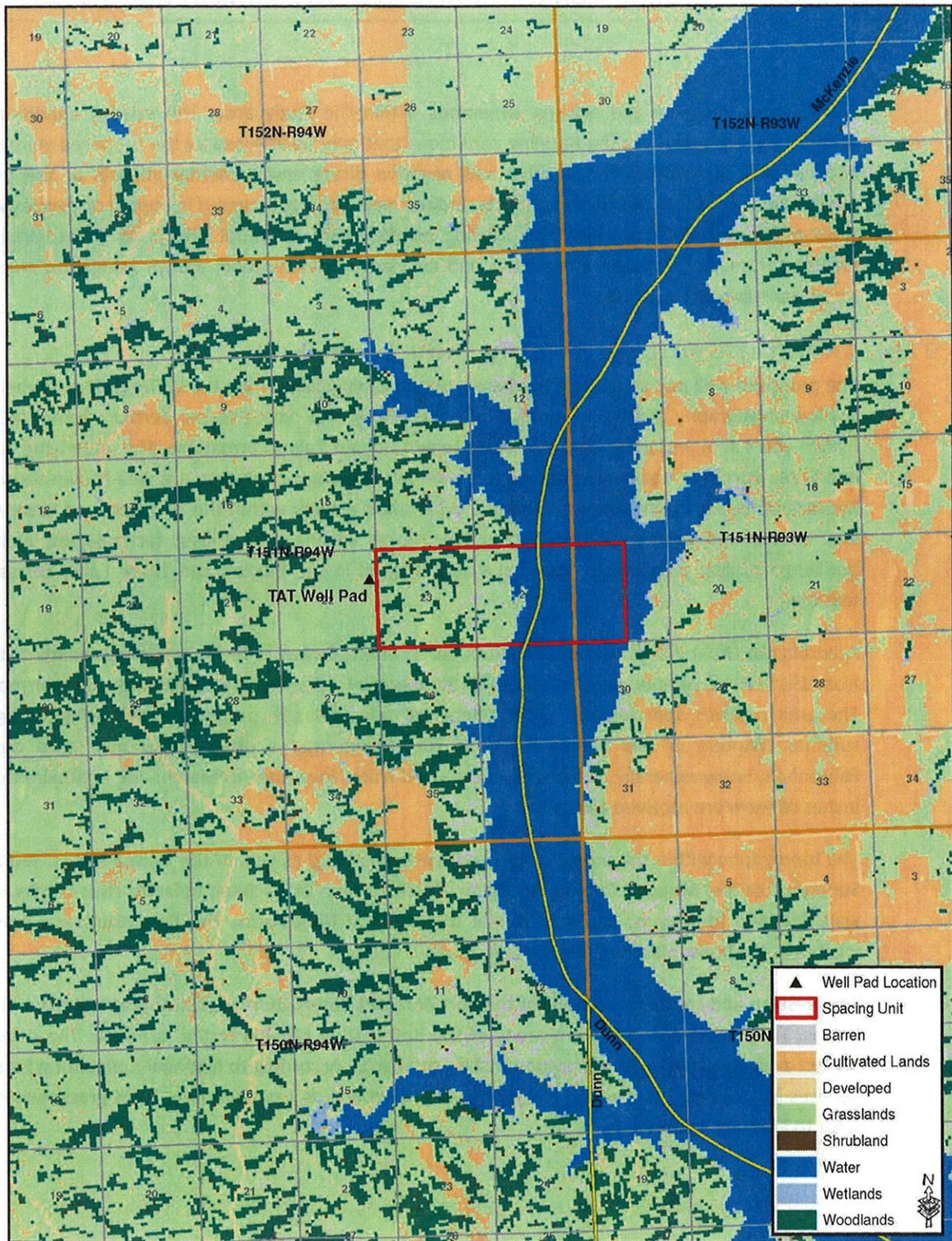


Figure 3.1, Land Use

3.2.1 Climate, Geologic Setting and Land Use Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact land use, climatic conditions, or the geologic setting within the study area.

Alternative B (Proposed Action)—Alternative B would result in the conversion of approximately 10.45 acres of land from present use to part of an oil and gas network. Of this, 8.00 acres would be as a result of well pad construction and 2.45 acres would be from access road construction. The land-use of the affected area is predominantly grassland.

Mineral resources would be impacted through the development of oil and gas resources at the proposed well site, as is the nature of this project. Impacts to the geologic setting and paleontological resources are not anticipated.

3.3 Soils

The Natural Resource Conservation Service (NRCS) Soil Survey of McKenzie County dates from 2006 with updated information available online through the NRCS Web Soil Survey was analyzed. There are four soil types identified within the project impact area. Characteristics of these soils are identified in *Table 3.1, Soils*.

Table 3.1, Soils

MAP UNIT SYMBOL	SOIL NAME	PERCENT SLOPE	COMPOSITION (IN UPPER 60 INCHES)			EROSION FACTOR		HYDROLOGIC SOIL GROUP
			% SAND	% SILT	% CLAY	T	KF	
38F	Dogtooth-Janesburg-Cabba Complex	6 to 30	4.5	47.1	48.4	2	.28	D
43C	Williams-Zahl Loams	6 to 9	35.0	35.2	30.6	5	.28	B
88D	Brandenburg-Searing-Dogtooth Complex	6 to 15	86.7	8.4	5.0	2	.49	A

These soils listed have a low to moderate susceptibility to sheet and rill erosion. The range of tolerable soil loss without loss of productivity for these soils ranges from very low to high. Each soil is well drained. The water table for these soils is generally recorded at greater than six feet and none of the soils are susceptible to ponding or flooding.

³ Erosion Factors indicate susceptibility of a soil to sheet and rill erosion by water. Kf indicates the erodibility of material less than two millimeters in size. Values of K range from 0.02 to 0.69. Higher values indicate greater susceptibility. T Factors estimate maximum average annual rates of erosion by wind and water that will not affect crop productivity. Tons/acre/year range from 1 for shallow soils to 5 for very deep soils. Soils with higher T values can tolerate higher rates of erosion without loss of productivity.

⁴ Hydrologic Soil Groups (A, B, C, and D) are based on estimates of runoff potential according to the rate of water infiltration under the following conditions: soils are not protected by vegetation, soils are thoroughly wet, and soils receive precipitation from long-duration storms. The rate of infiltration decreases from Group A (high infiltration, low runoff) to D (low infiltration, high runoff).

3.3.1 Soil Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact soils.

Alternative B (Proposed Action)—Construction activities associated with the proposed well site and access road would result in soil disturbance, though impacts to soils are not anticipated to be significant. Stockpile quantities for the locations were calculated using and assumed eight inches of existing topsoil. The stockpile would contain approximately 5,815 cubic yards of topsoil (including topsoil used for berming).

Topsoil depths taken during the on-site survey indicated there is a sufficient quantity of topsoil for construction and reclamation activities. Topsoil depths taken during the on-site surveys verified the soil depth to be approximately eight inches at the well pad. The stockpiles would be positioned to assist in diverting runoff away from the disturbed areas, thus minimizing erosion, and to allow for interim reclamation soon after the well is put into production. Topsoil stockpiles at the site would be located along the east edges of the well pad.

Soil impacts would be localized, and best management practices (BMPs) would be implemented to minimize these impacts. Surface disturbances caused by well development, road improvements, and facilities construction would result in the removal of vegetation from the soil surface. This can damage soil crusts and destabilize the soil. As a result, the soil surface could become more prone to accelerated erosion by wind and water. BMPs used at the well site to reduce these impacts would include erosion and sediment control measures during and after construction, segregating topsoil from subsurface material for future reclamation, re-seeding of disturbed areas immediately after construction activities are completed, the use of construction equipment appropriately sized to the scope and scale of the project, ensuring road gradients fit closely with the natural terrain, and maintaining proper drainage. According to discussions at the field on-site assessments and standard industry practices, BMPs identified in the BLM Gold Book shall be utilized to further minimize site erosion.

Another soil resources issue is soil compaction, which can occur through use of heavy equipment. When soil is compacted, it decreases permeability and increases surface runoff. This is especially evident in silt and clay soils. In addition, soils may be impacted by mixing of soil horizons. Soil compaction and mixing of soil horizons would be minimized by the previously discussed topsoil segregation.

Contamination of soils from various chemicals and other products used during oil development activities is not anticipated. In the rare event that such contamination may occur, the event shall be immediately reported to the BLM, the NDIC, and, where appropriate, the North Dakota Department of Health (NDDH). In addition, the procedures of the surface management agency shall be followed to contain spills and leaks.

3.4 Water Resources

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, provides the authority to the Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE) to establish water quality standards, control discharges into surface and ground waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404). Within the Fort Berthold

Reservation, the Missouri River and Lake Sakakawea are both considered navigable waters and are therefore subject to Section 10 of the Rivers and Harbors Act of 1899.

The EPA also has the authority to protect the quality of drinking water under the Safe Drinking Water Act (SDWA) of 1974. As amended in 1986 and 1996, the SDWA requires many actions to protect drinking water and its sources: rivers, lakes reservoirs, springs, and ground water wells⁵. The Energy Policy Act of 2005 excludes hydraulic fracturing operations related to oil, gas, or geothermal production activities from EPA regulation under the SDWA⁶.

3.4.1 Surface Water

The project area is situated in the Great Plains region of North Dakota that borders the Badlands to the west. This is an arid area with few isolated surface water basins. The majority of the surface waters in the region are associated with the Missouri River, Lake Sakakawea, and tributaries to these water bodies. Surface water generally flows overland until draining into these systems.

The proposed well site is located in the Lake Sakakawea basin, meaning surface waters within this basin drain to Lake Sakakawea. The site is within the Sanish Bay Watershed and the Clarks Creek Sub-watershed. Please refer to *Figure 3.2, Surface Water Resources*.

Runoff throughout the study area is by sheet flow until collected by ephemeral and perennial streams draining to Lake Sakakawea. Runoff from the well pad would travel southwest into an unnamed ephemeral stream. From there, it would travel northwest to Rough Coulee, which then flows into Hunts Along Bay of Lake Sakakawea for a total traveled drainage distance of approximately 2.90 miles.

3.4.1.1 Surface Water Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact surface water.

Alternative B (Proposed Action)—No significant impacts to surface water are expected to result from Alternative B. The proposed project has been sited to avoid direct impacts to surface waters and to minimize the disruption of drainage patterns across the landscape. Construction site plans would contain measures including the installation of berms around all cut slopes to prevent precipitation or melt-water from running onto the pad. Culverts would be installed at the pad entrance and the connection point with the existing oilfield access road. Roadway engineering and the implementation of BMP's to control erosion would minimize runoff of sediment downhill or downstream. Specific measures to mitigate the impacts to surface waters and to minimize the disruption of drainage patterns may also include, but are not limited to, the implementation of silt fences and straw wattles.

⁵ The SDWA does not regulate private wells that serve fewer than 25 individuals.

⁶ The use of diesel fuel during hydraulic fracturing is still regulated under the SDWA.

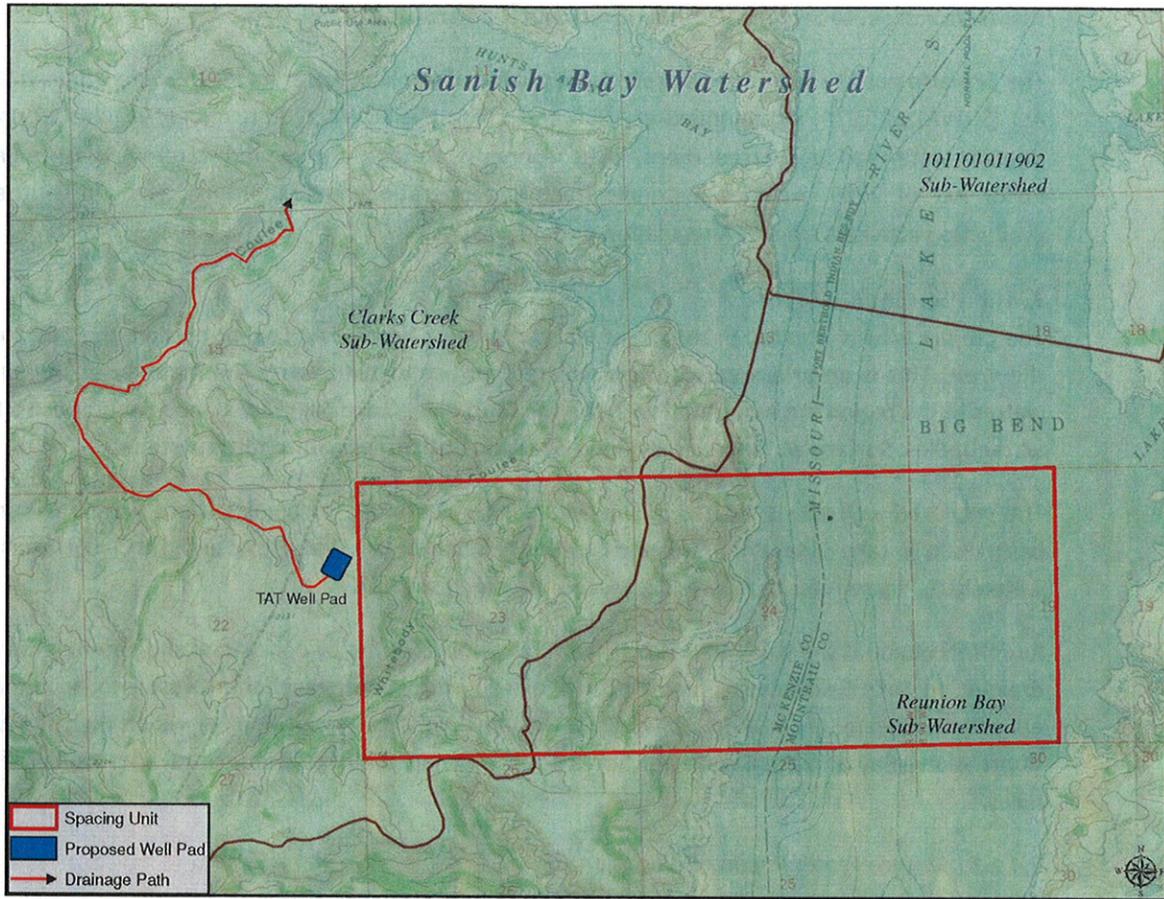


Figure 3.2, Surface Water Resources

Third-party intrusions are one of the biggest contributing factors to spills. To aid in the prevention of such intrusions, Saddle Butte would fully comply with the marking requirements specified in the US Department of Transportation’s rules and regulations, specifically contained in 49 CFR Parts 192 and 195. To ensure such compliance, Saddle Butte developed construction specifications to delineate the requirements for pipeline marking in accordance with applicable laws, rules, and regulations, including the locations of such markings (e.g., road crossings, waterbody crossings, line of sight, etc.) and the manner of marking such pipelines (e.g., height of markings and signage on the markings).

Saddle Butte has committed to developing a spill response plan that would be submitted to the BIA prior to the commencement of the construction activities. The response plan would include procedures that specifically address making the appropriate contacts, isolating the incident, protecting waterways and providing contact information for all the appropriate contractors and experts necessary to facilitate a rapid response.

The proposed pipelines would be sited to avoid direct impacts to surface water and to minimize the disruption of drainage patterns across the landscape. Implementation of BMPs to control erosion would mitigate runoff of sediment downhill or downstream.

Two types of valves would be utilized for spill isolation:

- Check valves would be installed between trunk lines and lateral lines to prevent a “back feed” scenario to a spill, thereby limiting the volume of any spill to the wells that are directly contributing to it.
- Manual valve sets would also be installed at all intersections of laterals to trunk lines, allowing isolation at the wells themselves.

Saddle Butte has also developed a GIS database that establishes real time, web-based maps for use by its operations team and first responder personnel. In addition, Saddle Butte has provided options in its trunk lines for automatic isolation based on low pressure switching devices once the system pressure exceeds 1400 psi. These valves would automatically isolate the pipeline under most line rupture circumstances. Based on these mitigation measures, the proposed project is not anticipated to result in measurable increases in runoff or impacts to surface waters.

3.4.2 Ground Water

The North Dakota State Water Commission’s electronic records reveal that there are no active or permitted groundwater wells within one-mile of the proposed oil and gas well pad or access road. The Missouri River-Lake Sakakawea Aquifer is located east of the proposed well pad and lies within the spacing unit; however, no sole source aquifers have been identified within the state of North Dakota. Please refer to *Figure 3.3, Aquifers and Groundwater Wells*.

3.4.2.1 Groundwater Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact ground water.

Alternative B (Proposed Action)—As required by applicable law, all proposed wells would be cemented and cased to isolate aquifers (including the Missouri River-Lake Sakakawea Aquifer discussed above) from potentially productive hydrocarbon and disposal/injection zones, thus minimizing the potential for impacts to groundwater.

Saddle Butte’s standard bore depth beneath an actively eroding drainage area is eight feet. However, bores are designed on a case by case basis to avoid any adverse effects of the natural surface in the vicinity of the bore. Additionally, bore pipe would be coated with abrasion resistant coating that provides substantial abrasion resistance if a large erosion or flooding event occurs. In addition, measures used to install and inspect the pipe prior to use along with monitoring procedures for potential leaks would minimize potential groundwater disturbance.

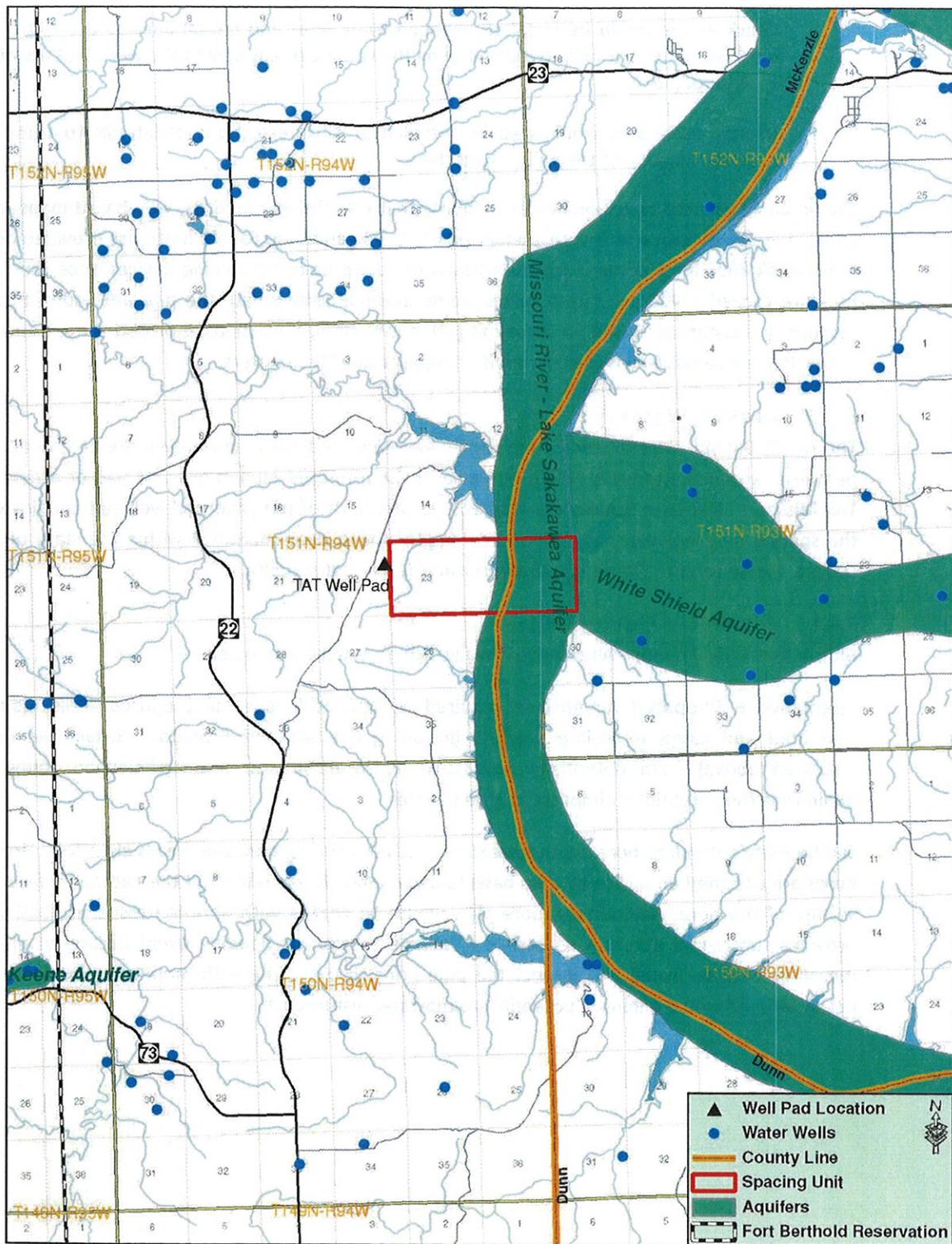


Figure 3.3, Aquifers and Groundwater Wells

3.5 Wetlands

Wetlands are defined by both the 1977 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1986, as those areas that are inundated by surface or ground water with a frequency to support and under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987), are hydric soils, hydrophytic vegetation, and hydrology. Wetlands are an important natural resource serving many functions, such as providing habitat for wildlife, storing floodwaters, recharging ground water, and improving water quality through purification.

No wetlands or riparian areas were identified within the study areas for the proposed well pad or access road areas during the field surveys.

3.5.1 Wetland impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact wetlands.

Alternative B (Proposed Action)—Due to the absence of wetlands within the well pad study area, no wetland impacts area anticipated to result from Alternative B.

3.6 Air Quality

The Clean Air Act, as amended, requires the EPA to establish air quality standards for pollutants considered harmful to public health and the environment by setting limits on emission levels of various types of air pollutants.

The NDDH operates a network of Ambient Air Quality Monitoring (AAQM) stations. The AAQM station in Theodore Roosevelt National Park – North Unit (TRNP-NU) is located approximately 33.8 miles southwest of the proposed well site. Criteria pollutants tracked under EPA's National Ambient Air Quality Standards in the Clean Air Act include sulfur dioxide (SO₂), particulate matter (PM), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb), and carbon monoxide (CO). In addition, the NDDH has established state air quality standards. State standards must be as stringent as (but may be more stringent than) federal standards. The federal and state air quality standards for these pollutants are summarized in *Table 3.2, Federal and State Air Quality Standards and Reported Data for TRNP-NU* (EPA 2006, NDDH 2010, TRNP-NU 2010).

Table 3.2, Federal and State Air Quality Standards and Reported Data for TRNP-NU

POLLUTANT	AVERAGING PERIOD	EPA AIR QUALITY STANDARD		NDDH AIR QUALITY STANDARD		TRNP-NU 2010 REPORTED DATA	
		µg/m ³	PARTS PER MILLION	µg/m ³	PARTS PER MILLION	µg/m ³	PARTS PER MILLION
SO ₂	24-Hour	365	0.14	365	0.14	—	0.0041
	Annual Mean	80	0.030	80	0.030	—	0.0006
PM ₁₀ ⁷	24-Hour	150	—	125	—	31.0	—
	Annual Mean	—	—	—	—	8.6	—
PM _{2.5} ⁸	24-Hour	35	—	35	—	27.3	—
	Weighted Annual Mean	15	—	15	—	5.46	—
NO ₂	Annual Mean	100	0.053	100	0.053	—	0.0012
CO	1-Hour	40,000	35	40,000	35	—	—
	8-Hour	10,000	9	10,000	9	—	—
Pb	3-Month	1.5	—	1.5	—	—	—
O ₃	1-Hour	—	—	—	—	—	0.073
	8-Hour	—	0.075	—	0.075	—	0.070

North Dakota was one of thirteen states in 2010 that met standards for all criteria pollutants. The state also met standards for fine particulates and the eight-hour ozone standards established by the EPA (NDDH 2010).

In addition, the Fort Berthold Reservation complies with the North Dakota National Ambient Air Quality Standards and visibility protection. The Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres designated prior to 1977. There are no Federal Class I areas⁹ within the project area. The Theodore Roosevelt National Park is the nearest Class I Area, located approximately 33.8 miles southwest of the proposed site.

3.6.1 Air Quality Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact air quality.

Alternative B (Proposed Action)—The Fort Berthold Reservation complies with North Dakota National Ambient Air Quality Standards and visibility protection. In addition, the TRNP-NU AAQM Station reported air quality data well below the state and federal standards. Alternative B would not include any major sources of air pollutants. Construction activities would temporarily generate minor

⁷ PM₁₀ refers to particulates 10 micrometers (µ) or less in size.

⁸ PM_{2.5} refers to particulates 2.5 micrometers (µ) or less in size.

⁹ Federal Class I areas are generally national parks and wilderness areas.

amounts of dust and gaseous emissions of PM, SO₂, NO₂, CO, and volatile organic compounds. Emissions would be limited to the immediate project area and are not anticipated to cause or contribute to a violation of National Ambient Air Quality Standards. No detectable or long-term impacts to air quality or visibility are expected within the airsheds of the Fort Berthold Reservation, State, or Theodore Roosevelt National Park.

On August 1, 2012, the EPA Administrator, Lisa Jackson, signed the approval and promulgation of the Federal Implementation Plan (FIP) for oil and gas well production facilities on the Fort Berthold Reservation. The Reservation-specific FIP regulates emissions from oil and gas production facilities producing in the Bakken Pool that were constructed and operating on or after August 12, 2007. The Interim Final Rule (IFR) became effective on August 3, 2012, and compliance with the IFR is required no later than 90 days after publication in the Federal Register. The FIP will be a permit by rule, the emission control requirements are clearly defined as follows:

The owner or operator is required to reduce the mass content of VOC emissions from natural gas during oil and natural gas production and storage operations by at least 90.0 percent on the first date of production. Within ninety (90) days of the first date of production, we require the owner or operator to route the natural gas from the production and storage operations through a closed-vent system to a utility flare or equivalent combustion device capable of reducing the mass content of VOC in the natural gas vented to the device by at least 98.0 percent.

Marathon would comply with all rules and regulations set forth in the FIP. In addition, Marathon would provide dust control for their access roads and haul roads.

3.7 Threatened, Endangered, and Candidate Species

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, 50 CFR Part 402, as amended, each federal agency is required to ensure the following two criteria. First, any action funded or carried out by such agency must not be likely to jeopardize the continued existence of any federally-listed endangered or threatened species or species proposed to be listed. Second, no such action can result in the destruction or adverse modification of habitat of such species that is determined to be critical by the Secretary. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future. A candidate species is a plant or animal for which the USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. While candidate species are not legally protected under the ESA, it is within the spirit of the ESA to consider these species as having significant value and worth protecting.

The proposed project area was evaluated to determine the potential for occurrences of federally-listed threatened, endangered and candidate species. The USFWS February 2012 Endangered, Threatened, and Candidate Species and Designated Critical Habitat in North Dakota County List identified the gray wolf, interior least tern, pallid sturgeon, black-footed ferret, and whooping crane as endangered species that may be found within McKenzie County. The piping plover is listed as a threatened species and the Dakota skipper and Sprague's pipit are listed as candidate species. In addition, McKenzie County contains designated critical habitat for the piping plover adjacent to Lake

Sakakawea. None of these species were observed during the field surveys and on-site assessment. Habitat requirements, the potential for suitable habitat within the project area, and other information regarding listed species for McKenzie County are included in the following section.

3.7.1 Threatened Species

Piping Plover (Charadrius melodus)

The piping plover is a small migratory shorebird. Historically, piping plovers could be found throughout the Atlantic Coast, Northern Great Plains, and the Great Lakes. Drastically reduced, sparse populations presently occur throughout this historic range. In North Dakota, breeding and nesting sites can be found along the Missouri River. Preferred habitat for the piping plover includes riverine sandbars, gravel beaches, alkali areas of wetlands, and flat, sandy beaches with little vegetation. The USFWS has identified critical habitat for the piping plover on the Missouri River system. Critical habitat includes reservoir reaches composed of sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with water bodies.

There is no existing or potential piping plover habitat within the project area. Critical habitat in the form of sandy/gravelly Lake Sakakawea shoreline exists approximately 0.96 miles away.

3.7.1.1 Threatened Species Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no effect to the piping plover or its critical habitat.

Alternative B (Proposed Action)—Similar to the interior least tern, suitable habitat for the piping plover is largely associated with Lake Sakakawea and its shoreline. The well site is located on upland bluffs composed of mixed-grass pasture land, with Lake Sakakawea and its shoreline located approximately 280 feet below and 0.96 miles to the east of the well. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers for shoreline-nesting birds.

Storage tanks and the heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against accidental release of fluids from the site. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. All cut slopes would be bermed to prevent precipitation or melt-water from running onto the pad. In addition, stabilization of drill cuttings before placement in the pit and the reinforced lining of the cuttings pit would diminish the potential for pit leaching. Due to the implementation of secondary containment measures and the cuttings pit parameters, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is unlikely. Additionally, if electrical lines are installed, they would be buried to prevent the potential for bird strikes. However, due to the proximity of the proposed project to Lake Sakakawea (approximately 0.96 miles), the proposed project may affect but is not likely to adversely affect the piping plover. The proposed project is not likely to destroy or adversely modify designated piping plover critical habitat.

3.7.2 Endangered Species

Black-Footed Ferret (Mustela nigripes)

The black-footed ferret historically could be found throughout the Rocky Mountains and Great Plains. In North Dakota, the black-footed ferret may potentially be present within prairie dog towns. However, this species has not been confirmed in North Dakota for nearly 30 years and is presumed to

be extirpated. Its preferred habitat includes areas around prairie dog towns, as it relies on prairie dogs for food and lives in prairie dog burrows. Black-footed ferrets require at least an 80-acre prairie dog town to survive.

No prairie dog towns were observed within the proposed well pad or access road corridor to provide suitable black-footed ferret habitat or food sources.

Gray Wolf (Canis Lupis)

The gray wolf is the largest wild canine species in North America. It is found throughout northern Canada, Alaska, and the forested areas of Northern Michigan, Minnesota, and Wisconsin and has been reintroduced to Yellowstone National Park in Wyoming. While the gray wolf is not common in North Dakota, occasionally individual wolves do pass through the state. Historically, its preferred habitat includes biomes such as boreal forest, temperate deciduous forest, and temperate grassland. Gray wolves live in packs of up to 21 members, although some individuals will roam alone.

The project area is located far from other known wolf populations and is surrounded by mixed-grass pasture land which does not provide suitable gray wolf habitat.

Interior Least Tern (Aterna antillarum)

The interior least tern nests along inland rivers. The interior least tern is found in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande Rivers. In North Dakota, it is sighted along the Missouri River during the summer nesting season. The interior least tern nests in sandbars or barren beaches, preferably in the middle of a river for increased safety while nesting. These birds nest close together, using safety in numbers to scare away predators.

There is no existing or potential habitat within the project area. Potential habitat in the form of sandy/gravelly Lake Sakakawea shoreline exists approximately 0.96 miles away from the proposed site.

Pallid Sturgeon (Scaphirhynchus albus)

The pallid sturgeon is known to exist in the Yellowstone, Missouri, middle and lower Mississippi, and Atchafalaya Rivers, and seasonally in some tributaries. In North Dakota, the pallid sturgeon is found principally in the Missouri River and upstream of Lake Sakakawea in the Yellowstone River. Dating to prehistoric times, the pallid sturgeon has become well adapted to living close to the bottom of silty river systems. According to the USFWS, its preferred habitat includes "a diversity of water depths and velocities formed by braided river channels, sand bars, sand flats, and gravel bars." Weighing up to 80 pounds, pallid sturgeons are long lived, with individuals possibly reaching 50 years of age.

Potential habitat for pallid sturgeon can be found in Lake Sakakawea approximately 0.96 miles from the proposed project site, or 2.90 miles following the shortest drainage pattern.

Whooping Crane (Grus Americana)

The whooping crane is the tallest bird in North America. In the United States, this species ranges through the Midwest and Rocky Mountain regions from North Dakota south to Texas and east into Colorado. Whooping cranes migrate through North Dakota along a band running from the south central to the northwest parts of the state. They use shallow, seasonally and semi-permanently flooded palustrine (marshy) wetlands for roosting and various cropland and emergent wetlands for feeding. During migration, whooping cranes are often recorded in riverine habitats, including the

Missouri River. Currently there are three wild populations of whooping cranes, yielding a total species population of about 383. Of these flocks, only one is self-sustaining.

There were no wetlands or cropland observed near the proposed well pad location. However, the proposed project is located in the Central Flyway where 75 percent of confirmed whooping crane sightings have occurred.

3.7.2.1 *Endangered Species Impacts/Mitigation*

Alternative A (No Action)—Alternative A would have no effect to the gray wolf, interior least tern, pallid sturgeon, black-footed ferret, or whooping crane.

Alternative B (Proposed Action)—Due to lack of preferred habitat characteristics and/or known populations, the proposed project is anticipated to have no effect on the gray wolf or black-footed ferret.

Suitable habitat for the interior least tern and pallid sturgeon is largely associated with Lake Sakakawea and its shoreline. The well site and access road are located on upland bluffs of mixed-grass pastureland, with Lake Sakakawea and its shoreline located approximately 280 feet below. Lake Sakakawea shoreline is located approximately 0.96 miles northeast at its nearest point, or 2.90 miles via the shortest drainage pattern. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers for shoreline-nesting birds.

Storage tanks and the heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against accidental release of fluids from each site. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. All cut slopes would be bermed to prevent precipitation or melt-water from running onto the pad. In addition, stabilization of drill cuttings before placement in the pit and the reinforced lining of the cuttings pit would diminish the potential for pit leaching. Due to the implementation of secondary containment measures and the cuttings pit parameters, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is unlikely. Additionally, if electrical lines are installed, they would be buried to prevent the potential for bird strikes. However, due to the proximity of the proposed project to Lake Sakakawea (approximately 0.96 miles), the proposed project may affect but is not likely to adversely affect the interior least tern and/or pallid sturgeon.

There were no shallow wetlands or cropland found near the proposed well site; however, the proposed project is located within the Central Flyway where approximately 75 percent of confirmed whooping crane sightings have occurred. Whooping cranes traveling through the area may alter their flight and landing patterns to avoid disturbance related to oil and gas development. Therefore, the proposed project may affect but is not likely to adversely affect whooping cranes or their associated habitat. To minimize the potential of direct whooping crane impacts, if electrical lines are installed the lines would be buried to prevent bird strikes. Per USFWS recommendations, if a whooping crane is sighted within one-mile of a well site or associated facilities while under construction, then all work would cease within one-mile of that part of the project and the USFWS would be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.

3.7.3 Candidate Species

Dakota Skipper (*Hesperia dacotae*)

The Dakota skipper is a small butterfly with a one-inch wing span. These butterflies historically ranged from southern Saskatchewan, across the Dakotas and Minnesota, to Iowa and Illinois. The preferred habitat for the Dakota Skipper consists of flat, moist bluestem prairies and upland prairies with an abundance of wildflowers. Dakota Skippers are visible in their butterfly stage from mid-June to early July.

The proposed site consists of heavily grazed rangeland that could potentially provide suitable Dakota skipper habitat as grazing patterns change. Upland prairie and wildflower species were observed. No Dakota Skippers were observed during the field survey or on-site assessment.

Sprague's pipit (*Anthus spragueii*)

The Sprague's pipit is a small songbird found in prairie areas throughout the Northern Great Plains. Preferred habitat includes rolling, upland mixed-grass prairie habitat with high plant species diversity. The Sprague's pipit breeds in habitat with minimal human disturbance. Historically, natural disturbances such as fire and bison grazing were major drivers in maintaining a healthy prairie ecosystem that provided ideal habitat for the Sprague's Pipit. Today, fire is no longer a widespread regular phenomenon as it was in pre-colonial times, and bison grazing has largely been substituted by cattle grazing. Little information exists at this time to conclusively determine how grazing or substituting cattle for bison throughout much of the range has impacted the Sprague's pipit. However, based on currently available information, it is believed that cattle grazing is not a significant threat to the species.

The proposed project area consists of heavily grazed upland mixed-grass prairie. Although the overall health and productivity of the site compared to historical conditions is unknown, as grazing patterns change, the site may contain the prairie habitat necessary for the Sprague's pipit. No Sprague's pipit were observed during the field survey or on-site assessment.

3.7.3.1 Candidate Species Impacts/Mitigation

Alternative A (No Action)—Alternative A would not adversely impact candidate species.

Alternative B (Proposed Action)—Due to the presence of potential habitat for the Dakota skipper and Sprague's pipit within the project area, the proposed action may impact individuals or habitat. An "effect determination" under Section 7 of the Endangered Species Act has not been made due to the current unlisted status of the species.

3.8 Bald and Golden Eagles

Protection is provided for the bald and golden eagle through the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA of 1940, 16 U.S.C. 668-668d, as amended, was written with the intent to protect and preserve bald and golden eagles, both of which are treated as species of concern within the Department of the Interior. The BGEPA prohibits, except under certain specified conditions, the taking, possession, or commerce of bald and golden eagles. Under the BGEPA, "take" includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb, wherein "disturb" means to agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment.

The bald eagle (*Haliaeetus leucocephalus*) is sighted in North Dakota along the Missouri River during spring and fall migration periods and periodically in other places in the state such as the Devils Lake and Red River areas. In 2009, the ND Game and Fish Department estimated that 66 nests were

occupied by bald eagles, though not all eagle nests were visited and verified. Its preferred habitat includes open areas, forests, rivers, and large lakes. Bald eagles tend to use the same nest year after year, building atop the previous year's nest. No bald eagles or eagle nests were observed within 0.5 miles of proposed project disturbance areas during field surveys conducted on October 21, 2010 and November 3, 2010.

The golden eagle (*Aquila chrysaetos*) can be spotted in North Dakota throughout the badlands and along the upper reaches of the Missouri River in the western part of the state. Golden eagle pairs maintain territories that can be as large as 60 square miles and nest in high places including cliffs, trees, and human-made structures. They perch on ledges and rocky outcrops and use soaring to search for prey. Golden eagle preferred habitat includes open prairie, plains, and forested areas. No golden eagles or eagle nests were observed within 0.5 miles of the proposed project disturbance areas during the field surveys conducted on October 21, 2010, and November 3, 2010.

The USGS Northern Prairie Wildlife Research Center maintains information on bald eagle and golden eagle habitat within the state of North Dakota. According to the USGS data, the 0.5-mile buffered survey area the proposed well pad and access road does contain recorded habitat for both the bald eagle and the golden eagle. In addition, Dr. Anne Marguerite Coyle of Dickinson State University has completed focused research on golden eagles and maintains a database of golden eagle nest sightings. According to Dr. Coyle's information, the closest recorded golden eagle nest is located approximately 3.26 miles southeast of the proposed TAT well pad. Please refer to *Figure 3.4, Bald and Golden Eagle Habitat and Nesting Sightings*.

3.8.1 Eagle Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact bald or golden eagles.

Alternative B (Proposed Action)—The proposed project is located within areas of recorded suitable bald and golden eagle habitat. However, no evidence of eagle nests were found within 0.5 miles of the project area and no nest sightings have been recorded within one mile of the project area. Therefore, no impacts to bald or golden eagles are anticipated to result from the proposed project. If a bald or golden or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed. Additionally, if electrical lines are tied into existing backbones then the lines would be buried to prevent the potential for bird strikes.

3.9 Migratory Birds and Other Wildlife

The Migratory Bird Treaty Act (MBTA), 916 U.S.C. 703-711, provides protection for 1,007 migratory bird species, 58 of which are legally hunted. The MBTA regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds. The MBTA defines "taking" to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof, except when specifically permitted by regulations.

The proposed project study area lies in the Central Flyway of North America. As such, this area is used as resting grounds for many birds on their spring and fall migrations, as well as nesting and breeding grounds for many waterfowl species. Other non-game bird species are known to fly through and inhabit this region.

In addition, the project area contains suitable habitat for mule deer (*Odocoileus hemionu*), whitetail deer (*Odocoileus virginianus*), sharp-tailed grouse (*Tympanuchus phasianellus*), wild turkey (*Meleagris gallopavo*), ring-necked pheasant (*Phasianus colchicas*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), American badger (*Taxidea taxus*), song birds, coyote (*Canis latrans*), red fox (*Vulpes vulpes*), Eastern cottontail rabbit (*Sylvilagus floridanus*), white-tailed jackrabbit (*Lepus townsendii*), mountain lion (*Puma concolor*), and North American porcupine (*Erethizon dorsatum*).

During the pedestrian field surveys, migratory birds, raptors, big and small game species, non-game species, potential wildlife habitats, and/or bird nests were identified if present. The following wildlife and migratory birds were observed during the field survey and on-site assessment: Red-tailed hawk, cattle, and pocket gopher mounds

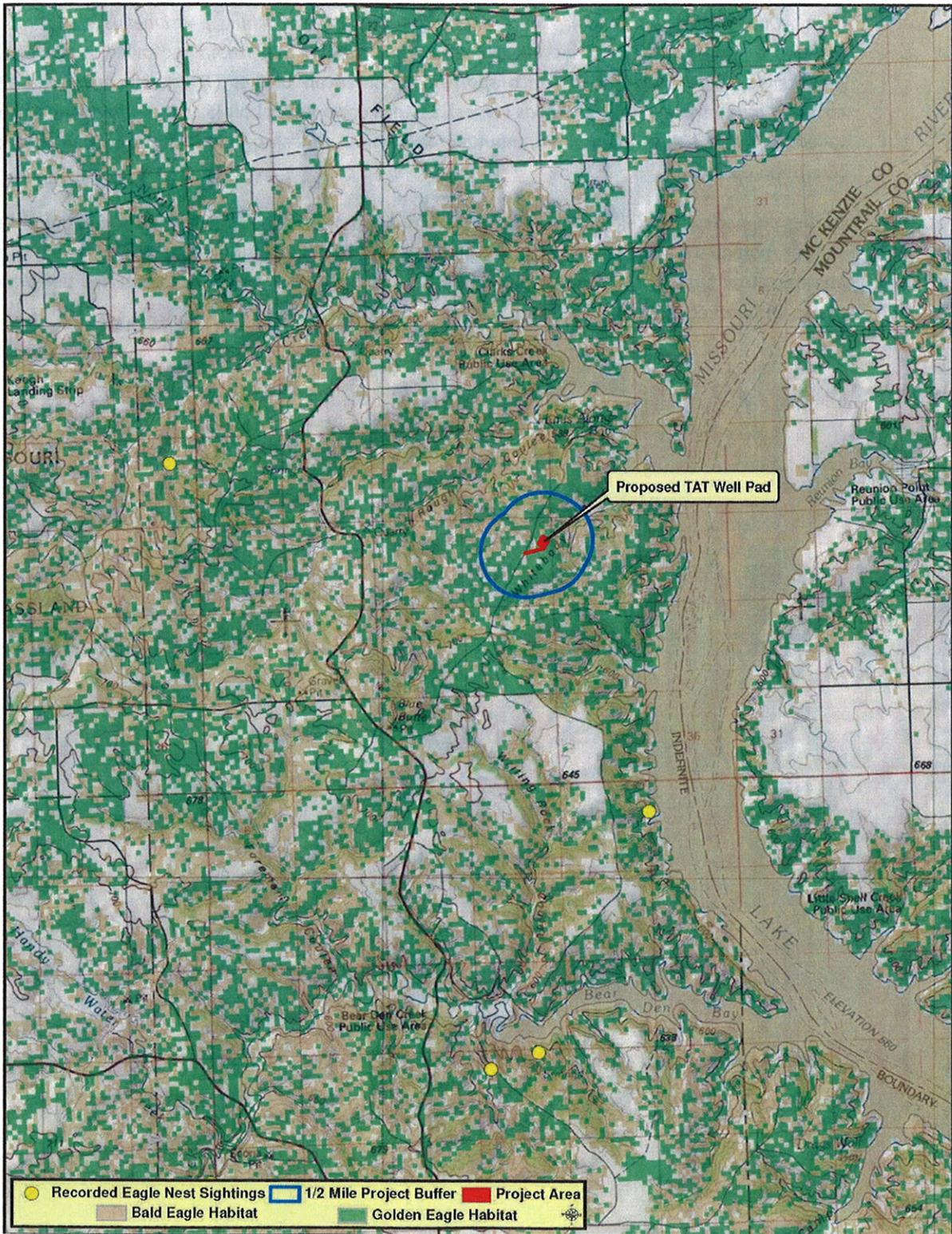


Figure 3.4, Bald and Golden Eagle Habitat and Nesting Sightings

3.9.1 Migratory Birds and Other Wildlife Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact migratory birds or other wildlife.

Alternative B (Proposed Action)—Due to the presence of suitable habitat at the project site for many wildlife and avian species, ground clearing, drilling, and long-term production activities associated with the proposed project may impact individuals by displacing animals from suitable habitat. While many species of wildlife may continue to use the project area for breeding and feeding and continue to thrive, the activities associated with oil and gas development may displace animals from otherwise suitable habitats. As a result, wildlife may be forced to utilize marginal habitats or relocate to unaffected habitats where population density and competition increase. Consequences of such displacement and competition may include lower survival, lower reproductive success, lower recruitment, and lower carrying capacity leading ultimately to population-level impacts. Therefore, the proposed project may affect individuals and populations within these wildlife species, but is not likely to result in a trend towards listing of any of the species identified. As no grouse leks were observed in the project area, additional timing restrictions for construction are not required.

The proposed well pad site is located on an upland area that is at a considerably higher elevation (approximately 280 feet) than the Lake Sakakawea shoreline. Additionally, the distance to Lake Sakakawea is approximately 0.96 miles. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers for shoreline-nesting birds.

During drilling activities, the noise, movements, and lights associated with the drilling are expected to deter wildlife from entering the area. In addition, the cuttings pit would be used primarily for solid material storage, and it is expected that very minimal free fluid would be present in the pit. The absence of exposed liquids in the pit would minimize their attractiveness to wildlife. Immediately after the drilling rig leaves the location, the cuttings pit would be netted with State and Federal approved nets. These would remain in place until the closure of the cuttings pit.

In addition, design considerations would be implemented to further protect against potential habitat degradation. The storage tanks and heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. BMP's to minimize wind and water erosion of soil resources, as well as implementing a semi-closed loop drilling system with an on-site stabilized cuttings pit during drilling, would also be put into practice.

All efforts would be made to complete construction outside the migratory bird nesting season (February 1 through July 15) in order to avoid impacts to migratory birds during the breeding/nesting season. In the event that construction needs to take place during the migratory bird nesting season, a pre-construction survey for migratory birds or their nests would be conducted by a qualified biologist within five days prior to the initiation of all construction activities or the project area would be mowed/grubbed the previous fall to deter birds from nesting in project area.

All reasonable, prudent, and effective measures to avoid the taking of migratory bird species would be implemented during the construction and operation phases. These measures would include: the use of suitable mufflers on all internal combustion engines; certain compressor components to mitigate noise; only utilizing approved roadways; placing wire mesh or grate covers over barrels or buckets placed under valves and spigots to collect dripped oil; maintaining open pits and ponds that

are free from oil, netting cuttings pits with netting that has a maximum mesh size of 1.5 inches, and burying of electrical lines.

3.10 Vegetation

Botanical resources were evaluated using visual inspection. The project area was also investigated for the presence of invasive plant species.

The well site study area consisted of native and non-native upland grasses and shrubs that have been disturbed by cattle and/or horse grazing. The proposed access road leading to the proposed well pad was dominated by western wheatgrass (*Pascopyrum smithii*), Kentucky bluegrass (*Poa pratensis*), little bluestem (*Schizachyrium scoparium*), fringed sagewort (*Artemisia frigida*), and cudweed sagewort (*Artemisia ludoviciana*). Silver buffaloberry (*Shepherdia argetea*) was observed in small patches along the proposed access road and throughout the proposed well site. Dominant well pad vegetation consisted of fringed sagewort, cudweed sagewort, blue grama (*Bouteloua gracilis*), dotted gayfeather (*Liatris punctata*) and western wheatgrass. The nearest wooded draw is approximately 400 feet northeast of the proposed well pad. No noxious weeds were observed in the study area. Please refer to **Figure 3.5, Access Road Vegetation**, **Figure 3.6, Dominant Well Pad Vegetation**, and **Figure 3.7, Silver Buffaloberry** for examples of vegetation observed at the site.

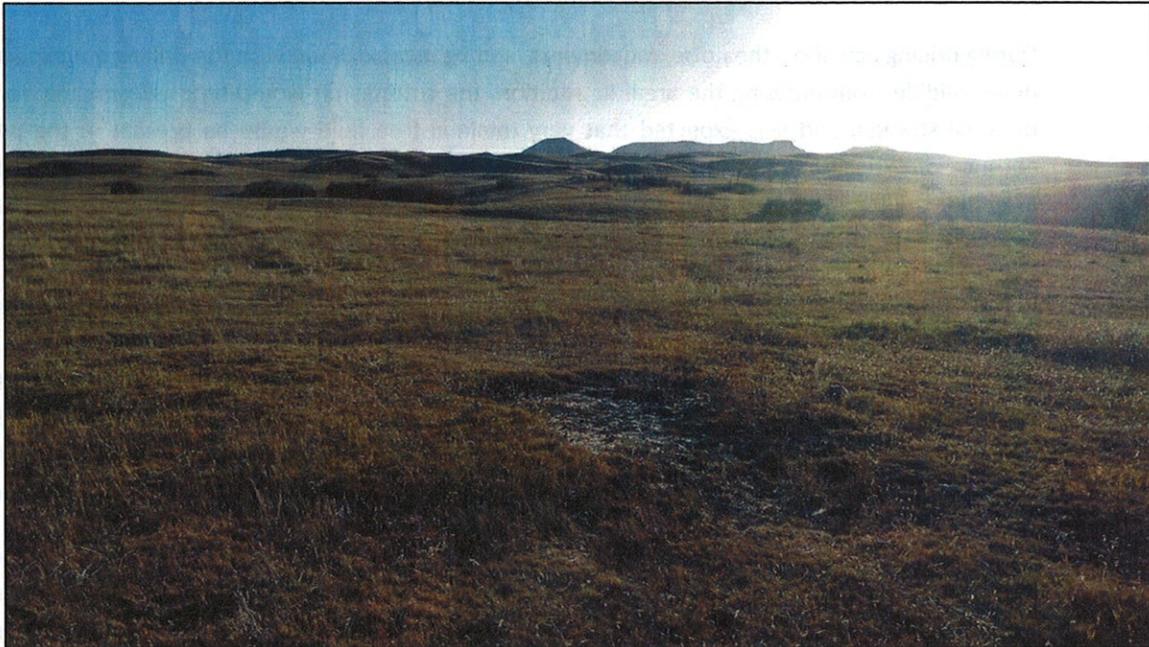


Figure 3.5, Access Road Vegetation



Figure 3.6, Dominant Well Pad Vegetation

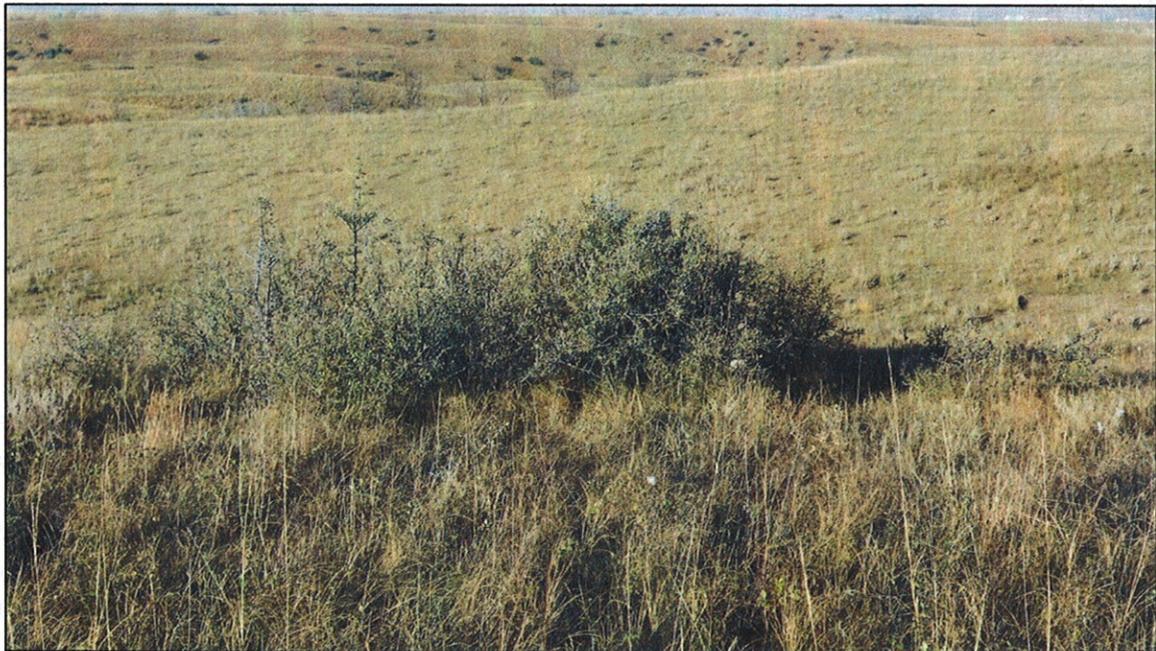


Figure 3.7, Silver Buffaloberry

The project area was surveyed for the presence of noxious weeds. Of the 11 species declared noxious under the North Dakota Century Code (Chapter 63-10.1), seven are known to occur in McKenzie County. In addition, counties and cities have the option to add species to the list to be enforced within their jurisdictions. McKenzie County has added black henbane, common burdock, houndstongue, halogeton, and baby's breath. There were no noxious weeds observed during the field survey. Please refer to *Table 3.3, Noxious Weed Species*.

Table 3.3, Noxious Weed Species

COMMON NAME	SCIENTIFIC NAME	2009 MCKENZIE COUNTY REPORTED ACRES
Absinth wormwood	<i>Artemesia absinthium L.</i>	15
Baby's breath	<i>Gypsophila paniculata</i>	—
Black henbane	<i>Hyoscyamus niger</i>	—
Canada thistle	<i>Cirsium arvense (L.) Scop</i>	34,933
Common burdock	<i>Arctium minus</i>	—
Dalmation toadflax	<i>Linaria genistifolia ssp. Dalmatica</i>	1
Diffuse Knapweed	<i>Centaurea diffusa Lam</i>	1
Halogeton	<i>Halogeton glomeratus</i>	—
Houndstongue	<i>Cynoglossum officinale</i>	—
Leafy spurge	<i>Euphorbia esula L.</i>	26,348
Musk thistle	<i>Carduus nutans L.</i>	—
Purple loosestrife	<i>Lythrum salicaria</i>	—
Russian knapweed	<i>Acroptilon repens (L) DC.</i>	—
Saltcedar (tamarisk)	<i>Tamarix ramosissima</i>	2,400
Spotted knapweed	<i>Centaurea maculosa Lam.</i>	5
Yellow toadflax	<i>Linaria vulgaris</i>	—

3.10.1 Vegetation Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact vegetation.

Alternative B (Proposed Action)—Ground clearing activities associated with construction of the proposed well pad and access road would result in vegetation disturbance; however, the areas of proposed surface disturbances are minimal in the context of the setting, and these impacts would be further minimized in accordance with the BLM Gold Book standards for well reclamation. Disturbance of vegetation in areas of noxious weed infestations may result in redistribution of invasive species within the project area. Thus, areas not currently dominated by these species would have a high potential to become infested. The spread of noxious weeds can have an adverse effect on multiple aspects of vegetation resources ranging from the suitability of sensitive plant habitat and maintenance of native biodiversity to forage production for livestock grazing. If noxious weeds are discovered, Marathon would treat them with a BIA/BLM approved herbicide prior to construction to prevent the spread of noxious weed infestations.

Following construction, interim reclamation measures to be implemented include reduction of cut and fill slopes, redistribution of stockpiled topsoil, and re-seeding of disturbed areas with a native grass seed mixture consistent with surrounding vegetation. If commercial production equipment is

installed, the well site would be reduced in size to accommodate the production facilities, while leaving adequate room to conduct normal well maintenance and potential recompletion operations, with the remainder of the well pad reclaimed. Reclamation activities would include leveling, re-contouring, treating, backfilling, and re-seeding with a native grass seed mixture from a BIA/BLM-approved source. Erosion control measures would be installed as appropriate. Stockpiled topsoil would be redistributed and re-seeded as recommended by the BIA.

Interim reclamation activities would begin six months after well completion, unless weather conditions or the drilling schedule precludes this from happening. In the event that reclamation activities do not begin within six months of well completion, Marathon would request an extension from the BIA.

If no commercial production developed from any of the proposed wells, or upon final abandonment of commercial operations, all disturbed areas would be promptly reclaimed. The access road and well pad area would be re-contoured to match topography of the original landscape as closely as possible and re-seeded with vegetation consistent with surrounding native species to ensure a healthy and diverse mix free of noxious weeds. Seed would be obtained from BIA/BLM-approved sources. Re-vegetation of the site would be consistent with the BLM Gold Book Standards. Erosion control measures, including the reseeded and/or installation of blanket matting on all fill slopes and placement of straw waddles in all adjacent drainages, would be installed in a manner that is consistent with the BLM Gold Book Standards. Maintenance of the re-vegetated site would continue until such time that the stand was consistent with the surrounding undisturbed vegetation and the site free of noxious weeds. The surface management agency would provide final inspection of the site to deem the reclamation effort complete.

3.11 Cultural Resources

Historic properties, or cultural resources, on federal or tribal lands are protected by many laws, regulations and agreements. The *National Historic Preservation Act of 1966* (16 USC 470 et seq.) at 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 Archaeological and Historic Preservation Act of 1974 provides for the survey, recovery, and preservation of significant scientific, prehistoric, archaeological, or paleontological data when such data may be destroyed or irreparably lost due to a federal, federally licensed, or federally-funded project.

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.*).

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 is triggered by the possession of human remains or cultural items by a federally-funded repository or by the discovery of human remains or cultural items on federal or Tribal lands and provides for the inventory, protection, and return of cultural items to affiliated Native American groups. Permits are required for intentional excavation and removal of Native American cultural items from federal or tribal lands.

The American Indian Religious Freedom Act of 1978 requires consultation with Native American groups concerning proposed actions on sacred sites on federal lands or affecting access to sacred sites. It establishes federal policy to protect and preserve for American Indians, Eskimos, Aleuts, and Native Hawaiians the right to free exercise of their religion in the form of site access, use and possession of sacred objects, as well as the freedom to worship through ceremonial and traditional rites. The act requires federal agencies to consider the impacts of their actions on the religious sites and objects important to these peoples, regardless of eligibility for listing on the NRHP.

In accordance with 16 U.S.C. 470hh(a), information concerning the nature and location of archeological resources and traditional cultural properties, and detailed information regarding archaeological and cultural resources, is confidential. Such information is exempt from the Freedom of Information Act and is not included in this EA.

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 Kadmas, Lee & Jackson, Inc., using an intensive pedestrian methodology. Approximately 12.7 acres were inventoried on October 21, 2010 (Ó Donnchadha 2010). No historic properties were located that appeared to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on December 9, 2010; however, the THPO did not respond within the allotted 30 day comment period.

3.11.1 Cultural Resources Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact cultural resources.

Alternative B (Proposed Action)—No cultural resources were identified within the APE. As such, cultural resources impacts are not anticipated. If cultural resources are discovered during

construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA. All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.

3.12 Socioeconomic Conditions

Socioeconomic conditions depend on the character, habits, and economic conditions of people living within the proposed project area. Business, employment, transportation, utilities, etc. are factors that affect the social climate of a community. Other factors that distinguish the social habits of one particular area from another include the geography, geology, and climate of the area.

The Fort Berthold Reservation is home to six major communities, consisting of New Town, White Shield, Mandaree, Four Bears, Twin Buttes, and Parshall. These communities provide small business amenities such as restaurants, grocery stores, and gas stations; however, they lack the larger shopping centers that are typically found in larger cities of the region such as Minot and Bismarck. According to 2000 US Census data¹⁰, educational/health/social services is the largest industry on the Reservation, followed by the entertainment/recreation/ accommodation/food industry. The Four Bears Casino, Convenience Store, and Recreation Park are also major employers with over 320 employees, 90% of which are tribal members. In addition, several industries are located on the Reservation, including Northrop Manufacturing, Mandaree Enterprise Corporation, and Three Affiliated Tribes Lumber Construction Manufacturing Corporation.

Several paved state highways provide access to the reservation including ND Highways 22 and 23 and US Highway 1804. These highways provide access to larger communities such as Bismarck, Minot and Williston. Paved and gravel BIA Route roadways serve as primary connector routes within the Reservation. In addition, networks of rural gravel roadways are located throughout Reservation boundaries providing access to residences, oil and gas developments, and agricultural land. Major commercial air service is provided out of Bismarck and Minot, with small-scale regional air service provided out of New Town and Williston.

3.12.1 Socioeconomic Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact the socioeconomic conditions in the project area. However, Alternative A would not permit the development of oil and gas resources within the spacing units, which could have positive effects on employment and income through the creation of jobs and payment of leases, easement, and/or royalties to Tribal members.

Alternative B (Proposed Action)—Alternative B is not anticipated to substantially impact the socioeconomic conditions in the project area, but it does have the potential to yield beneficial impacts on Tribal employment and income. Qualified individual tribal members may find employment through oil and gas development and increase their individual incomes. Additionally, the proposed action may result in indirect economic benefits to tribal business owners resulting from construction workers expending money on food, lodging, and other necessities. The increased traffic during construction may create more congested traffic conditions for residents. Marathon would follow McKenzie County, BIA, and North Dakota Department of Transportation (NDDOT) rules and

¹⁰ Since 2000, there has been an increasing focus on oil and gas development on the Fort Berthold Reservation. As such, it is anticipated that these trends have likely shifted; however, data from the 2010 US Census for these categories has not been released for the Fort Berthold Reservation.

regulations regarding rig moves and oversize/overweight loads on state and county roads used as haul roads in order to maintain safe driving conditions.

3.13 Environmental Justice

Per Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, measures must be taken to avoid disproportionately high adverse impacts on minority or low-income communities.

Generally, the Three Affiliated Tribes qualify for environmental justice consideration as both a minority and low-income population. The population of North Dakota is predominantly Caucasian. Tribal members comprise 5.4% of North Dakota’s population and 23.5% of the population of McKenzie County.

According to 2006–2010 U.S. Census Bureau data, McKenzie County has higher than statewide average per capita and median household incomes, while the Fort Berthold Reservation is lower than the statewide average for both of these categories. In addition, McKenzie County has slightly higher rates of unemployment than the state average, while the Fort Berthold Reservation’s rate of unemployment was substantially greater. Please refer to *Table 3.4, Employment and Income*.

Table 3.4, Employment and Income

LOCATION	PER CAPITA INCOME	MEDIAN HOUSEHOLD INCOME	UNEMPLOYMENT RATE	INDIVIDUALS LIVING BELOW POVERTY LEVEL
McKenzie County	\$27,605	\$48,480	4.0%	10.0%
Fort Berthold Reservation	\$18,059	\$41,658	6.9%	26.0%
Statewide	\$25,803	\$46,781	3.6%	12.3%

Source: U.S. Census Bureau, 2006–2010 American Community Survey

Due to the recent expansion of oil and gas activity with northwestern North Dakota, these figures are not truly reflective of the current economic characteristic of either McKenzie County or the Fort Berthold Reservation. Between 2008 and 2011, annual income paid to tribal owners for oil and gas related activities rose from \$4.5 million to \$116.4 million. In addition, oil and gas related activities have created in excess of 10,000 jobs on the Reservation, many of which have been filled by tribal members.

Population decline in rural areas of North Dakota has been a growing trend as individuals move toward metropolitan areas of the state, such as Bismarck and Fargo. Population trends within McKenzie County and the Fort Berthold Reservation have shown an increase over the past decade due largely in part to oil and gas related activities. American Indians are the majority population on the Fort Berthold Reservation but are the minority population in McKenzie County and the state of North Dakota. Please refer to *Table 3.5, Demographic Trends*.

Table 3.5, Demographic Trends

LOCATION	POPULATION IN 2010	% OF STATE POPULATION	% CHANGE 2000–2010	PREDOMINANT RACE	PREDOMINANT MINORITY
McKenzie County	6,360	0.95%	+10.9%	White	American Indian (23.5%)
Fort Berthold Reservation	6,341	0.94%	+7.2%	American Indian ¹¹	White (23.8%)
Statewide	672,591	—	4.7%	White	American Indian (5.4%)

Source: U.S. Census Bureau, 2005-2009 American Community Survey.

3.13.1 Environmental Justice Impacts/Mitigation

Alternative A (No Action)—Alternative A would not result in disproportionately high adverse impacts to minority or low-income populations.

Alternative B (Proposed Action)—Alternative B would not require relocation of homes or businesses, cause community disruptions, or cause disproportionately adverse impacts to members of the Three Affiliated Tribes. The proposed project has not been found to pose significant impacts to any other critical element (public health and safety, water, wetlands, wildlife, soils, or vegetation) within the human environment. The proposed project is also not anticipated to result in disproportionately adverse impacts to non-Tribal minority or low-income populations.

Oil and gas development of the Bakken and Three Forks Formations is occurring both on and off the Fort Berthold Reservation. Employment opportunities related to oil and gas development may lower the unemployment rate and increase the income levels on the Fort Berthold Reservation. The Tribal Employee Rights Office (TERO) establishes rules and regulations pertaining to employment and contracting on the Fort Berthold Reservation. Marathon complies with these regulations by utilizing numerous contractors that employ MHA tribal members. Several of these contractors have developed a collaborative working relationship with Marathon and provide a valuable asset in their ability to drill, complete and produce wells on the Fort Berthold Reservation. In addition, the Three Affiliated Tribes and allotted owners of mineral interests may receive income from oil and gas development on the Fort Berthold Reservation in the form of royalties, if drilling and production are successful, as well as from Tribal Permit Application and Tribal Employee Rights Office (TERO) fees collected on wells drilled on minerals held in trust by the BIA.

3.14 Infrastructure and Utilities

The Fort Berthold Reservation’s infrastructure consists of roads, bridges, utilities, and facilities for water, wastewater, and solid waste.

Known utilities and infrastructure within the vicinity of the proposed project includes paved (ND Highway 22) and gravel roadways. There are no known freshwater pipelines in the vicinity of the proposed project.

¹¹ According to the North Dakota Tourism Division, there are 10,400 enrolled members of the Three Affiliated Tribes.

3.14.1 Infrastructure and Utility Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact infrastructure or utilities.

Alternative B (Proposed Action)—Alternative B would require construction of a new gravel or scoria access road segment approximately 0.21 miles in length. In addition, vehicular traffic associated with construction, operation, and maintenance of the proposed action would increase the overall traffic on the local roadway network. To minimize potential impacts to roadway conditions and traffic patterns in the area, all haul routes used would either be private roads or roads that have been approved for this type of transportation use by the local governing tribal, township, county, and/or state entities. Marathon would follow McKenzie County, BIA, and NDDOT rules and regulations regarding rig moves and oversize/overweight loads on state and county roads used as haul roads. All contractors are required to permit their oversize/overweight roads through these entities. Marathon's contractors would be required to adhere to all local, county, tribal, and state regulations regarding rig moves, oversize/overweight loads, and frost restrictions.

The proposed project may also require the installation of supporting electrical lines. In addition, if commercially recoverable oil and gas are discovered as a result of drilling the wells, a natural gas gathering system may need to be installed. It is expected that electric lines and other pipelines would be constructed within the approved ROW, or additional NEPA analysis and BIA approval would be completed prior to construction of these utilities. Other utility modifications would be identified during design and coordinated with the appropriate utility company.

Drilling operations at the proposed project site may generate produced water. In accordance with the BLM Gold Book and BLM Onshore Oil and Gas Order Number 7, produced water would be disposed of via subsurface injection. Produced water may be trucked to nearby oil fields where injection wells are available.

Safety hazards posed from increased traffic during the drilling phase are anticipated to be short-term and minimal for the proposed site. It is anticipated that approximately 30 to 40 trips, over the course of several days, would be required to transport the drilling rigs and associated equipment to the proposed project site. If commercial operations are established at the proposed wells following drilling activities, the pumps would be checked daily and oil and water hauling activities would commence. Oil would be hauled using a semi tanker trailer, typically capable of hauling 140 barrels of oil per load. Traffic to and from the project site would depend upon the productivity of the wells. A 1,000 barrel per day well would require approximately seven tanker visits per day, while a 300 barrel per day well would require approximately two visits per day.¹² Produced water would also be hauled from the site using a tanker, which would typically haul 110 barrels of water per load. The number of visits would be dependent upon daily water production.¹³ Established load restrictions for state and BIA roadways would be followed and haul permits would be acquired as appropriate.

¹² A typical Bakken oil well initially produces at a high rate and then declines rapidly over the next several months to a more moderate rate. In the vicinity of the proposed project area, initial rates of 500 to 1,000 BOPD (barrels of oil per day) could be expected, dropping to 200 to 400 BOPD after several months.

¹³ A typical Bakken oil well initially produces water at 200 barrels per day and then declines rapidly over the next several months to a more moderate rate. In the vicinity of the proposed project area, initial rates of 200 BWP (barrels of water per day) could be expected, dropping to 30 to 70 BWP after several months.

3.15 Public Health and Safety

Health and safety concerns associated with this type of development include hydrogen sulfide (H₂S) gas¹⁴, hazardous materials used or generated during well installation or production.

3.15.1 Public Health and Safety Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact public health and safety.

Alternative B (Proposed Action)—Project design and operational precautions would minimize the likelihood of impacts from H₂S gases and hazardous materials as described below.

H₂S Gases. It is unlikely that the proposed action would result in release of H₂S in dangerous concentrations; however, Marathon would submit H₂S Contingency Plans to the BLM as part of the APD process. These plans establish safety measures to be implemented throughout the drilling process to prevent accidental release of H₂S into the atmosphere. The Contingency Plans are designed to protect persons living and/or working within 3,000 feet (0.57 miles) of the well location and include emergency response procedures and safety precautions to minimize the potential for an H₂S gas leak during drilling activities. Satellite imagery revealed that there are no residences within 3,000 feet of the proposed well pad.

Hazardous Materials. The Environmental Protection Agency (EPA) specifies chemical reporting requirements under the Superfund Amendments and Reauthorization Act of 1986, as amended. No materials used or generated by this project for production, use, storage, transport, or disposal are on either the Superfund list or on the EPA's list of extremely hazardous substances in 40 CFR 355.

The Spill Prevention, Control, and Countermeasure (SPCC) rule includes EPA requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Spill Response Plan. Marathon and Saddle Butte (for proposed pipelines) have committed to developing a spill response plan. The response plan would include 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. The spill response plan would be submitted to the BIA prior to the commencement of construction activities.

Pipeline Marking Procedures. Saddle Butte would fully comply with the marking requirements specified in USDOT rules and regulations, specifically contained in 49 CFR Parts 192 and 195.

3.16 Cumulative Considerations

Cumulative impacts result from the incremental consequences of an action "when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Effects of an action may be minor when evaluated in an individual context, but these effects can add to other disturbances and collectively may lead to a measureable environmental change. By evaluating the impacts of the proposed action with the

¹⁴ H₂S is extremely toxic in concentrations above 500 parts per million. H₂S has not been found in measurable quantities in the Bakken Formation. However, before reaching the Bakken, drilling would penetrate the Mission Canyon Formation, which is known to contain varying concentrations of H₂S.

effects of other actions, the relative contribution of the proposed action to a projected cumulative impact can be estimated.

3.16.1 Past, Present, and Reasonable Foreseeable Actions

Oil and gas development in western North Dakota has occurred with varying intensity for the past 100 years. Gas development began in the area in 1909, and the first recorded oil well was drilled in 1920. North Dakota's oil production has boomed twice prior to the current boom; first in the 1950s, peaking in the 1960s, and again in the 1970s, peaking in the 1980s. North Dakota is currently experiencing its third oil boom, which has already far surpassed the previous booms in magnitude. This oil boom is occurring both within and outside the Fort Berthold Reservation.

According to the NDIC, as of May 21, 2012, there were approximately 791 active and/or confidential oil and gas wells within the Fort Berthold Reservation and 1,963 within the 20-mile radius outside the boundaries of the Fort Berthold Reservation. Please refer to *Figure 3.8, Existing and Proposed Oil and Gas Wells*. There are seven known oil and gas wells within one mile of the proposed well pad. Please refer to *Table 3.6, Summary of Active and Proposed Wells*.

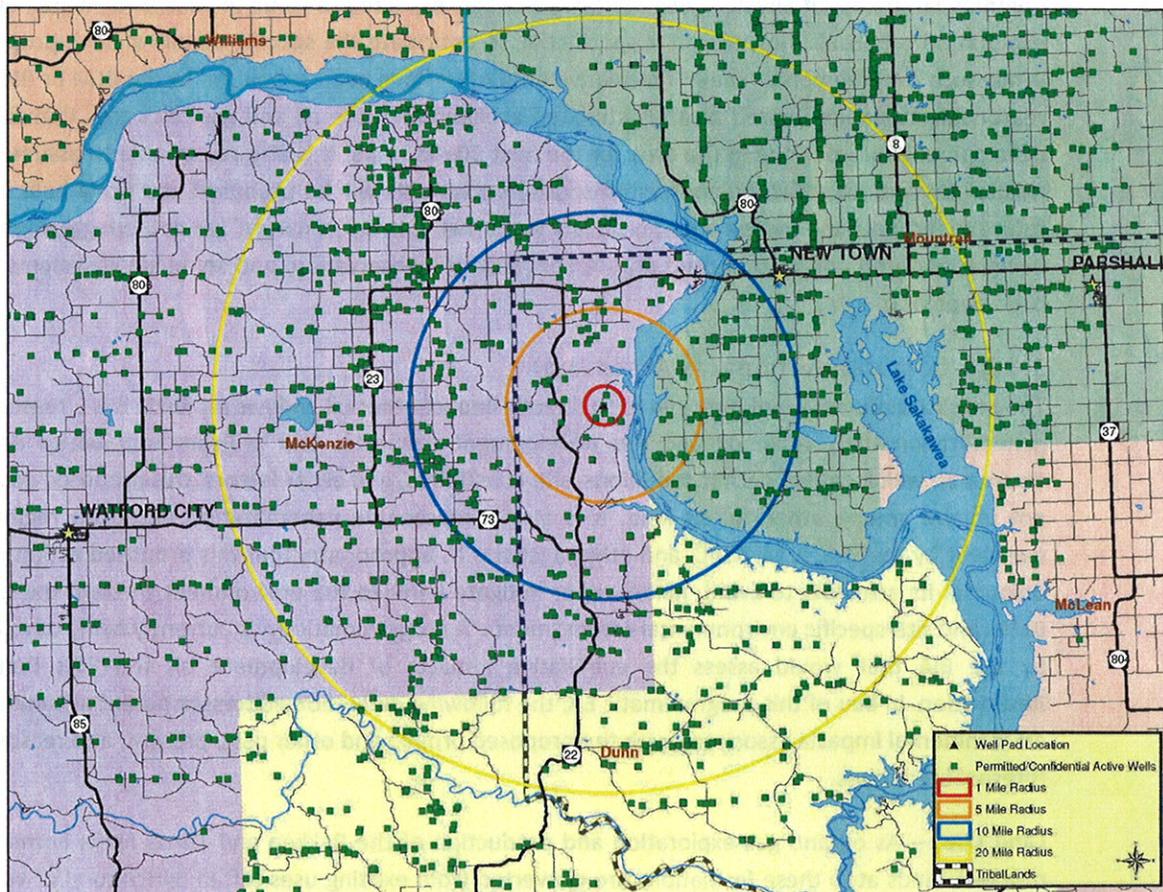


Figure 3.8, Existing and Proposed Oil and Gas Wells

Table 3.6, Summary of Active and Proposed Wells

DISTANCE FROM SITE	NUMBER OF ACTIVE OR PROPOSED WELLS
1 mile radius	7
5 mile radius	70
10 mile radius	320
20 mile radius	1,378

As mentioned previously in this EA, the Bakken Formation covers approximately 25,000 square miles beneath North Dakota, Montana, Saskatchewan, and Manitoba, with approximately two-thirds of the acreage beneath North Dakota. The Three Forks Formation lies beneath the Bakken. The North Dakota Department of Mineral Resources estimates that there are approximately 2 billion barrels of recoverable oil in each of these Formations and that there will be 30–40 remaining years of production, or more if technology improves.

Commercial success at any new well can be reasonably expected to result in additional nearby oil/gas exploration proposals; however, it is speculative to anticipate the specific details of such proposals. While such developments remain speculative until APDs have been submitted to the BLM or BIA, it is reasonable to assume based on the estimated availability of the oil and gas resources that further development will continue in the area for the next 30–40 years. It is also reasonable to assume that natural gas and oil gathering and/or transportation systems will be proposed and likely built in the future to facilitate the movement of products to market. Currently, natural gas gathering systems are being considered and/or proposed on the Fort Berthold Reservation, and some small systems have been approved.

3.16.2 Cumulative Impacts Assessment

The proposed project is not anticipated to directly impact other oil and gas projects. It is a reasonable generalization that, while oil and gas development proposals and projects vary based on the developer, well location, permit conditions, site constraints, and other factors, this proposed action is not unique among others of its kind. It is also a reasonable generalization based on regulatory oversight by the BIA, BLM, NDIC, and other agencies as appropriate, that this proposed action is not unique in its attempts to avoid, minimize, or mitigate harm to the environment through the use of BMPs and site-specific environmental commitments. A programmatic EA is currently being developed by the BIA that would assess the cumulative impacts of development on the Fort Berthold Reservation. In lieu of this programmatic EA, the following discussion addresses potential cumulative environmental impacts associated with the proposed project and other past, present, and reasonably foreseeable actions.

Land Use — As oil and gas exploration and production of the Bakken and Three Forks Formations proceed, lands atop these formations are converted from existing uses (often agricultural or vacant) to industrial, energy-producing uses. The proposed project would convert grasslands to a well pad, access road, and associated uses. However, the well pad and access road locations have been selected to avoid or minimize impacts to sensitive land uses (culturally sensitive areas) and to maintain the minimum impact footprint possible. In addition, the BIA views these developments to

be temporary in nature as impacted areas would be restored to original conditions upon completion of oil and gas activity.

Air Quality — Air emissions related to construction and operation of past, present, or reasonably foreseeable oil and gas wells, when added to emissions resulting from the proposed project, are anticipated to have a negligible cumulative impact. McKenzie County is currently well below the Ambient Air Quality Standards, and it is anticipated that mobile air source toxics from truck traffic for the proposed project and other projects, as well as air emissions related to gas flaring, would be minor; therefore, the contribution of the proposed project to air emissions is not expected to be significant.

Threatened and Endangered Species — The potential for cumulative impacts to threatened and endangered species comes to those listed species that may be affected by the proposed project or candidate species that may be impacted by the proposed project. The proposed project occurs within the Central Flyway through which whooping cranes migrate. Continual development (e.g., agriculture, oil and gas, and wind) within the Central Flyway has compromised whooping crane habitat both through direct impacts via conversion of potential habitat to other uses and indirect impacts due to disrupting the use of potential stopover habitat, as whooping cranes prefer isolated areas and are known to avoid large-scale development. However, the proposed action, when added to other development directly and indirectly impacting whooping cranes and their habitat, is not anticipated to substantially contribute to cumulative impacts occurring to the whooping crane population.

As previously stated, habitat for the interior least tern, pallid sturgeon, and piping plover is primarily associated with Lake Sakakawea and its shoreline. When added to other past, present, and reasonably foreseeable projects, such as oil and gas wells and water intake structures on Lake Sakakawea, the proposed project may have an indirect cumulative impact on potential habitat (Lake Sakakawea and its shoreline) for these species due to potential leaks or spills. However, due to the implementation of secondary containment measures and cuttings pit parameters for the proposed project, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is unlikely. Furthermore, electrical lines, if installed, would be buried to prevent the potential for electrical line strikes by the interior least tern and piping plover. Therefore, it is unlikely the project would contribute to cumulative impacts to the interior least tern, pallid sturgeon, and piping plover.

Please refer to the discussion below (Eagles, Other Wildlife, and Vegetation) for an analysis of potential cumulative impacts to candidate species (Dakota skipper and Sprague's pipit).

Eagles, Other Wildlife, and Vegetation — The proposed project, when added to previously constructed and reasonably foreseeable oil and gas wells, would contribute to habitat loss and fragmentation associated with construction of well pads, access roads, and associated development. The North Dakota Parks and Recreation Department notes in its undated publication, "*North Dakota Prairie: Our Natural Heritage*" that approximately 80% of the state's native prairie has been lost to agriculture, with most of the remaining areas found in the arid west; ongoing oil and gas activity has the potential to threaten remaining native prairie resources. While many species of wildlife may continue to use the project area for breeding and feeding and continue to thrive, the activities associated with oil and gas development may displace animals from otherwise suitable habitats. As a result, wildlife may be forced to utilize marginal habitats or relocate to unaffected habitats where population density and competition increase. Consequences of such displacement and competition

may include lower survival, lower reproductive success, lower recruitment, and lower carrying capacity leading ultimately to population-level impacts. In particular, species that rely on native prairie for breeding, feeding, and sheltering, such as the Dakota skipper and Sprague's pipit, may experience population impacts due to the cumulative loss of habitat through conversion and fragmentation.

The proposed action and other similar actions are carefully planned to avoid or minimize these impacts. Multiple components of the process used by the BIA to evaluate and approve such actions, including biological and botanical surveys, on-site assessments with representatives from multiple agencies and entities, agency solicitation, public appeal periods on this EA, and the use of BMPs and site-specific environmental commitments are in place to ensure that environmental impacts associated with oil and gas development are minimized. The practice of utilizing existing roadways to the greatest extent practicable further minimizes impacts to wildlife habitats and prairie ecosystems. The proposed wells have been sited to avoid sensitive areas such as surface water, wetlands, and riparian areas. Reclamation activities are anticipated to minimize and mitigate disturbed habitat.

Infrastructure and Utilities — The proposed action, along with other oil and gas wells proposed and drilled in the Bakken and Three Forks Formations, requires infrastructure and utilities to provide needed resource inputs and accommodate outputs such as fresh water, power, site access, transportation for products to market, disposal for produced water and other waste materials. As with the proposed action, many other wells currently being proposed and/or built are positioned to make the best use of existing roads and to minimize the construction of new roads; however, some length of new access roads are commonly associated with new wells. The well pad has been positioned in close proximity to existing or proposed roadways to minimize the extent of access road impacts in the immediate areas. Additionally, existing roadways have been utilized wherever possible to minimize impacts to the surrounding landscape. The contribution of the proposed project and other projects to stress on local roadways used for hauling materials may result in a cumulative impact to local roadways. However, abiding by permitting requirements and roadway restrictions with the jurisdictional entities are anticipated to offset any cumulative impact that may result from the proposed project and other past, present, or future projects. BMPs would be implemented to minimize impacts of the proposed project.

The proposed action has been planned to avoid impacts to resources such as wetlands, floodplains, surface water, and cultural resources. Unavoidable impacts to these or other resources would be minimized and/or mitigated in accordance with applicable regulations.

3.17 Irreversible and Irrecoverable Commitment of Resources

Removal and consumption of oil or gas from the Bakken and Three Forks Formations would 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 earth-moving operations or in collisions with vehicles, and energy expended during construction and operation.

3.18 Short-term Use of the Environment versus Long-term Productivity

Short-term activities would not significantly detract from long-term productivity of the project area. The areas dedicated to the access road and well pad would be unavailable for livestock grazing,

wildlife habitat, or other uses. However, allottees with surface rights would be compensated for loss of productive acreage and project footprints would shrink considerably once the wells are drilled and non-working areas are reclaimed and reseeded. Successful and ongoing reclamation of the landscape would reestablish the land's use for wildlife and livestock grazing, stabilize the soil, and reduce the potential for erosion and sedimentation. The primary long-term resource loss would be the extraction of oil and gas resources from the Bakken and Three Forks Formations, which is the purpose of this project.

3.19 Permits

Marathon will be required to acquire the following permits prior to construction:

- *Application for Permit to Drill* – Bureau of Land Management
- *Application for Permit to Drill* – North Dakota Industrial Commission

3.20 Environmental Commitments/Mitigation

The following commitments have been made by Marathon Oil Company:

- Topsoil would be segregated and stored on-site to be used in the reclamation process. All disturbed areas would be re-contoured to original elevations as close as possible as part of the reclamation process.
- BMPs (may include, but are not limited to, erosion mats and biologs) would be implemented to minimize wind and water erosion of soil resources. Soil stockpiles would be positioned to help divert runoff around the well pad.
- The proposed well pad and access road would avoid surface waters. The proposed project would not alter stream channels or change drainage patterns.
- The drill cuttings pits would be located on the cut side of the proposed well pad, away from areas of shallow ground water and would have a reinforced synthetic liner to prevent potential leaks. All spills or leaks of chemicals and other pollutants would be reported to the appropriate regulatory agencies. The procedures of the surface management agency would be followed to contain leaks or spills.
- The proposed wells would be cemented and cased per BLM and NDIC regulations to isolate aquifers from potentially productive hydrocarbon and disposal/injection zones.
- Berming would be utilized around all cut slopes to prevent run-on of fluids due to large precipitation or snow melt events.
- Wetlands and riparian areas would be avoided.
- Disturbed vegetation would be re-seeded in kind upon completion of the project, and a noxious weed management plan would be implemented. The re-seeded sites would be maintained until such time that the vegetation is consistent with surrounding undisturbed areas and the sites are free of noxious weeds. Seed would be obtained from a BIA/BLM approved source.
- The proposed well pad and access road would avoid impacts to cultural resources. If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery,

work shall not resume until written authorization to proceed has been received from the BIA.

- All project workers would be prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.
- Marathon would ensure all contractors working for the company would adhere to all local, county, tribal, and state regulations and ordinances regarding rig moves, oversize/overweight loads, and frost law restrictions.
- Utility modifications would be identified during design and coordinated with the appropriate utility company.
- Disposal areas would be properly fenced to prevent human or animal access.
- An H₂S Contingency Plan would be submitted to the BLM as part of the APD.
- Established load restrictions for state and BIA roadways would be followed and haul permits would be acquired as appropriate.
- Suitable mufflers would be put on all internal combustion engines and certain compressor components to mitigate noise levels.
- The wells and associated facilities would be painted in earth tones, based on standard colors recommended by the BLM, to allow them to better blend in with the natural background color of the surrounding landscape.
- BMPs would be used during construction to ensure contaminants do not move off site.
- The cuttings pits would be netted while not actively being used.
- A semi-closed loop drilling system would be utilized. As part of this, Marathon would implement a closed circulation drilling mud system, whereby drilling fluid is circulated from the well into steel mud tanks and the drill cuttings are separated from the drilling fluid. The cuttings would then be stabilized, and placed in a cuttings pit on-site. The reinforced lining of the cuttings pit would have a minimum thickness of 20 mil to prevent seepage into the surrounding bedrock. Any minimal free fluid left in the cuttings pit would be removed and disposed of in accordance with BLM and NDIC regulations. All liquids from drilling would be transported off-site. The drill cuttings pits would be reclaimed to BLM and NDIC standards immediately upon finishing completion operations.
- Prior to their use, the cuttings pits would be fenced on the non-working sides. It is anticipated that the cuttings pit would be closed immediately following drilling and completion of the well; however, should the pit remain open, the access sides would be fenced and netted immediately order to prevent wildlife and livestock from accessing the pits.
- The cut sides of the well pads would be bermed to prevent run-on and runoff.
- If a whooping crane is sighted within one-mile of a well site or associated facilities while under construction, all work would cease within one-mile of that part of the project and the USFWS would be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.

- All efforts would be made to complete construction outside the migratory bird nesting season (February 1 through July 15) in order to avoid impacts to migratory birds during the breeding/nesting season. In the event that construction needs to take place during the migratory bird nesting season, a pre-construction survey for migratory birds or their nests would be conducted by a qualified biologist within five days prior to the initiation of all construction activities or the project area would be mowed/grubbed the previous fall to deter birds from nesting in project area.
- If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction areas, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Wire mesh or grate covers would be placed over barrels or buckets placed under valves and spigots to collect dripped oil.
- Netting, with a maximum mesh size of 1.5 inches, would be used to keep birds and other small animals out of open pits.
- All storage tanks and the heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production.
- Re-seeding of native species shall occur as needed on stockpile areas and slope areas during reclamation.
- If electrical lines are installed, the lines would be buried to prevent the potential for bird strikes.
- Marathon would comply with all rules and regulations set forth in the FIP.
- Marathon would provide dust control for their access roads and haul roads.
- Interim reclamation activities would begin six months after well completion, unless weather conditions or the drilling schedule precludes this from happening. In the event that reclamation activities do not begin within six months of well completion, Marathon would request an extension from the BIA.
- In addition, reclamation of the pipeline corridor would occur within 6 months after construction. If conditions prevent reclamation activities or seed germination, Saddle Butte would use either a sprayed reinforcement, lain matting reinforcement, spread or crimp straw, and/or would minimize erosion issues with straw wattle and silt fence through winter months. Additional reclamation activities would occur throughout the life of the pipeline, due to routine maintenance or addition of infrastructure. Reclamation would be considered successful when seeded areas are established, adjacent vegetative communities spread back into the disturbed areas, and noxious weeds are under control.
- All welds completed on the steel pipelines are subjected to a 100 percent Non-Destructive Testing.
- For expected pipeline construction, Saddle Butte would develop a spill response plan that would be submitted to the BIA prior to the commencement of the construction activities. The response plan would include procedures that specifically address making the appropriate contacts, isolating the incident, protecting waterways and providing contact

information for all the appropriate contractors and experts necessary to facilitate a rapid response.

CHAPTER 4 PREPARERS AND AGENCY COORDINATION

4.1 Introduction

This chapter identifies the names and qualifications of the principal people contributing information to this EA. In accordance with Part 1502.6 of the Council on Environmental Quality regulations for implementing NEPA, the efforts of an interdisciplinary team comprising technicians and experts in various fields were required to accomplish this study.

This chapter also provides information about consultation and coordination efforts with agencies and interested parties, which has been ongoing throughout the development of this EA.

4.2 Preparers

Kadrmass, Lee & Jackson, Inc. prepared this EA under a contractual agreement between Marathon Oil Company and Kadrmass, Lee & Jackson, Inc. A list of individuals with the primary responsibility for conducting this study, preparing the documentation, and providing technical reviews is contained in *Table 4.1, Preparers*.

Table 4.1, Preparers

AFFILIATION	NAME	TITLE	PROJECT ROLE
Bureau of Indian Affairs	Marilyn Bercier	Regional Environmental Scientist	Review of Draft EA and recommendation to Regional Director regarding FONSI or EIS
	Mark Herman	Environmental Engineer	
Marathon Oil Company	Luke Franklin	Senior HES Professional	Project development, alternatives, document review
	Bill Groffy	Senior Regulatory Representative	
	Darrell Nodland	Operations Specialist	
	Brenda Rettinger	HES Professional	
Kadrmass, Lee & Jackson, Inc.	Grady Wolf	Environmental Scientist	Client and agency coordination, senior review
	John Cannon	Environmental Planner	Field resources surveys
	Mike Huffington	Environmental Planner	Principal author, impact assessment, exhibit creator
	Quentin Obrigewitsch	Surveyor	Site plats
	Jennifer Macy	Archaeologist	Cultural resources surveys
	Mary Mitchell	Archaeologist	Cultural resources surveys
	Brian O'Donnchadha	Archaeologist	Cultural resources report

4.3 Agency Coordination

To initiate early communication and coordination, an early notification package to tribal, federal, state, and local agencies and other interested parties was distributed on July 11, 2011. This scoping package included a brief description of the proposed project, as well as a location map. Pursuant to Section 102(2) (D) (IV) of NEPA, a solicitation of views was requested to ensure that social, economic, and environmental effects were considered in the development of this project. **Appendix A contains Scoping Materials.** The solicitation package included two proposed double well pad locations. Since that time, one of the well pads was removed and the remaining well pad discussed in the EA became a triple well pad.

At the conclusion of the 30-day comment period, 10 responses were received. These comments provide valuable insight into the evaluation of potential environmental impacts. The comments were referenced and incorporated where appropriate within the environmental impact categories addressed in this document. **Appendix B contains Scoping Responses.**

4.4 Public Involvement

Provided the BIA approves this document and determines that no significant environmental impacts would result from the proposed action, a Finding of No Significant Impact (FONSI) will be issued. The FONSI is followed by a 30-day public appeal period. BIA will advertise the FONSI and public appeal period by posting notices in public locations throughout the Reservation. No construction activities may commence until the 30-day public appeal period has expired.

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Appendix A

Agency Scoping Materials

Appendix B

Agency Scoping Responses

Appendix C

Well Pad Plats

Appendix A

Agency Scoping Materials

July 11, 2011

Mr. Jeffrey Towner
U.S. Fish and Wildlife Service
North Dakota Field Office
3425 Miriam Avenue
Bismarck, North Dakota 58501-7926

**Re: Marathon Oil Company
Four Proposed Oil and Gas Wells on Two Pads
Fort Berthold Reservation
McKenzie County, North Dakota**

Dear Mr. Towner,

On behalf of Marathon Oil Company (Marathon), Kadrmaz, Lee & Jackson, Inc. (KL&J) is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of two dual well pads, resulting in the drilling and completion of four oil and gas wells on the Fort Berthold Reservation. These well pads are proposed to be positioned in the following locations:

- TAT USA 14-22H and TAT USA 14-22TFH (dual well) located in T151N, R94W, 5th P.M., Section 22 (TAT #14-22 site)
- TAT USA 12-23H and TAT USA 12-23TFH (dual well) located in T151N, R94W, 5th P.M., Section 22 (TAT #12-23 site)

Please refer to the enclosed Project Location Map.

The proposed action would advance the production of oil from the Bakken and Three Forks Formations. The well pads have been positioned to utilize existing roadways for access to the extent possible; however each well pad would require the construction of a new access road. Construction of the proposed well pads and access roads is scheduled to begin in fall 2011.

An intensive, pedestrian resource survey of each proposed well pad and access road was conducted on October 21, 2010 by KL&J. The purpose of this survey was to gather site-specific data and photos with regards to botanical, biological, threatened and endangered species, eagle, and water resources. A study area of 10 acres centered on each well pad center point and a 200-foot wide access road corridor were evaluated for each site. In addition, a follow-up eagle survey was conducted on November 3, 2010 by KL&J. A 0.50 mile wide buffer around all areas of project disturbance was used to evaluate the presence of eagles and eagle nests. Resources were evaluated using visual inspection and pedestrian transects across the site. ***Please refer to the enclosed Study Area Map and Eagle Buffer Map.***

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
Fort Berthold Reservation

The BIA-facilitated EA on-site assessment of the well pads and access roads was also conducted on October 21, 2010. The BIA Environmental Protection Specialist, as well as representatives from the Tribal Historic Preservation Office, Marathon, and KL&J were present. During this assessment construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. The well pad and access road locations were finalized, and the BIA gathered information needed to develop site-specific mitigation measures and best management practices (BMPs) to be incorporated into the final APDs. Those present at the on-site assessment agreed that the chosen locations are positioned in areas which would minimize impacts to sensitive wildlife and botanical resources and that the environmental commitments made by Marathon will further minimize harm to the environment. BMPs and other commitments Marathon has made to avoid, minimize, or mitigate impacts are listed at the end of this letter.

Threatened and Endangered Species: The proposed well sites occur in McKenzie County. In McKenzie County, the interior least tern, whooping crane, black-footed ferret, pallid sturgeon, and gray wolf are all listed as endangered species. The piping plover is listed as a threatened species, and the Dakota skipper and Sprague's pipit are listed as candidate species. McKenzie County also contains designated critical habitat for the piping plover. None of these species were observed during the field survey and on-site assessment.

Whooping cranes use shallow, seasonally and semi-permanently flooded palustrine (marshy) wetlands for roosting, and various cropland and emergent wetlands for feeding. No shallow, emergent wetlands were observed near either of the proposed sites. Both sites occur on open rangeland that is heavily grazed by cattle and/or horses. However, the proposed project is located in the Central Flyway where 75 percent of confirmed whooping crane sightings have occurred. Whooping cranes traveling through the area may alter their flight and landing patterns to avoid disturbance related to oil and gas development. However, it is believed that there are still large, undeveloped areas on the Fort Berthold Reservation in which migrading cranes could land to rest. Therefore, the proposed project may affect but is not likely to adversely affect whooping cranes. The proposed project is not likely to impact potential habitat. Per USFWS recommendations on previous projects of a similar nature, if a whooping crane is sighted within one-mile of a well site or associated facilities while under construction, all work will cease within one-mile of that part of the project and the USFWS will be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.

Suitable habitat for the interior least tern and critical habitat for the piping plover are largely associated with the shoreline of Lake Sakakawea. Potential habitat for these species exists approximately 0.96 miles northeast of the proposed sites at the nearest point (TAT #12-23 site), or about 2.90 miles away following the

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
Fort Berthold Reservation

shortest drainage pattern to the Lake (also TAT #12-23 site). The well pads and access roads are located on upland bluffs of rangeland with Lake Sakakawea and its shoreline located approximately 280 to 380 feet below the bluffs. The topographic features of the area and distance from the shoreline should assist in providing sight and sound buffers for shoreline-nesting birds.

Suitable habitat for the pallid sturgeon is found within Lake Sakakawea, located about 2.90 miles away following the shortest drainage pattern to the Lake (TAT #12-23).

The proposed project is located 2.90 miles from Lake Sakakawea (following the shortest drainage pattern), making the potential for significant quantities of accidentally released fluids reaching the Lake unlikely, but reasonably feasible. Storage tanks and the heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against accidental release of fluids from each site. The berm would be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. Berming will be utilized around cut slopes to prevent run-on at each pad and, where BIA determines necessary, pit and soil stockpiles will be used to divert drainage outside of the fill slopes. In addition, stabilization of drill cuttings before placement in the pit and the reinforced lining of the cuttings pit would diminish the potential for pit leaching. Due to the implementation of secondary containment measures and the cuttings pit parameters, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is reasonably feasible but unlikely. Therefore, the proposed project may affect but is not likely to adversely affect the interior least tern, pallid sturgeon, or piping plover. The proposed project is not likely to impact critical habitat for the piping plover.

The black-footed ferret historically could be found throughout the Rocky Mountains and Great Plains. Preferred habitat for the black-footed ferret includes areas around prairie dog towns, as ferrets rely on prairie dogs for food and live in prairie dog burrows. Black-footed ferrets require at least an 80-acre prairie dog town to survive. In North Dakota, the southwestern corner of the state provided suitable habitat and supported the black-footed ferret. However, this species has not been confirmed in North Dakota for nearly 30 years and is presumed extirpated. The proposed well pads are not located near any active prairie dog towns. Due to a lack of suitable habitat and known populations, the proposed project is anticipated to have no effect to the black-footed ferret.

Historically, the gray wolf's preferred habitat includes biomes such as boreal forest, temperate deciduous forest, and temperate grassland. While the gray wolf is not common in North Dakota, occasionally individual wolves do pass through the state. The project sites are located far from other known wolf populations and are positioned on open rangeland that would not likely provide sufficient cover for gray wolves. No wolves or indications of wolves were observed during the field

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
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survey. Due to a lack of preferred habitat characteristics and known populations, the proposed project is anticipated to have no effect to the gray wolf.

The preferred habitat for the Dakota skipper consists of undisturbed, flat, moist bluestem prairies and upland prairies with an abundance of wildflowers. The proposed sites consist of heavily grazed rangeland that could potentially provide suitable Dakota skipper habitat as grazing patterns change. Upland prairie and wildflower species were observed. No Dakota skippers were observed during the field survey; however, the survey took place outside of the brief adult flight period for the Dakota skipper. Due to the presence of potential habitat for the Dakota skipper within the project area, the proposed action may impact individuals or habitat. An "effect determination" under Section 7 of the Endangered Species Act has not been made due to the current unlisted status of the species.

The Sprague's pipit is a small songbird found in prairie areas throughout the Northern Great Plains. Preferred habitat includes rolling, upland mixed-grass prairie of intermediate height with high plant species diversity. The Sprague's pipit breeds in habitat with minimal human disturbance. Historically, natural disturbances such as fire and bison grazing were major drivers in maintaining a healthy prairie ecosystem that provided ideal habitat for the Sprague's pipit. Today, fire is no longer a widespread regular phenomenon as it was in pre-colonial times, and bison grazing has largely been substituted by cattle grazing. Little information exists at this time to conclusively determine how grazing or substituting cattle for bison throughout much of the range has impacted the Sprague's pipit. However, based on currently available information, it is believed that cattle grazing is not a significant threat to the species. The proposed project areas consist of heavily grazed upland mixed-grass prairie. Although the overall health and productivity of the site compared to historical conditions are unknown, as grazing patterns change, the site may contain the prairie habitat necessary for the Sprague's pipit. No Sprague's pipit were observed during the field survey. Due to the presence of potential habitat for the Sprague's pipit within the project area, the proposed action may impact individuals or habitat. An "effect determination" under Section 7 of the Endangered Species Act has not been made due to the current unlisted status of the species.

Botanical Resources: The TAT #14-22 well site study area consisted of native and non-native upland grasses and shrubs that have been disturbed by cattle and/or horse grazing. The access road leading to the proposed well pad was dominated by Western snowberry (*Symphoricarpos occidentalis*), fringed sagewort (*Artemisia frigida*), cudweed sagewort (*Artemisia ludoviciana*), blue grama (*Bouteloua gracilis*), and Western wheatgrass (*Agropyron smithii*). Small patches of silver buffaloberry (*Shepherdia argentea*) were also observed along the proposed access road. Western wheatgrass, fringed sagewort, cudweed sagewort, Western snowberry, buffalograss (*Buchloe dactyloides*), Prairie wild rose (*Rosa arkansana*), yarrow (*Achillea millefolium*), and blue grama (*Bouteloua*

Two Proposed Oil and Gas Dual Well Pads
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gracilis) were all observed throughout the study area. Silver buffaloberry, bur oak (*Quercus macrocarpa*), green ash (*Fraxinus pennsylvanica*), and American elm (*Ulmus americana*) were all observed growing within the wooded draws surrounding the study area. No wetlands or noxious weeds were observed within the study area. There are no threatened or endangered plant species listed for McKenzie County.

The TAT #12-23 well site study area also consisted of native and non-native upland grasses and shrubs that have been disturbed by cattle and/or horse grazing. The access road leading to the proposed well pad was dominated by Western wheatgrass, Kentucky bluegrass (*Poa pratensis*), little bluestem, fringed sagewort, and cudweed sagewort. Silver buffaloberry was observed in small patches along the proposed access road and throughout the proposed well site. Dominant well pad vegetation consisted of fringed sagewort, cudweed sagewort, blue grama, dotted gayfeather (*Liatris punctata*) and Western wheatgrass. No wetlands or noxious weeds were observed in the study area.

Biological Resources: The project areas contain suitable habitat for mule deer, whitetail deer, sharp-tailed grouse, turkey, ring-necked pheasant, golden eagle, bald eagle, red tail hawk, kestrel, badger, song birds, coyote, red fox, cottontail rabbit, jackrabbit, mountain lion, and North American porcupine. The following wildlife and/or migratory bird species were observed during the field survey/on-site assessment and eagle survey:

- TAT #14-22 – Red tail hawk, cattle, and pocket gopher mounds
- TAT #12-23 – Sharp-tailed grouse, six mule deer

Additionally, a hawk nest was observed in the SE ¼ of Section 22, T151N, R94W, located approximately 600 feet southwest of an existing well pad. The hawk nest was determined to be inactive during the time of the survey on November 3, 2010.

During drilling activities, the noise, movements, and lights associated with having a drilling rig on-site are expected to deter wildlife from entering the area. In addition, the cuttings pits would only be used for solid material storage, and it is expected that very minimal free fluid will be present in the pits. The absence of exposed liquids in the pits would minimize their attractiveness to wildlife. Immediately after the drilling rig leaves the location, reserve pits would be netted with State and Federal approved nets. These would remain in place with proper maintenance until the closure of the cuttings pits.

In addition, design considerations will be implemented to further protect against potential habitat degradation. The storage tanks and heater/treaters would be surrounded by an impermeable berm that would act as secondary containment to guard against possible spills. The berm would be sized to hold 100% of the

Two Proposed Oil and Gas Dual Well Pads
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capacity of the largest storage tank plus one full day's production. BMPs to minimize wind and water erosion of soil resources, as well as implementation of a semi-closed mud/cuttings system with an on-site cuttings pit during drilling, would be put into practice.

It is anticipated that construction of the proposed sites would take place after July 15 and would therefore avoid the migratory bird nesting and breeding season (between February 1 and July 15). In the event that construction is delayed and should occur during future migratory bird nesting and breeding seasons, a qualified biologist would conduct pre-construction surveys for migratory birds or their nests within five days prior to the initiation of all construction activities. The findings of these surveys would be reported to USFWS. In addition, if any migratory bird is found on-site during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

Additionally, all reasonable, prudent, and effective measures to avoid the taking of migratory bird species will be implemented during the construction and operation phases. These measures will include: the use of suitable mufflers on all internal combustion engines; certain compressor components to mitigate noise; only utilizing approved roadways; placing wire mesh or grate covers over barrels or buckets placed under valves and spigots to collect dripped oil; maintaining open pits and ponds that are free from oil, and netting cuttings pits with netting that has a maximum mesh size of 1.5 inches.

Eagles: Ground surveys for eagle nests were conducted on October 21, 2010 and November 3, 2010. Though one hawk nest was observed, the study areas were thoroughly searched and no eagle nests were detected within 0.5 miles of the project area. In addition, Dr. Anne Marguerite Coyle of Dickinson State University has completed focused research on golden eagles and maintains a database of golden eagle nest sightings. According to Dr. Coyle's information (last updated in 2010), the closest recorded golden eagle nest is located approximately 1.9 miles south of the proposed TAT #14-22 site. No eagles were observed. If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project area during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

Water Resources: The TAT #14-22 site is situated on an upland area with coulees to the southwest and northeast. The topography of the area, the pad configuration, and berming would prevent the site from draining towards wooded draws to the southwest. Runoff from the well pad would travel north-northeast via an unnamed ephemeral stream which eventually flows into Rough Coulee. Once in Rough Coulee, runoff would flow into Hunts Along Bay of Lake Sakakawea. The total traveled drainage distance from the proposed well site to Lake Sakakawea would be approximately 3.30 miles. The nearest wooded draw is approximately 330 feet southeast of the proposed well pad. Culverts will be

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
Fort Berthold Reservation

implemented as necessary to avoid drainage impacts. ***Please refer to the enclosed Drainage Map.***

The TAT #12-23 site is also situated on an upland area. Whitebody Coulee is located east of the site; however, the topography of the area and pad configuration would prevent the site from draining into that coulee. Runoff from the well pad would travel southwest into an unnamed ephemeral stream. From there, it would travel northwest to Rough Coulee, which then flows into Hunts Along Bay of Lake Sakakawea for a total traveled drainage distance of approximately 2.9 miles. The nearest wooded draw is approximately 400 feet northeast of the proposed well pad. Culverts will be implemented as necessary to avoid drainage impacts.

Best Management Practices: BMPs for soil and wind erosion would be implemented as needed to include over-seeding of cut areas and spoil piles, as well as the use of diversion ditches, silt fences, and/or mats. Any woody vegetation removed during site construction would be chipped and incorporated into topsoil stockpiles. The alteration of drainages near the proposed well pads would be avoided. Berming will be utilized around cut slopes to prevent pad run-on, and, where BIA determines necessary, pit and soil stockpiles will be used to divert drainage outside of the fill slopes. Culverts to maintain drainage along the access roads would also be installed where needed. Well pad corners would be rounded where feasible to minimize impacts. Upon well completion, a portion of each well pad would be reclaimed to further avoid environmental areas of concern.

Summary of Commitments to Avoid or Minimize Impacts: In an effort to minimize the potential environmental effects associated with the proposed project, Marathon will also implement the following measures into the development of this site:

- A semi-closed mud/cuttings system with an on-site cuttings pit would be used during drilling at each site. Drill cuttings would be stabilized before being placed in the reinforced lined cuttings pit. The reinforced lining of the cuttings pit would have a minimum thickness of 20 mil to prevent seepage and contamination of underlying soil. Any minimal fluids remaining in drill cuttings pit would be removed and disposed of in accordance with BLM and NDIC rules and regulations. All liquids from drilling would be transported off-site. The drill cuttings pit would be reclaimed to BLM and North Dakota Industrial Commission (NDIC) standards immediately upon finishing completion operations.
- Prior to their use, the cuttings pits would be fenced on the non-working sides. The access sides would be fenced and netted immediately following drilling and completion operations in order to prevent wildlife and livestock from accessing the pits.

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
Fort Berthold Reservation

- Berming will be utilized around cut slopes to prevent runoff from entering the pads and, where BIA determines necessary, pit and soil stockpiles will be used to divert drainage outside of the fill slopes.
- It is anticipated that construction of the proposed sites would take place after July 15 and would therefore avoid the migratory bird nesting and breeding season (between February 1 and July 15). In the event that construction is delayed and should occur during future migratory bird nesting and breeding seasons, a qualified biologist would conduct pre-construction surveys for migratory birds or their nests within five days prior to the initiation of all construction activities. The findings of these surveys would be reported to USFWS. In addition, if any migratory bird is found on-site during construction, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Measures implemented during construction to avoid the taking of migratory bird species will include: the use of suitable mufflers on all internal combustion engines; certain compressor components to mitigate noise; only utilizing approved roadways; placing wire mesh or grate covers over barrels or buckets placed under valves and spigots to collect dripped oil; maintaining open pits and ponds that are free from oil, and netting the cuttings pits with netting that has a maximum mesh size of 1.5 inches.
- Per USFWS recommendations on previous projects of a similar nature, if a whooping crane is sighted within one-mile of either well site or associated facilities while under construction, all work will cease within one-mile of that part of the project and the USFWS will be contacted immediately. In coordination with USFWS, work may resume after the bird(s) leave the area.
- The storage tanks and heater/treaters will be surrounded by an impermeable berm that will act as secondary containment to guard against possible spills. The berm will be sized to hold 100% of the capacity of the largest storage tank plus one full day's production. BMPs would be implemented to minimize wind and water erosion of soil resources and a semi-closed loop mud/cuttings system would be used during drilling. Berming will be utilized around cut slopes to prevent runoff, and, where BIA determines necessary, pit and soil stockpiles will be used to divert drainage outside of the fill slopes.

Two Proposed Oil and Gas Dual Well Pads
Marathon Oil Company
Fort Berthold Reservation

To ensure that social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed development of this project, pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted. We are also interested in existing or proposed developments you may have that should be considered in connection with the proposed project. Any information that might help us in our study would be appreciated.

It is requested that any comments or information be forwarded to our office on or before **August 11, 2011**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the necessary environmental documentation.

If you would like further information regarding this project, please contact me at (218) 790-4476. Thank you for your cooperation.

Sincerely,

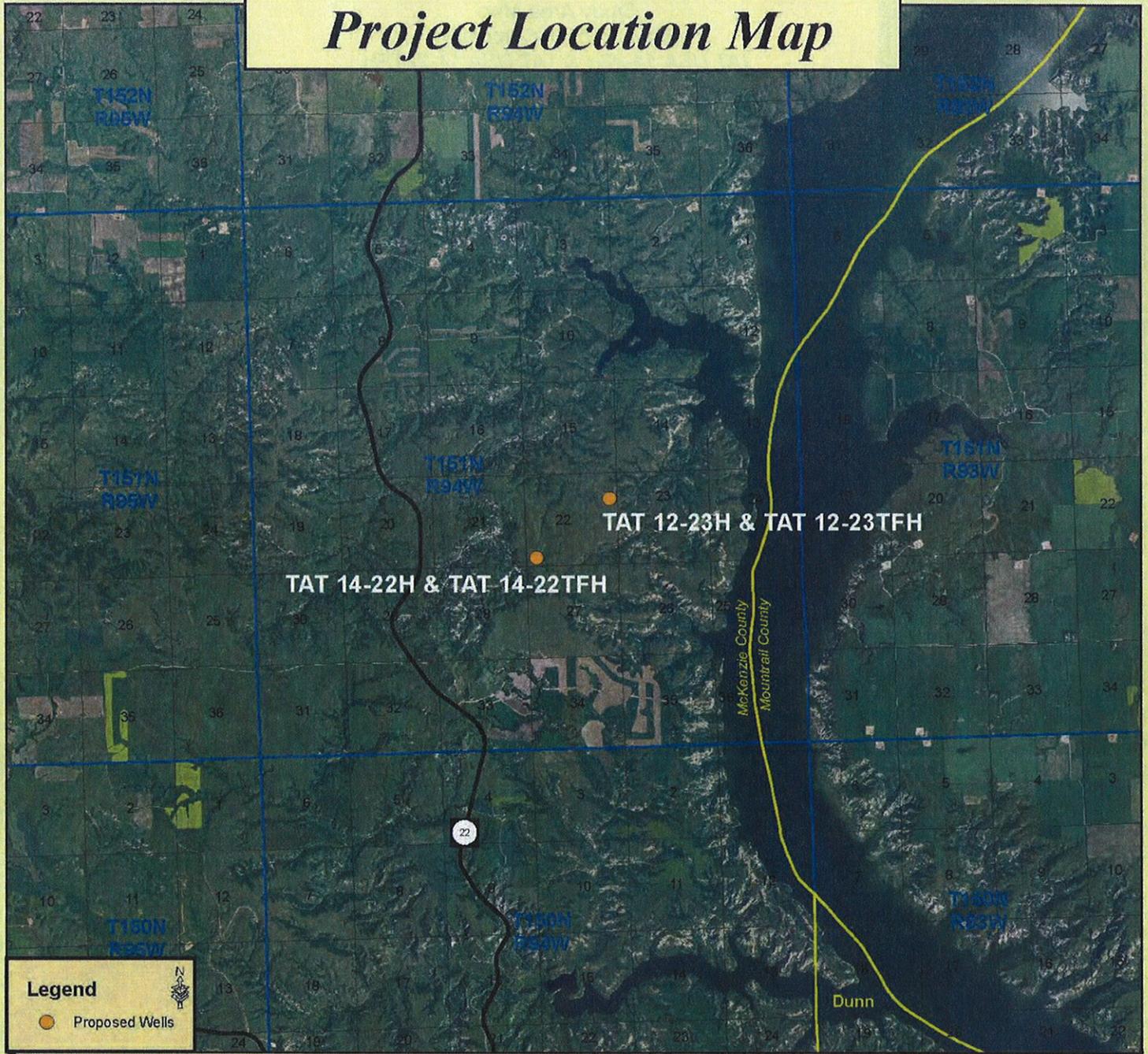
Kadmas, Lee & Jackson, Inc.



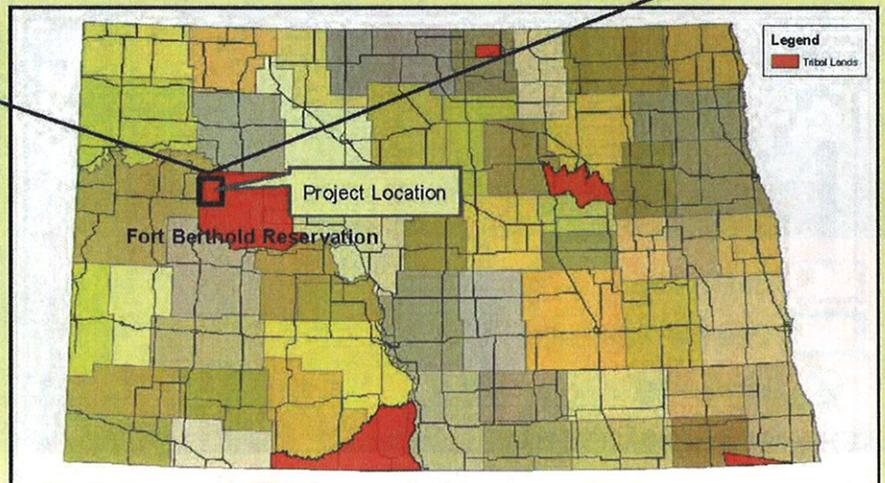
Shanna Braun
Environmental Planner

Enclosures (Maps)

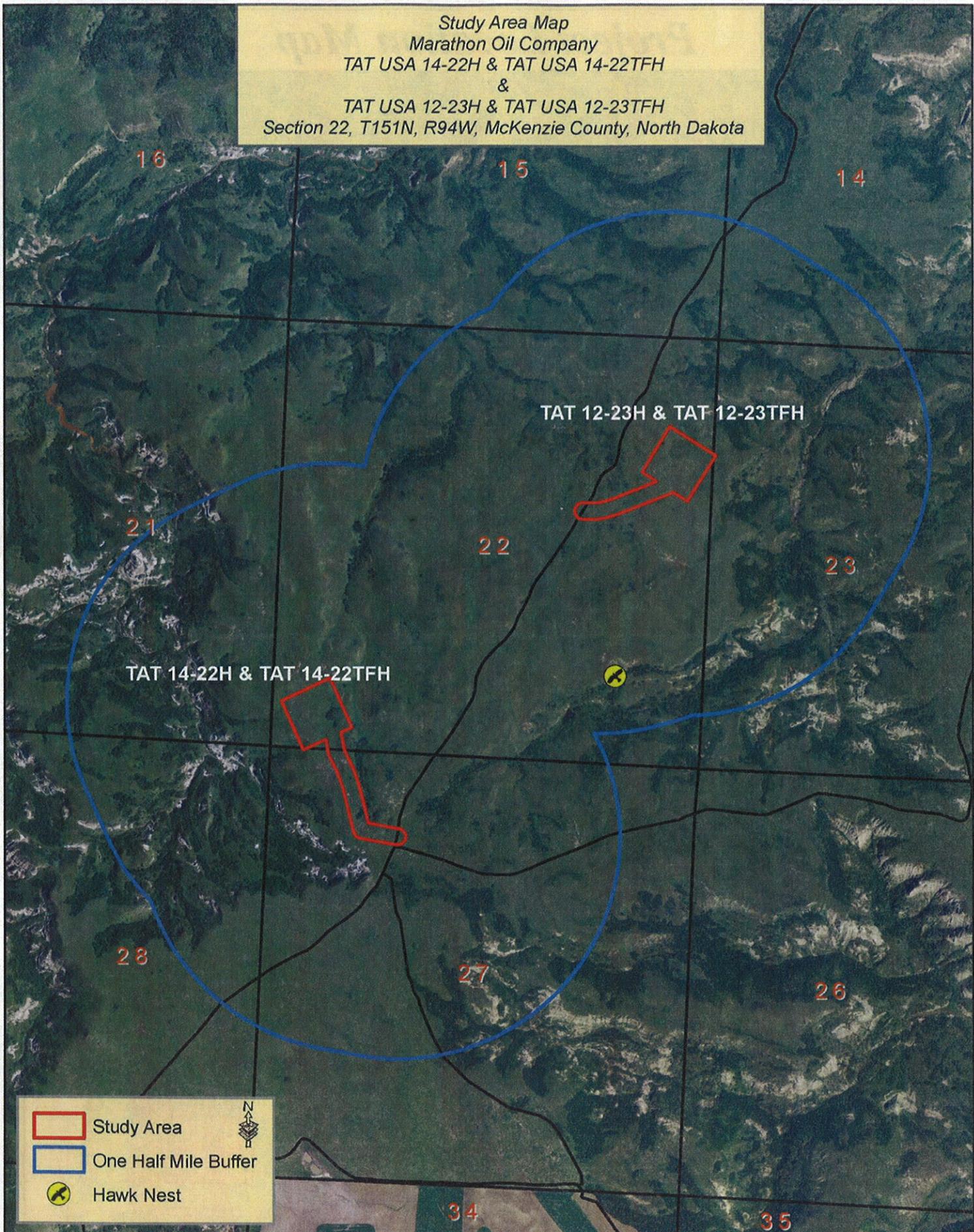
Project Location Map



Marathon Oil Company
TAT 12-23H and TAT 12-23TFH
&
TAT 14-22H and TAT 14-22TFH
Proposed Wells
McKenzie County, ND



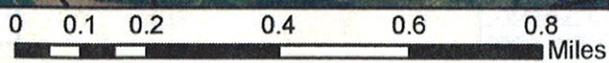
Study Area Map
Marathon Oil Company
TAT USA 14-22H & TAT USA 14-22TFH
&
TAT USA 12-23H & TAT USA 12-23TFH
Section 22, T151N, R94W, McKenzie County, North Dakota



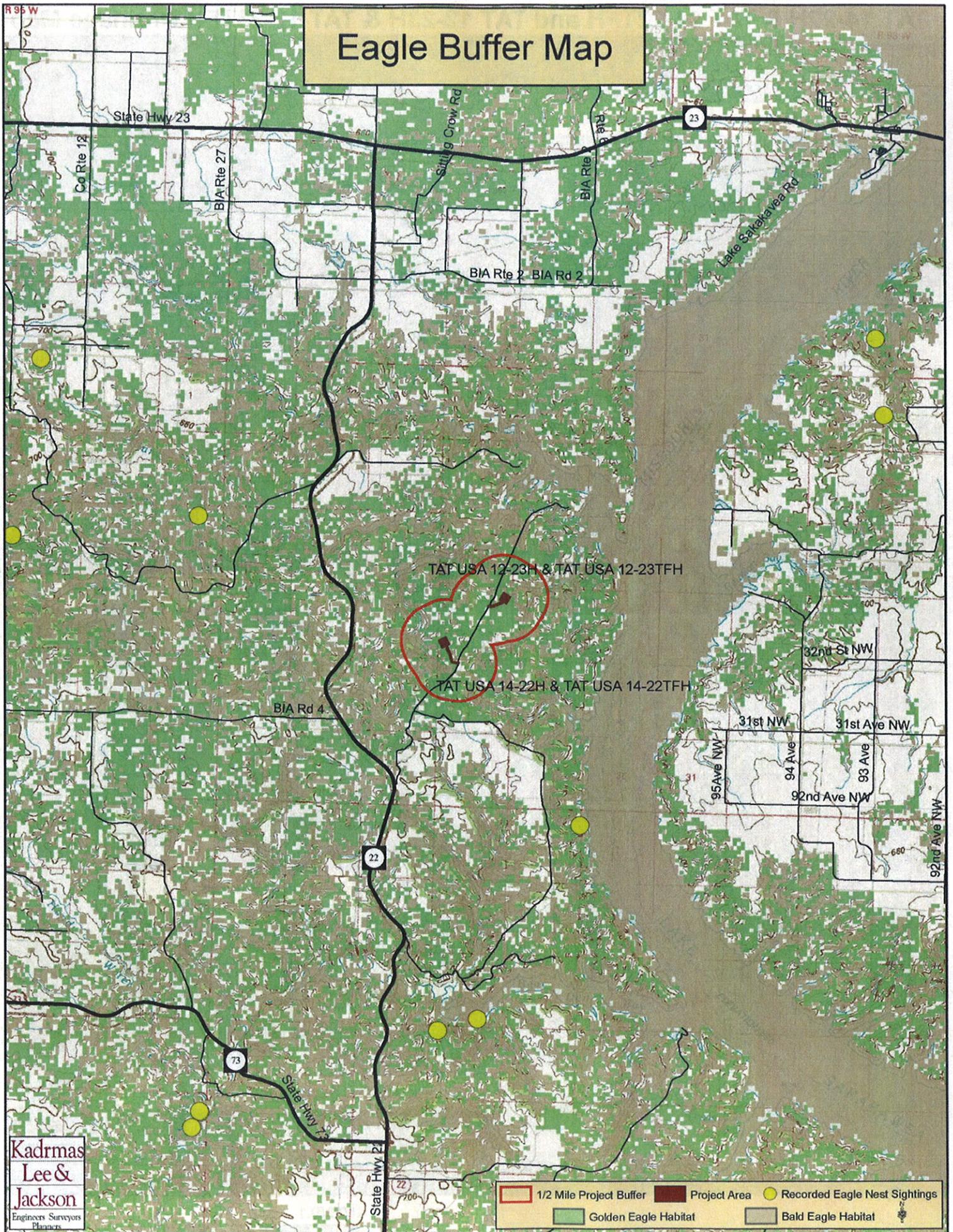
Legend:

-  Study Area
-  One Half Mile Buffer
-  Hawk Nest





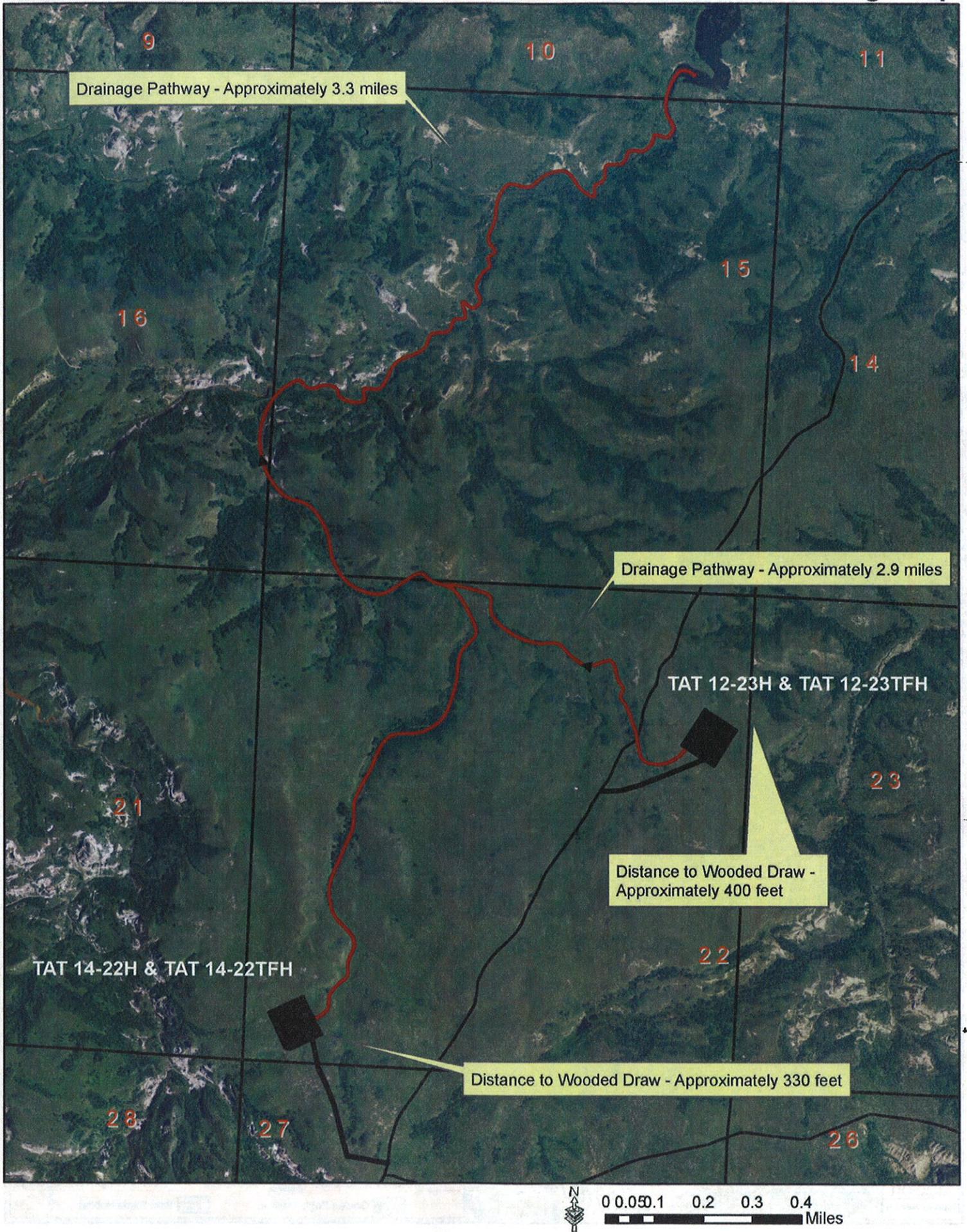
Eagle Buffer Map



**Kadmas
Lee &
Jackson**
Engineers Surveyors
Planners

- 1/2 Mile Project Buffer
- Project Area
- Recorded Eagle Nest Sightings
- Golden Eagle Habitat
- Bald Eagle Habitat

TAT 14-22H & TAT 14-22TFH and TAT 12-23H & TAT 12-23TFH Drainage Map



July 11, 2011

«CTitle» «First» «Last»
«Title»
«Department»
«Agency»
«Address»
«City», «State» «Zip»

**RE: Marathon Oil Company
Four Proposed Oil and Gas Wells on Two Pads
Fort Berthold Reservation
McKenzie County, ND**

Dear «CTitle» «First» «Last»;

On behalf of Marathon Oil Company, Kadmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of two dual well pads, resulting in the drilling and completion of four oil and gas wells in McKenzie County on the Fort Berthold Reservation. These well pads are proposed to be positioned in the following locations:

- TAT USA 14-22H and TAT USA 14-22TFH (dual well) located in T151N, R94W, 5th P.M., Section 22
- TAT USA 12-23H and TAT USA 12-23TFH (dual well) located in T151N, R94W, 5th P.M., Section 22

Please refer to the enclosed Project Location Map.

The proposed action would advance the production of oil and gas from the Bakken and Three Forks Formations. The well pads have been positioned to utilize existing roadways for access to the extent possible. Construction of the proposed well pads and access roads is scheduled to begin in fall 2011.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted. We are also interested in existing or proposed developments you may have that should be considered in connection with the proposed project.

Please provide your comments by **August 11, 2011**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact me at (218) 790-4476. Thank you for your cooperation.

Sincerely,

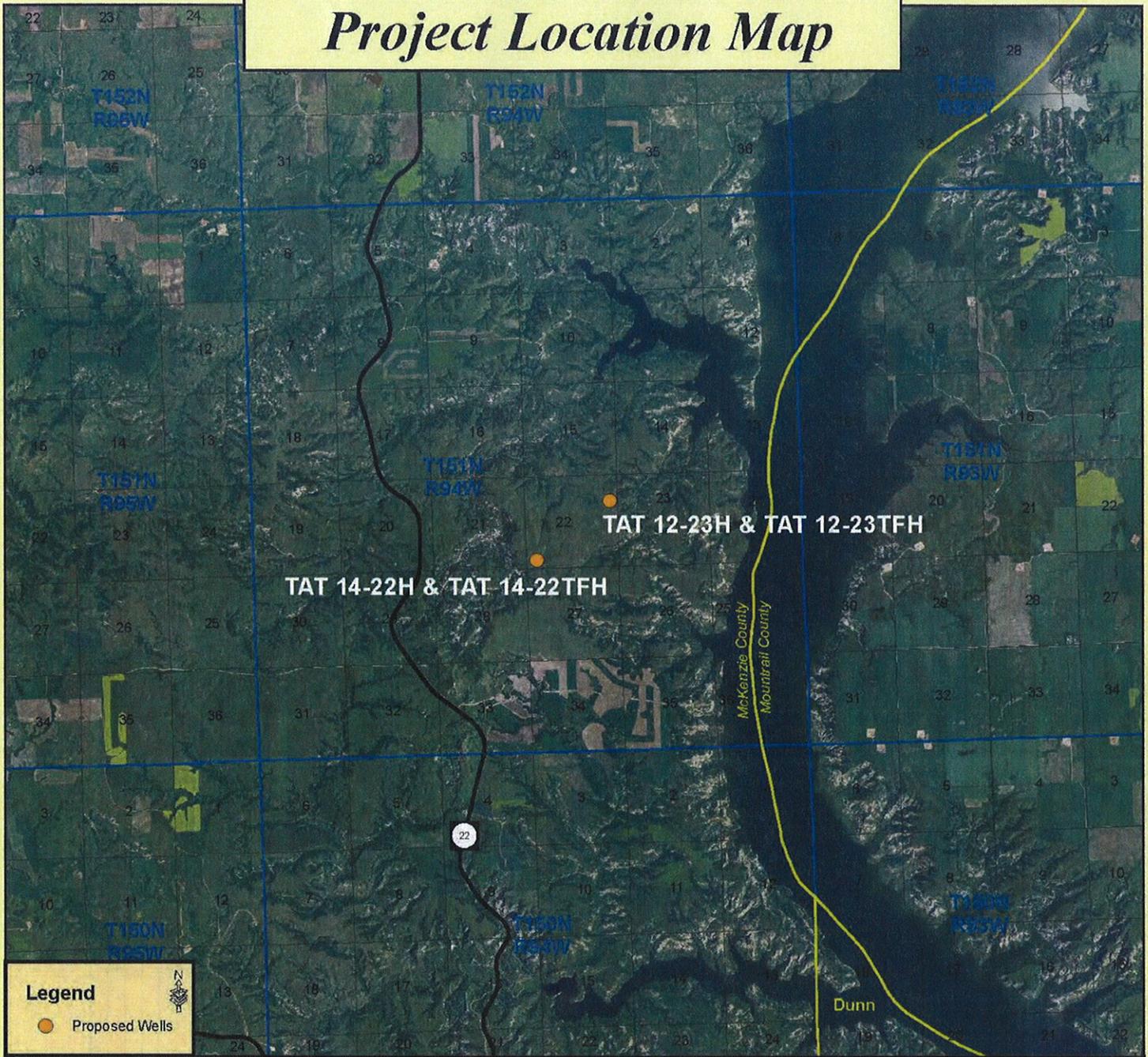
Kadrmass, Lee & Jackson, Inc.

A handwritten signature in black ink, appearing to read "Shanna Braun". The signature is fluid and cursive, with the first name being more prominent.

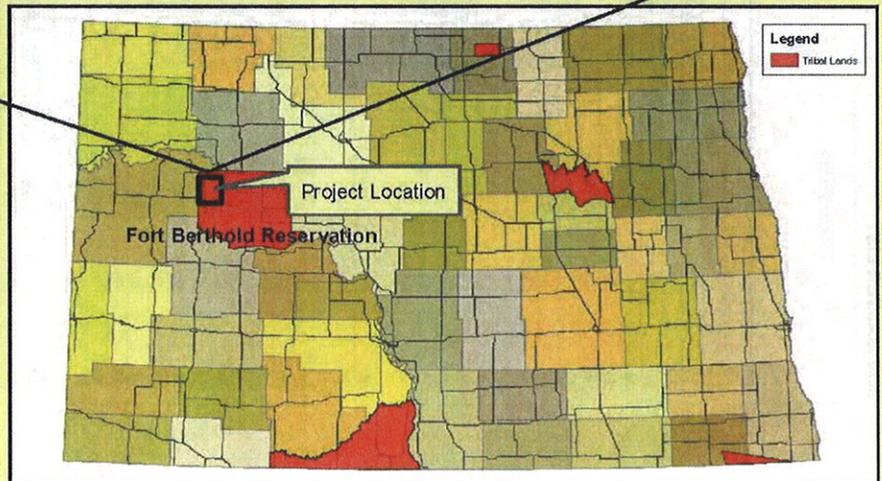
Shanna Braun
Environmental Planner

Enclosure (Project Location Map)

Project Location Map



Marathon Oil Company
TAT 12-23H and TAT 12-23TFH
&
TAT 14-22H and TAT 14-22TFH
Proposed Wells
McKenzie County, ND



TAT Weill Pad, Marathon Oil Company
Scoping Mailing List

Ctitle	First	Last	Title	Department	Agency	Address	City	State	Zip
Mr.	Weldon	Loudermilk	Regional Director		Bureau of Indian Affairs	1115 4th Ave. SE	Aberdeen	SD	57401
Mr.	Jeffrey	Desjardis	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	SD	58763
Mr.	Darryl	Turcotte	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	ND	58763
Mr.	Richard	Nelson	Chief, Resource Management		Dakotas Area Office	PO Box 1017	Bismarck	ND	58502-1017
Mr.	Tom	Schauer	Manager		Bismarck Airports District Office	2301 University Drive, Bldg 238	Bismarck	ND	58504
Mr.	Dan	Comarosi	Manager		US Army Corps of Engineers	1513 S. 12th St.	Bismarck	ND	58504
Mr.	Charles	Sorensen	Natural Resources Specialist		US Army Corps of Engineers	PO Box 527	Rivdale	ND	58565
Mr.	Broad	Thompson	Chief, Planning Branch		US Army Corps of Engineers	1618 Capitol Avenue	Omaha	NE	68102-4901
Mr.	Gerald	Paulson	Director, Transmission Line Substations		US Department of Energy	PO Box 1173	Bismarck	ND	58502-1173
Mr.	Larry	Svoboda	Director		Western Area Power Admin.				
Mr.	Richard	Clark	Wetlands Coordinator		NEPA Program, Region 8	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Jeffrey	Towner	Field Supervisor		Region 8, EPR-EP	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Paul J.	Sweeney	State Conservationist		US Fish & Wildlife Service	3425 Miriam Ave.	Bismarck	ND	58501
Mr.	Scott	Davis	Executive Director		Natural Resources Conservation Service	PO Box 1458	Bismarck	ND	58502-1458
Mr.	Greg	Wiche	Director		Indian Affairs Commission	600 E. Blvd. Ave.	Bismarck	ND	58505-0300
Mr.	L. David	Glatt	Chief		US Geological Survey	1st Floor, Judicial Wing, Rm 117	Bismarck	ND	58501
Mr.	Terry	Stenwand	Director		ND Department of Health	918 E. Divide Ave., 4th floor	Bismarck	ND	58501-1947
Mr.	Ed	Murphy	State Geologist		ND Game & Fish Department	700 Bismarck Expressway	Bismarck	ND	58501-5995
Mr.	Mark	Zimmerman	Director		ND Geological Survey	1600 E. Blvd. Avenue	Bismarck	ND	58505-0840
Mr.	Todd	Sando	State Engineer		ND Parks & Recreation Dept.	1600 E. Century Ave., Suite 3	Bismarck	ND	58503-9649
Mr.	Scott	Hochhalter	Soil Conservation Specialist		ND State Water Commission	900 E. Blvd. Ave.	Bismarck	ND	58505-0850
Mr.	Bill	Boyd	Construction Manager		Soil Conservation Committee	2719 Gateway Ave., #104	Bismarck	ND	58503
Mr.	Doug	Dixon	General Manager		Midcontinent Cable Company	719 Memorial Hwy	Bismarck	ND	58501
Mr.	John	Skurupcy	General Manager		Montana Dakota Utilities	PO Box 1406	Williston	ND	58802-1406
Mr.	Ken	Miller	General Manager		McKenzie Electric Cooperative	PO Box 649	Ward City	ND	58854-0649
Mr.	Roy	Christenson	Manager/CEO		Northern Border Pipeline Company	13710 FNB Parkway	Omaha	NE	68154-5200
Mr.	David C.	Schelkosh	CEO		Southwest Water Authority	4666 2nd St. W.	Dickinson	ND	58601
Mr.	Sir or Madam	Begley	District Engineer		West Plains Electric Coop., Inc.	PO Box 1038	Dickinson	ND	58602-1038
Mr.	Mike	Nash	Assistant Field Office Manager		Xcel Energy	PO Box 2747	Fargo	ND	58108-2747
Mr.	Michael	Sevage	Tribal Chairman		ND Department of Transportation	1700 3rd Ave W, Suite 101	Dickinson	ND	58601-3009
Ms.	Myra	Pearson	Tribal Chairman		Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Mr.	Charles	Murphy	Tribal Chairman		Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Mr.	Elton	Spotted Horse	Environmental Division Director		Sisseton-Wapeton Sioux Tribe	PO Box 509	Sisseton	SD	57262-0267
Mr.	Elgin	Crows Breast	Tribal Historic Preservation Officer		Spirit Lake Sioux Tribe	PO Box 359	Fort Yates	ND	58525
Mr.	Tex	Hall	Tribal Chairman		Standing Rock Sioux Tribe	PO Box D	Fort Yates	ND	58538
Mr.	Merle	St. Claire	Tribal Chairman		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Damon	Williams	Tribal Attorney		Three Affiliated Tribes	HC3 Box 2	New Town	ND	58763
Mr.	Fred	Fox	Director		Three Affiliated Tribes	HC3 Box 2	New Town	ND	58763
Ms.	V. Judy	Bugh	Representative		Turtle Mountain Chippewa	PO Box 900	Belcourt	ND	58516-0900
Mr.	Arnold	Strahs	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Scott	Eagle	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Mervin	Packmeu	Representative		Three Affiliated Tribes	PO Box 665	Mandaree	ND	58757
Mr.	Frank	Whitcalf	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Berry	Benson	Representative		Three Affiliated Tribes	PO Box 468	Parshall	ND	58770
Mr.	Fred	Poltra	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Lester	Crowheart	Director		Three Affiliated Tribes	70879 E Ave NW	Halliday	ND	58636
Mr.	Roger	Hovda	Operations Manager		Three Affiliated Tribes	308 Four Bears Complex	New Town	ND	58763
Ms.	Linda	Svihovec	Auditor		Reservation Telephone Cooperative	PO Box 68	Parshall	ND	58770-0068
Mr.	Roger	Chinn	Chairman		McKenzie County	PO Box 543	Ward City	ND	58854
Mr.	Darrell	Nolland	Operations Specialist		McKenzie County	561 Highway 85 S	Grassy Butte	ND	58634
					Marathon Oil Company	3172 Highway 22	Dickinson	ND	58801

Appendix B

Agency Scoping Responses

List of Scoping Responses

Marathon Oil Company

EA for TAT Well Pad Drilling of:

**TAT USA 11-23TFH/TAT USA 12-23H/TAT USA 12-23TFH
Oil & Gas Wells**

Federal

US Department of Agriculture – Natural Resources Conservation Service

US Department of the Army – Corps of Engineers, North Dakota Regulatory Office

US Department of the Army – Corps of Engineers, Planning, Programs, and Project Management Division

US Department of the Interior – Bureau of Reclamation, Dakotas Area Office

US Department of the Interior – US Fish and Wildlife Service, North Dakota Field Office

US Department of Transportation – Federal Aviation Administration, Bismarck Airports District Office

State

North Dakota Department of Health

North Dakota Game and Fish Department

North Dakota Parks and Recreation Department

North Dakota State Water Commission

United States Department of Agriculture



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



July 14, 2011

Shanna Braun
Kadrmars, Lee & Jackson
3203 32nd Ave. S, Ste. 201
PO Box 9767
Fargo, ND 58106-9767

RE: Marathon Oil Company
Four Proposed Oil and Gas Wells on Two Pads
Fort Berthold Reservation
McKenzie County, ND

Dear Ms. Braun:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated July 11, 2011, regarding Marathon Oil Company proposing four oil and gas wells on two pads in McKenzie County, North Dakota.

Important Farmlands - NRCS has a major responsibility with Farmland Policy Protection Act (FPPA) in documenting conversion of farmland (i.e., prime, statewide, and local importance) to non-agricultural use. It appears your proposed project is not supported by Federal funding or actions; therefore, no further action is required.

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. Braun
Page 2

NRCS would recommend that impacts to wetlands be avoided. If the project requires passage through or disturbance of 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, at (701) 530-2019.

Sincerely,



JEROME M. SCHAAR
State Soil Scientist/MO 7 Leader



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

July 14, 2011

North Dakota Regulatory Office

Kadrmass, Lee and Jackson, Inc
Attn: Shanna Braun, Environmental Planner
3203 32nd Avenue S, Suite 201
PO Box 9767
Fargo, North Dakota 58106-9767

Dear Ms. Braun:

This is in response to your solicitation letter on behalf of **Marathon Oil Company**, received on July 12, 2011, requesting Department of the Army (DA), United States Army Corps of Engineers (Corps) comments for development of two dual well pads, four oil and gas wells within the Fort Berthold Indian Reservation. The proposed wells include:

- **TAT USA 14-22H and TAT USA 14-22TFH (dual well) located in Section 22, Township 151 North, Range 94 West, Dunn County, North Dakota.**
- **TAT USA 12-23-H and TAT USA 12-23TFH (dual well) located in Section 22, Township 151 North, Range 94 West, Dunn County, North Dakota.**

Corps Regulatory Offices administer Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates work in or affecting navigable waters. This would include work over, through, or under Section 10 water. Section 10 waters in North Dakota are the Missouri River (including Lake Sakakawea and Lake Oahe), Yellowstone River, James River south of Jamestown, North Dakota, Bois de Sioux River, Red River of the North, and the Upper Des Lacs Lake. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

For any proposed well where the well line and/or bottom hole is under or crosses under Lake Sakakawea, regardless of depth, we require that project proponent provide a DA permit application (ENG Form 4345) to the Corps.

Enclosed for your information is the fact sheet for Nationwide Permit 12, Utility Line Activities. Pipeline projects are already authorized by Nationwide Permit 12 **provided the utility line can be placed without any change to pre-construction contours and all other proposed construction activities and facilities are in compliance with the Nationwide's permit conditions and 401 Water Quality Certification is obtained**. Please note the pre-construction notification requirements on page 2 of the fact sheet. **If a project involves any one of the seven notification requirements, the project proponent must submit a DA application**. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 12 and 13

of the fact sheet. [The following info is for activities on a reservation] Please be advised that the United States Environmental Protection Agency (EPA), Region 8 has denied 401 Water Quality Certification for activities in perennial drainages and wetlands. Furthermore, EPA has placed conditions on activities in ephemeral and intermittent drainages. It is recommended you contact the U.S. Environmental Protection Agency, Region 8, Attn: Brent Truskowski, 1595 Wynkoop Street, Denver, Colorado 80202-1129 to review the conditions pursuant to Section 401 of the Clean Water Act prior to any construction.

Also enclosed for your information is the fact sheet for Nationwide Permit 14, Linear Transportation Projects. Road crossings are already authorized by Nationwide Permit 14 **provided the discharge does not cause the loss of greater than ½ acre of waters of the United States per crossing and all other proposed construction activities are in compliance with the Nationwide's permit conditions.** Please note the pre-construction notification requirements on the front page of the fact sheet. **If a project involves (1) the loss of waters of the United States exceeding 1/10 acre per crossing; or (2) there is a discharge in a special aquatic site, including wetlands, the project proponent must submit a DA application prior to the start of construction.** Please reference General Condition 27, Pre Construction Notification on page 8 of the fact sheet. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 11 and 12 of the fact sheet. [The following is included for activities on a reservation] Enclosed is a copy of the United States Environmental Protection Agency, Region 8's; General Conditions for all Nationwide Permits and specific conditions for Nationwide Permit 14.

In the event your project requires approval from the U.S. Army Corps of Engineers and cannot be authorized by Nationwide Permit(s), a Standard or Individual Permit will be required. A project that requires a Standard or Individual Permit is intensely reviewed and will require the issuance of a public notice. A Standard or Individual Permit generally requires a minimum of 120 days for processing but based on the project impacts and comments received through the public notice may extend beyond 120 days.

This correspondence letter is neither authorization for the proposed construction nor confirmation that the proposed project complies with the Nationwide Permit(s).

If any of these projects require a Section 10 and/or Section 404 permit, please complete and submit the enclosed Department of the Army permit application (ENG Form 4345) to the U.S. Army Corps of Engineers, North Dakota Regulatory Office, 1513 South 12th Street, Bismarck, North Dakota 58504. If you are unsure if a permit is required, you may submit an application; include a project location map, description of work, and construction methodology.

If we can be of further assistance or should you have any questions regarding our program, please do not hesitate to contact this office by letter or phone at (701) 255-0015.

Sincerely,



Daniel E. Cimarosti
Regulatory Program Manager
North Dakota

Enclosure
ENG Form 4345
Fact Sheet NWP 12 and 14
CF w/o encl EPA Denver (Brent Truskowski)

**Instructions for Preparing a
Department of the Army Permit Application**

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the E-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, e.g., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the latitude and longitude of where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality that the site is located in.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wing walls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Description of Avoidance, Minimization, and Compensation. Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

Block 24. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 26. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 27. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)**

OMB APPROVAL NO. 0710-0003
EXPIRES: 31 AUGUST 2012

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Middle - Last - Company - E-mail Address -				8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Middle - Last - Company - E-mail Address -			
6. APPLICANT'S ADDRESS: Address- City - State - Zip - Country -				9. AGENT'S ADDRESS: Address- City - State - Zip - Country -			
7. APPLICANT'S PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax				10. AGENTS PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax			

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)			
13. NAME OF WATERBODY, IF KNOWN (if applicable)		14. PROJECT STREET ADDRESS (if applicable) Address	
15. LOCATION OF PROJECT Latitude: °N Longitude: °W		City - State - Zip -	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Section - Township - Range -			

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
-------------------------------	-------------------------------	-------------------------------

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**FACT SHEET
NATIONWIDE PERMIT 12
(2007)**

UTILITY LINE ACTIVITIES. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (Sections 10 and 404).

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

General Conditions: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

*Specifically in North Dakota, the North Dakota Department of Health has denied certification for projects under this Nationwide Permit proposed to cross **all classified rivers, tributaries and lakes**; individual certification for project in these waterways must be obtained by the project proponent prior to authorization under this Nationwide Permit. For utility line crossings of all other waters, the Department of Health has issued water quality certification provided the attached Construction and Environmental Disturbance Requirements are followed.*

22. Coastal Zone Management. *Not Applicable.*

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWP does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions.
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. *See attached pages.*

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project.

General Condition 27. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP's and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(c) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

**2007 NATIONWIDE PERMITS
REGIONAL CONDITIONS
STATE OF NORTH DAKOTA
OMAHA DISTRICT – CORPS OF ENGINEERS**

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of North Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

1. Wetlands Classified as Fens

All Nationwide Permits, with the exception of 3, 5, 20, 32, 38, 45, and 47, are revoked for use in fens in North Dakota. For nationwide permits 3, 5, 20, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition 27 (Notification) prior to initiating any regulated activity impacting fens in North Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

2. Waters Adjacent to Natural Springs

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in North Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

3. Missouri River, including Lake Sakakawea and Lake Oahe within the State of North Dakota

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity in the Missouri River, including Lake Sakakawea and Lake Oahe, within the State of North Dakota.

4. Historic Properties

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the North Dakota Regulatory Office.

5. Spawning Condition

That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July

Additional Information

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at:
<https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm>



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.

**FACT SHEET
NATIONWIDE PERMIT 14
(2007)**

LINEAR TRANSPORTATION PROJECTS. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

General Conditions: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. *Specifically for North Dakota, the North Dakota Department of Health has issued water quality certification for projects under this Nationwide Permit provided the attached Construction and Environmental Disturbance Requirements are followed.*

22. Coastal Zone Management. *Not Applicable.*

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. *See attached pages.*

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

General Condition 27. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP's and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

**2007 NATIONWIDE PERMITS
REGIONAL CONDITIONS
STATE OF NORTH DAKOTA
OMAHA DISTRICT – CORPS OF ENGINEERS**

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of North Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

1. Wetlands Classified as Fens

All Nationwide Permits, with the exception of 3, 5, 20, 32, 38, 45, and 47, are revoked for use in fens in North Dakota. For nationwide permits 3, 5, 20, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition 27 (Notification) prior to initiating any regulated activity impacting fens in North Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

2. Waters Adjacent to Natural Springs

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in North Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

3. Missouri River, including Lake Sakakawea and Lake Oahe within the State of North Dakota

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity in the Missouri River, including Lake Sakakawea and Lake Oahe, within the State of North Dakota.

4. Historic Properties

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the North Dakota Regulatory Office.

5. Spawning Condition

That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

Additional Information

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at:
<https://www.nwo.usace.army.mil/html/od-rnd/ndhome.htm>



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.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
1616 CAPITOL AVENUE
OMAHA NE 68102-4901



July 21, 2011

Planning, Programs, and Project Management Division

Kadrmas, Lee and Jackson
Attention: Shanna Braun
P.O. Box 9767
Fargo, North Dakota 58106

Dear Ms. Braun:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated July 11, 2011 regarding the proposed development, drilling and completion of four wells on two well pads on the Fort Berthold Reservation in Dunn County, North Dakota. The Corps offers the following comments:

The Corps is aware of recent reports that describe environmental impacts associated with the use of oil waste pits in North Dakota. Oil waste pits may be susceptible to flooding, which may threaten drinking water supplies, wildlife, soil and other water resources. Due to the proximity of the proposed wells to Lake Sakakawea, a significant drinking water resource, the Corps requests the applicant consider use of a closed loop drilling system. A closed loop drilling system may reduce or eliminate the discharge of toxic drilling wastes and their potential negative impacts to the environment. It also appears that the two well pad sites are within one mile of each other. The Corps requests the applicant consider consolidating the two pad sites and developing all four wells from a single pad location.

Since the proposed project does not appear to be located within Corps owned or operated lands, we are providing no floodplain or flood risk information. To determine if the proposed project may impact areas designated as a Federal Emergency Management Agency special flood hazard area, please consult the following floodplain management office:

North Dakota State Water Commission
Attention: Jeff Klein
900 East Boulevard Avenue
Bismarek, North Dakota 58505-0850
jjkein@nd.gov
T-701-328-4898
F-701-328-3747

Your plans should be coordinated with the U.S. Environmental Protection Agency, which is currently involved in a program to protect groundwater resources. If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the North Dakota Game and Fish Department regarding fish and wildlife resources. In addition, the North Dakota

State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. You can visit the Omaha District's Regulatory website for permit applications and related information. Please review the information on the provided website (<https://www.nwo.usace.army.mil/html/od-r/district.htm>) to determine if this project requires a 404 permit. For a detailed review of permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers
Bismarck Regulatory Office
Attention: CENWO-OD-R-ND/Cimarosti
1513 South 12th Street
Bismarck, North Dakota 58504

In addition, please update your records with our current mailing address:

U.S. Army Corps of Engineers, Omaha District
Planning Branch
Attention: CENWO-PM-AC
1616 Capitol Ave.
Omaha, Nebraska 68102-4901

If you have any questions, please contact Mr. John Shelman of my staff at (402) 995-2708.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Laux". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Eric Laux
Acting Chief, Environmental Resources and Missouri
River Recovery Program Plan Formulation Section



United States Department of the Interior

BUREAU OF RECLAMATION

Dakotas Area Office

P.O. Box 1017

Bismarck, North Dakota 58502



IN REPLY REFER TO:
DK-5000
ENV-6.00

JUL 20 2011



Ms. Shanna Braun
Environmental Planner
Kadmas, Lee, & Jackson, Inc.
P.O. Box 9767
Bismarck, ND 58106-9767

Subject: Solicitation for an Environmental Assessment for the Proposed Construction of Two Oil Well Drilling and Production Pads and Exploration and Production of Four Oil Wells by Marathon Oil on the Fort Berthold Reservation in McKenzie County, North Dakota

Dear Ms. Braun:

This letter is written to inform you that we received your letter dated July 11, 2011, and the information and map have been reviewed by Bureau of Reclamation staff.

It appears there are no Reclamation facilities in the general vicinity of section 22 and your proposed two-pad project in T151, R94W, McKenzie County North Dakota. Should the nature of your project be substantially altered or take you substantially outside of section 22, please notify our office. However, should you have need to cross a Fort Berthold Rural Water System pipeline, please refer to the enclosed sheet for pipeline crossing specifications and contact our engineer Colin Nygaard, as below.

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.

For future reference, the chief of Reclamation's Dakotas Area Office Environmental Management Division is Ms. Loretta Chandler. Feel free to share this personnel change with your other offices.

Thank you for providing the information and opportunity to comment. If you have any further environmental questions, please contact me at 701-221-1287 or Colin Nygaard, General Engineer, for engineering questions at 701-221-1262.

Sincerely,

Kelly B. McPhillips
Environmental Specialist

Enclosure

cc: See next page.

Subject: Solicitation for an Environmental Assessment for the Proposed Construction
of Two Oil Well Drilling and Production Pads and Exploration and Production
of Four Oil Wells by Marathon Oil on the Fort Berthold Reservation in McKenzie
County, North Dakota

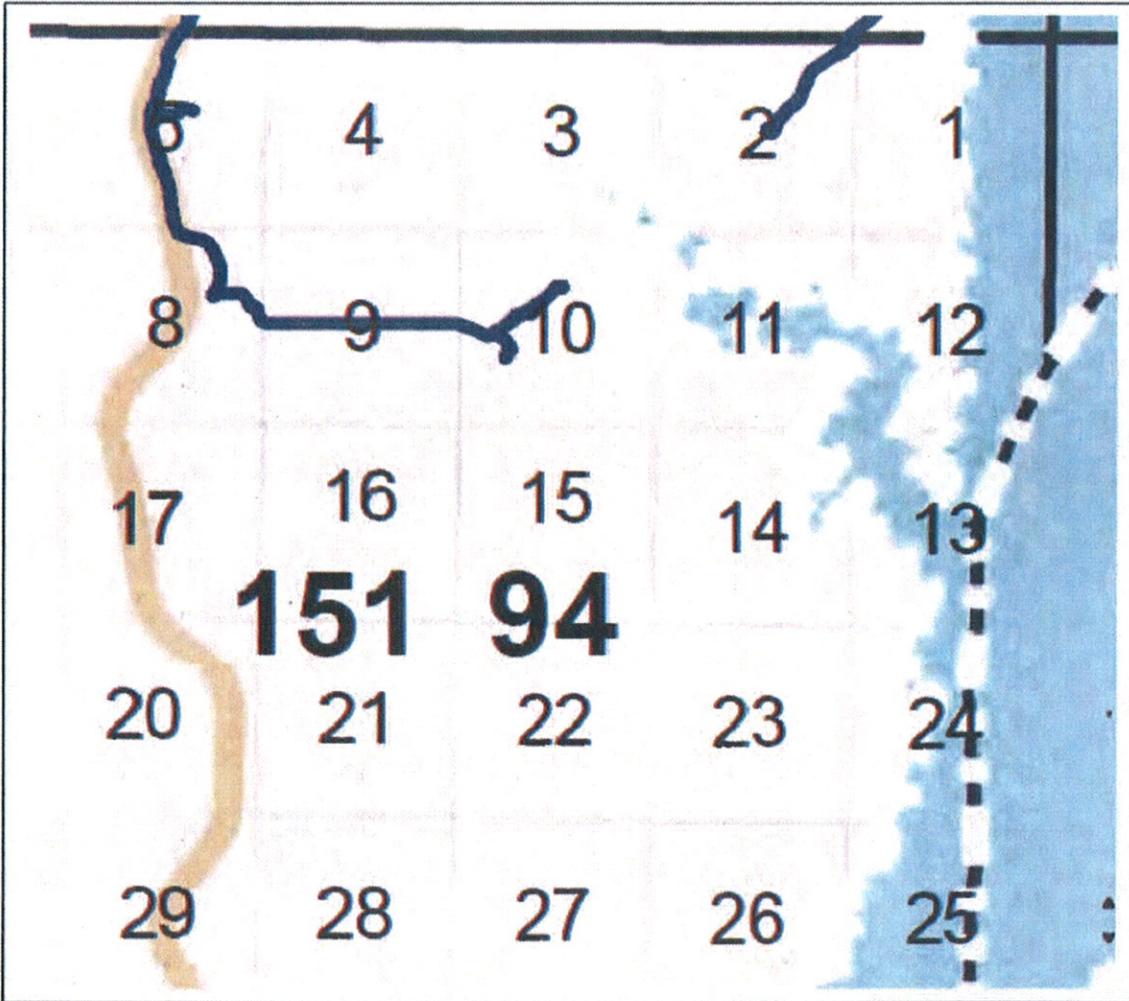
2

cc: Bureau of Indian Affairs
Great Plains Regional Office
Attention: Ms. Marilyn Bercier
Regional Environmental Scientist
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)

Subject: Solicitation for an Environmental Assessment for the Proposed Construction of Two Oil Well Drilling and Production Pads and Exploration and Production of Four Oil Wells by Marathon Oil on the Fort Berthold Reservation in McKenzie County, North Dakota

Section 22 in T151, R94W, Sanish NW, ND in McKenzie County – Dark blue lines represent rural water pipelines while brown lines represent county roads.



under the ESA. Therefore, the U.S. Fish and Wildlife Service (Service) is responding to you as the designated non-Federal representative for the purposes of ESA, and under our other authorities as the entity preparing the NEPA document for adoption by the BIA.

Your letter states that the proposed project is located approximately 0.96 mile and 2.90 stream-miles from potential habitat for interior least tern and piping plover. The proposed pad is approximately 445 feet from a wooded draw and drainage which empties into Lake Sakakawea. The Service concurs with your "may affect, is not likely to adversely affect" determination for interior least tern, piping plover, pallid sturgeon and designated critical habitat for piping plover. This concurrence is predicated on Marathon's commitment to place the pad a distance greater than 1 stream-mile from Lake Sakakawea, and over 300 feet from a wooded draw.

The Service concurs with your "may affect, is not likely to adversely affect" determination for whooping cranes. This concurrence is predicated on Marathon's commitment to stop work on the proposed site if a whooping crane is sighted within 1 mile of the proposed project area and immediately contacting the Service.

The Service acknowledges your no effect determinations for black-footed ferret and gray wolf.

The Dakota skipper and Sprague's pipit are candidate species for listing under the ESA; therefore, an effects determination is not necessary for these species. No legal requirement exists to protect candidate species; however, it is within the spirit of the ESA to consider these species as having significant value and worth protecting. Although not required, Federal action agencies such as the BIA have the option of requesting a conference on any proposed action that may affect candidate species such as the Dakota skipper and Sprague's pipit.

Migratory Birds

The letter states that Marathon will implement the following measures to avoid/minimize take of migratory birds:

- Construction will be completed outside of the migratory bird nesting season (Feb. 1-July 15);
- If construction needs to take place within the breeding and nesting season, pre-construction surveys for migratory birds and their nests will be conducted within 5 days prior to the initiation of construction activities. If birds or nests are discovered, the Service will be contacted for additional information on how to proceed.

Bald and Golden Eagles

The letter states that a ground survey for cliff, tree and ground raptor nests was conducted within line-of-sight of the proposed project on October 21, 2010, and November 3, 2010. No eagles or nests were discovered within 0.5 mile of the project area. The eagle nest database maintained by North Dakota Game and Fish Department does not indicate any recorded eagle nests within 0.5 mile of the project area.

The Service believes that Marathon's commitment to implement the aforementioned measures demonstrates that measures have been taken to protect migratory birds and bald and golden eagles to the extent practicable, pursuant to the MBTA and the BGEPA.

Thank you for the opportunity to comment on this project proposal. If you require further information or the project plans change, please contact me or Heidi Riddle of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,



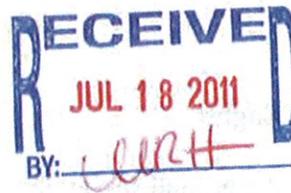
Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

cc: Bureau of Indian Affairs, Aberdeen
(Attn: Marilyn Bercier)
Bureau of Land Management, Dickinson
ND Game & Fish Department, Bismarck

Kadmas
Lee &
Jackson

Engineers Surveyors
Planners

July 11, 2011



RECEIVED

JUL 13 2011

Mr. Tom Schauer
Manager
Bismarck Airports District Office
Federal Aviation Administration
2301 University Drive, Bldg 23B
Bismarck, ND 58504

**RE: Marathon Oil Company
Four Proposed Oil and Gas Wells on Two Pads
Fort Berthold Reservation
McKenzie County, ND**

Dear Mr. Tom Schauer;

On behalf of Marathon Oil Company, Kadmas, Lee & Jackson, Inc. is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM of the development of two dual well pads, resulting in the drilling and completion of four oil and gas wells in McKenzie County on the Fort Berthold Reservation. These well pads are proposed to be positioned in the following locations:

- TAT USA 14-22H and TAT USA 14-22TFH (dual well) located in T151N, R94W, 5th P.M., Section 22
- TAT USA 12-23H and TAT USA 12-23TFH (dual well) located in T151N, R94W, 5th P.M., Section 22

Please refer to the enclosed Project Location Map.

The proposed action would advance the production of oil and gas from the Bakken and Three Forks Formations. The well pads have been positioned to utilize existing roadways for access to the extent possible. Construction of the proposed well pads and access roads is scheduled to begin in fall 2011.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted. We are also interested in existing or proposed developments you may have that should be considered in connection with the proposed project.

701 232 5353

3203 32nd Ave S, Ste 201

PO Box 9767

Fargo, ND 58106-9767

Fax 701 232 5354

kljeng.com

Kadmas, Lee & Jackson, Inc.

A KLJ Solutions Company

Please provide your comments by **August 11, 2011**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact me at (218) 790-4476. Thank you for your cooperation.

Sincerely,

Kadrmass, Lee & Jackson, Inc.



Shanna Braun
Environmental Planner

Enclosure (Project Location Map)

701 232 5353
3203 32nd Ave S, Ste 201
PO Box 9767
Fargo, ND 58106-9767
Fax 701 232 5354
kljeng.com
Kadrmass, Lee & Jackson, Inc.
A KLJ Solutions Company



US Department
of Transportation
**Federal Aviation
Administration**

Date 7/14/11

No objection provided the Federal Aviation Administration is notified of construction or alterations as required by Federal Aviation Regulations, Part 77, Objects Affecting Navigable Airspace, Paragraph 77.9. Notice may be filed on-line at <https://oeaaa.faa.gov>.



Patricia L. Dressler, Environmental Protection Specialist
FAA/Bismarck Airports District Office
2301 University Drive, Building 23B
Bismarck, ND 58504



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



July 15, 2011

Ms. Shanna Braun
Environmental Planner
Kadmas, Lee & Jackson, Inc.
P.O. Box 9767
Fargo, ND 58106-9767



Re: Marathon Oil Company
Four Proposed Oil & Gas Wells on Two Well Pads
Fort Berthold Reservation, McKenzie County

Dear Ms. Braun:

This department has reviewed the information concerning the above-referenced project submitted under date of July 11, 2011, 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 or well pads 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.

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.

2. 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.

Environmental Health
Section Chief's Office
701.328.5150

Division of
Air Quality
701.328.5188

Division of
Municipal Facilities
701.328.5211

Division of
Waste Management
701.328.5166

Division of
Water Quality
701.328.5210

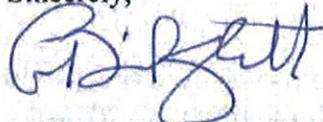
3. Oil and gas related construction activities located within tribal boundaries in North Dakota may be required to obtain a permit to discharge storm water runoff from the U.S. Environmental Protection Agency. Further information may be obtained from the U.S. EPA's website or by calling the U.S. EPA - 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.

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

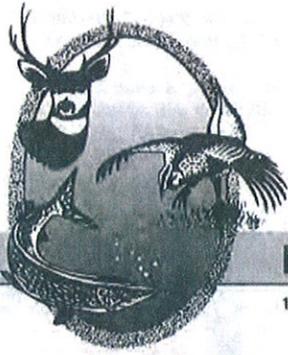
Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative 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

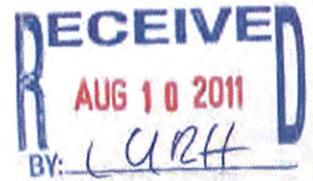
Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing 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.



"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



August 5, 2011

Shanna Braun
Environmental Planner
Kadmas, Lee & Jackson, Inc.
PO Box 9767
Fargo, ND 58106-9767

Dear Ms. Braun:

RE: TAT USA 14-22H & TAT USA 14-22TFH
TAT USA 12-23H & TAT USA 12-23TFH

Marathon Oil Company is proposing four oil and gas wells on two dual pads 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.

We also suggest that botanical surveys be completed during the appropriate season and aerial surveys be conducted for raptor nests before construction begins.

Sincerely,

Greg Link
Chief
Conservation & Communication Division

js



Jack Dalrymple, 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
www.parkrec.nd.gov

July 25, 2011

Ms. Shanna Braun
Kadrmas Lee & J
3203 32nd Ave. S Ste. 201
PO Box 9767
Fargo, ND 58106-9767



Re: Marathon Oil Company, Proposed Oil and Gas Wells on two Pads, Fort Berthold Reservation

Dear Ms. Braun,

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced proposal for the development of two dual well pads on the Fort Berthold Reservation, McKenzie County, ND.

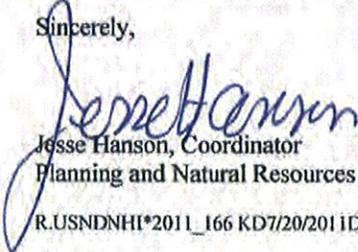
Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

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 Kathy Duttonhefner (701-328-5370 or kgduttonhefner@nd.gov) of our staff. Thank you for the opportunity to comment on this proposed project.

Sincerely,


Jesse Hanson, Coordinator
Planning and Natural Resources Division

R.USNDNHI*2011_166 KD7/20/2011DL8.11.2011

.....
Play in our backyard!



United States Department of the Interior

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



IN REPLY REFER TO:
DESCRM
MC-208

DEC 09 2010

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

Dear Mr. Crows Breast:

We have considered the potential effects on cultural resources of five proposed oil well pads and access roads in Dunn, McKenzie and Mountrail Counties, North Dakota. Approximately 57.3 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located that appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

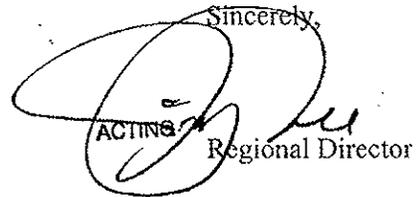
As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for these undertakings. Catalogued as **BIA Case Number AAO-1879/FB/11**, the proposed undertakings, locations, and project dimensions are described in the following reports:

Ó Donnchadha, Brian

- (2010a) Henry Charging USA 41-3H Well Pad and Access Road: A Class III Cultural Resource Inventory, Mountrail County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.
- (2010b) TAT USA 12-23H Well Pad and Access Road: A Class III Cultural Resource Inventory, McKenzie County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND
- (2010c) TAT USA 14-22H Well Pad and Access Road: A Class III Cultural Resource Inventory, McKenzie County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.
- (2010d) Aisenbrey 21-25H Well Pad and Access Road: A Class III Cultural Resource Inventory, Mountrail County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.
- (2010e) Johnson 44-32H Well Pad and Access Road: A Class III Cultural Resource Inventory, Mountrail County, North Dakota. KLJ Cultural Resources for Marathon Oil Company, Dickinson, ND.

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

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

Sincerely,

ACTING Regional Director

Enclosures

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



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>



August 15, 2011

Shanna Braun
Kadmas, Lee and Jackson
PO Box 9767
Fargo, ND 58106-9767

Dear Ms. Braun:

This is in response to your request for review of environmental impacts associated with the Marathon Oil Company, Four Proposed Oil and Gas Wells on Two Pads, Fort Berthold Reservation, McKenzie County, ND.

The proposed project has been reviewed by State Water Commission staff and the following comments are provided:

- The property is not located in an identified floodplain and it is believed the project will not affect an identified floodplain.
- It is the responsibility of the project sponsor to ensure that local, state and federal agencies are contacted for any required approvals, permits, and easements.
- All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.
- No sole-source aquifers have been designated in ND.

There are no other concerns associated with this project that affect State Water Commission or State Engineer regulatory responsibilities.

Thank you for the opportunity to provide review comments. If you have any questions, please call me at 328-4969.

Sincerely,


Larry Knudtson
Research Analyst

LJK:dp/1570

Appendix C

Well Pad Plats

WELL LOCATION PLAT

Marathon Oil Company
3172 Hwy 22 North, Dickinson, North Dakota 58601
TAT USA 12-23TFH

1520 feet from the north line and 450 feet from the east line (surface location)

Section 22, T. 151 N., R. 94 W., 5th P.M.

McKenzie County, North Dakota

660 feet from the north line and 2250 feet from the west line (bottom hole location)

Section 19, T. 151 N., R. 93 W., 5th P.M.

Mountrail County, North Dakota

Surface owner @ well site - T2195

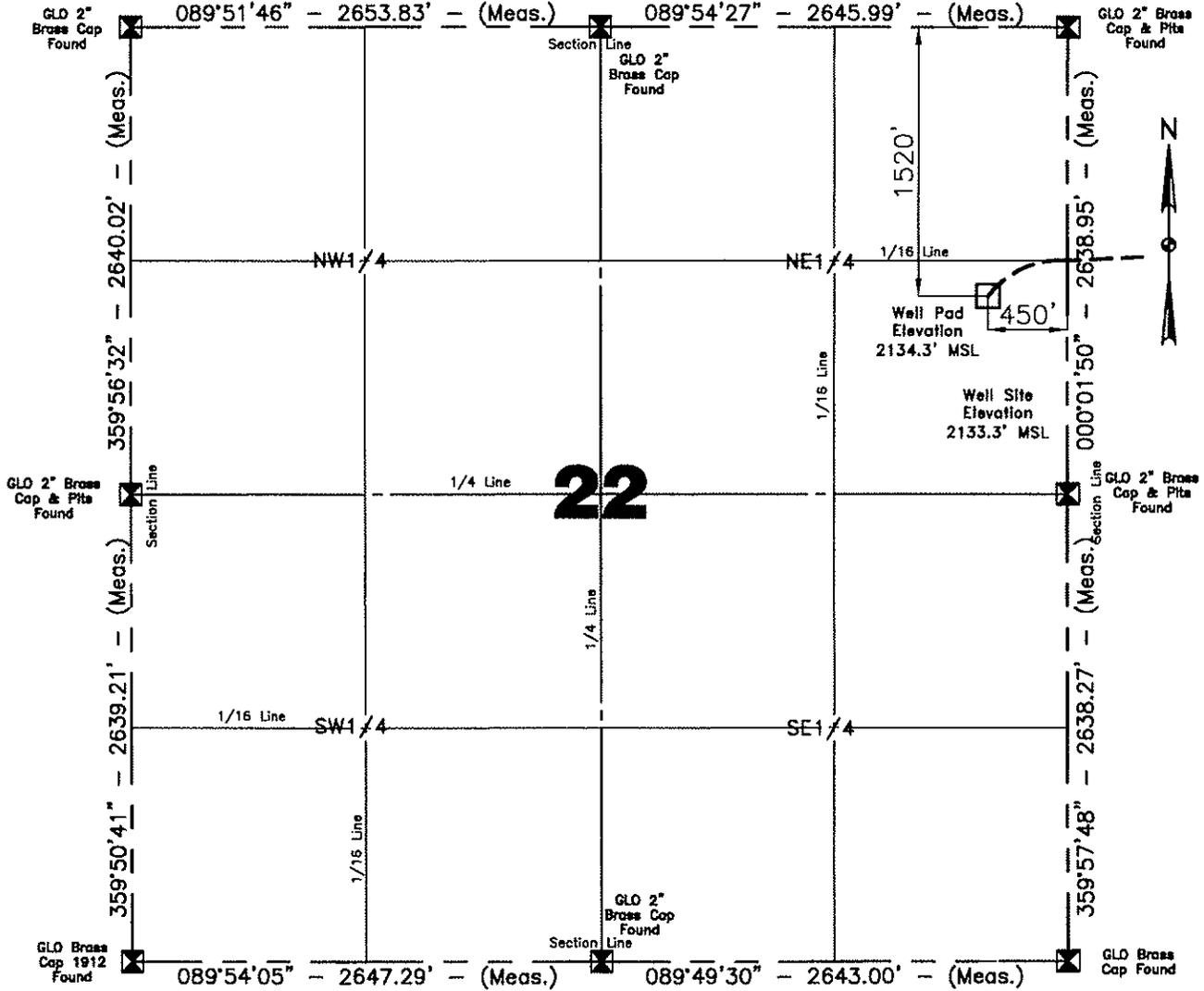
NAD 83 - Latitude 47°53'12.626" North; Longitude 102°41'15.109 West (surface location)

NAD 83 - Latitude 47°53'21.160" North; Longitude 102°38'00.470" West (bottom hole location)

NAD 27 - Latitude 47°53'12.569" North; Longitude 102°41'13.432" West (surface location)

NAD 27 - Latitude 47°53'27.670" North; Longitude 102°38'31.807" West (bottom hole location)

[Derived from OPUS Solution NAD-83(CORS96)]



Scale 1"=1000'

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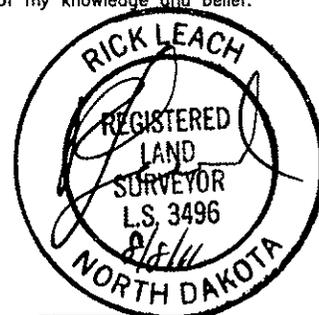
I, Rick Leach, Professional Land Surveyor, N.D. No. 3496, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief.

NOTE: All land corners are assumed unless otherwise noted. The well location shown hereon is not an as-built location.

Justin Semerad 10/19/2010
 Surveyed By Date Revised: 8/8/2011

Vertical Control Datum Used
 Sea-Level Datum of NAVD 88
 Based on elevation derived from OPUS Solution on
 GPS*EQCOR-28-151-94 (GLO Brass Cap) on the
 east quarter corner of Section 28, T.151N., R.94W.,
 5th P.M. being at 2323.23' Elevation MSL.

Professional Consulting Engineers
 and Surveyors
 Registered in
 North Dakota, South Dakota
 Montana, Wyoming & Minnesota
 Tele-Fax No. 701-483-2795
 Bus. Phone No. 701-483-1284
 P.O. Box 290
 677 27th Ave. E.
 Dickinson, North Dakota 58602
 Certificate of Authorization #C-061



Kadmas
Lee &
Jackson
 Registered Surveyors
 Planners

Project No. 3711466
 Book 2W-244 & 2W-216 Pg. 34-36, 38-39 Staking

DATE

HORIZONTAL SECTION PLAT

Marathon Oil Company
 3172 Hwy 22 North, Dickinson, North Dakota 58601
 TAT USA 12-23TFH

1520 feet from the north line and 450 feet from the east line (surface location)

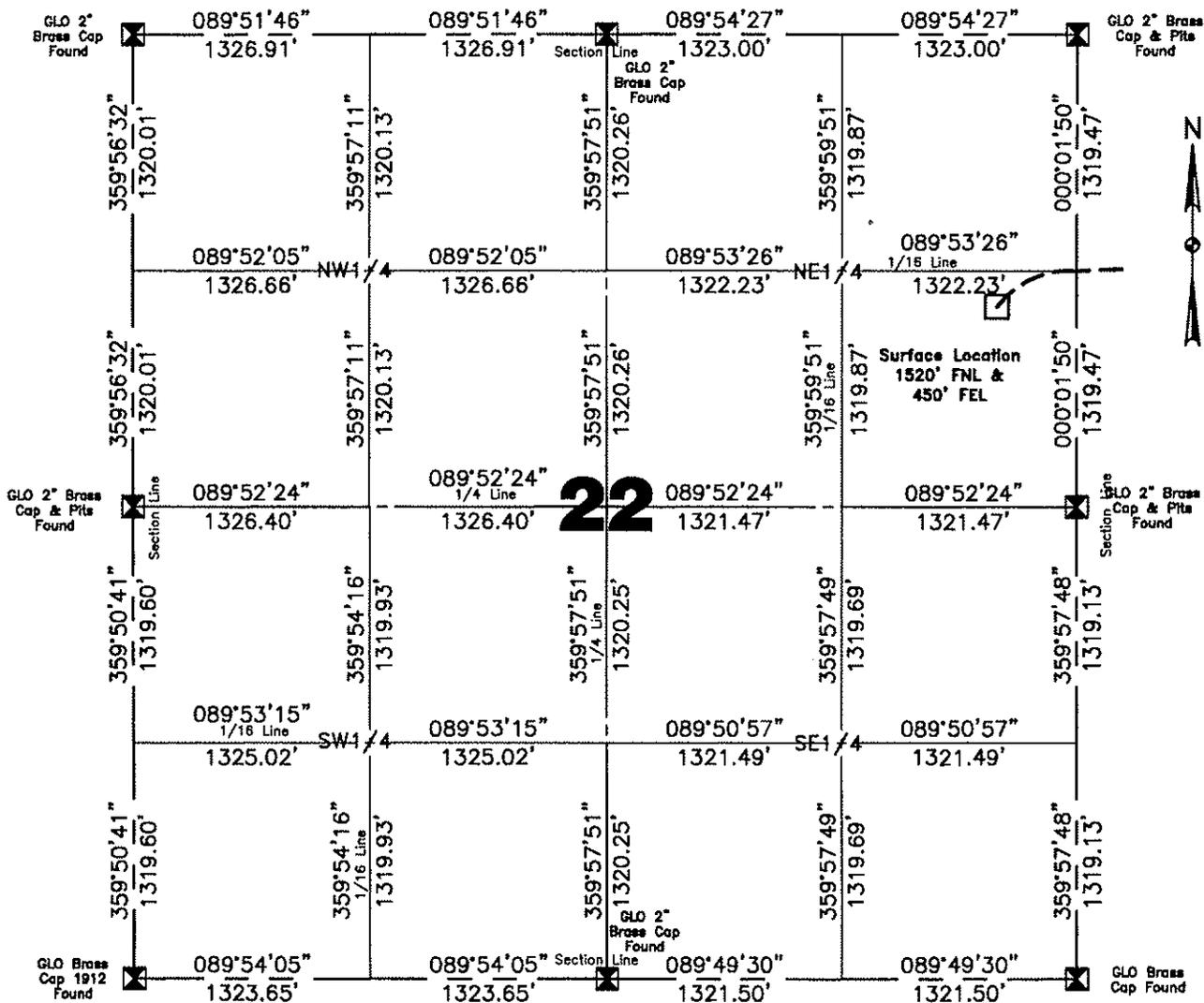
Section 22, T. 151 N., R. 94 W., 5th P.M.
 McKenzie County, North Dakota

660 feet from the north line and 2250 feet from the west line (bottom hole location)
 Section 19, T. 151 N., R. 93 W., 5th P.M.
 Mountrail County, North Dakota

Surface owner @ well site - T2195

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[Derived from OPUS Solution NAD-83(CORS96)]



Scale 1"=1000'

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 Lee &
 Jackson
 Engineers Surveyors
 Planners

Surveyed By J. Semerad	Field Book OW-244 & OW-216
Computed & Drawn By Roxy Crist	Project No. 3711466

Revised: 8/8/2011

DATE

HORIZONTAL SECTION PLAT

Marathon Oil Company
 3172 Hwy 22 North, Dickinson, North Dakota 58601
TAT USA 12-23TFH

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Section 22, T. 151 N., R. 94 W., 5th P.M.

McKenzie County, North Dakota

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Section 19, T. 151 N., R. 93 W., 5th P.M.

Mountrail County, North Dakota

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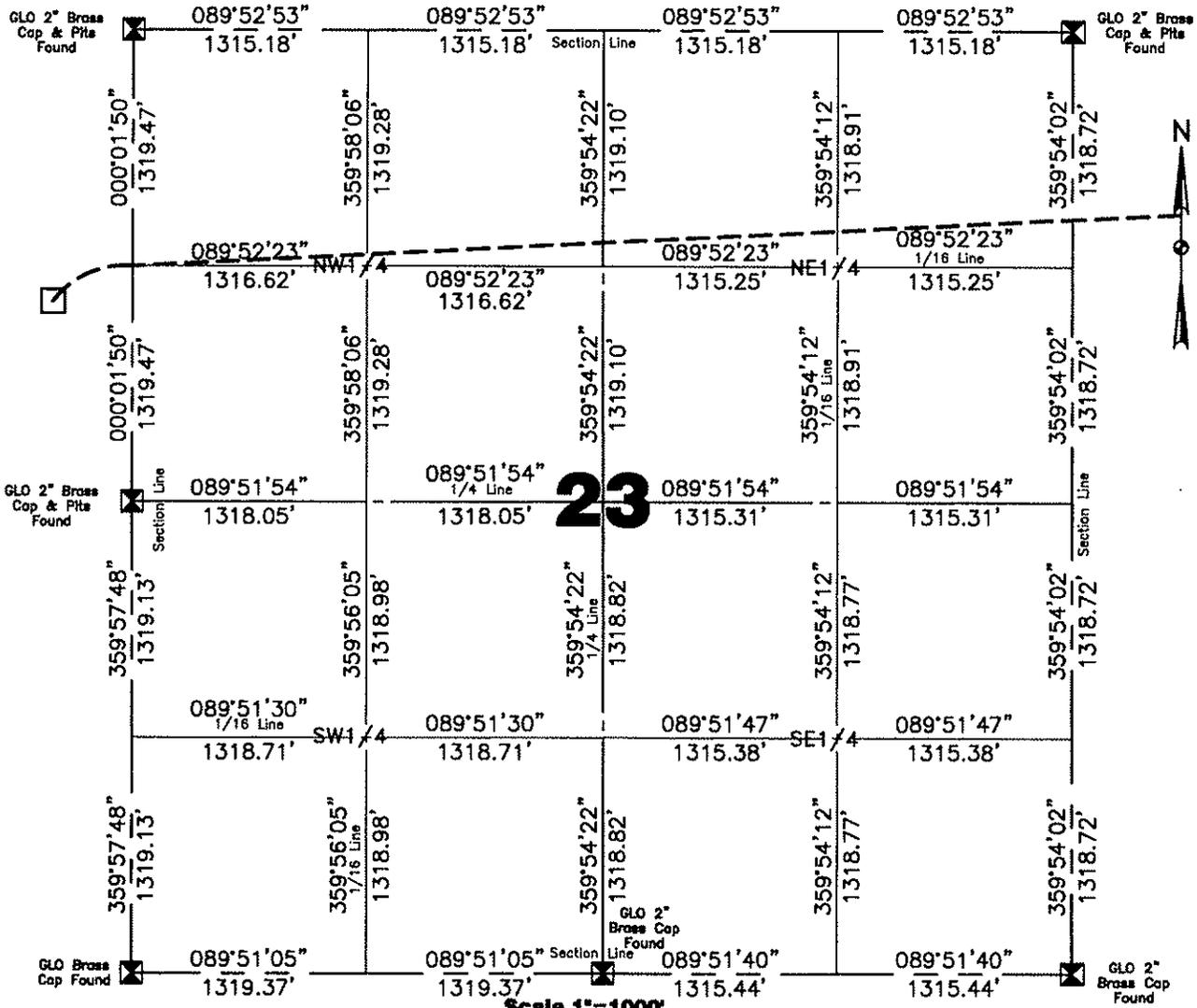
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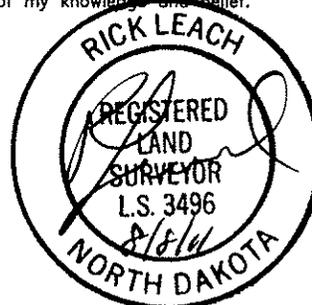
[Derived from OPUS Solution NAD-83(CORS96)]



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Surveyed By J. Semerad	Field Book OW-244 & OW-216
Computed & Drawn By Roxy Crist	Project No. 3711466

Revised: 8/8/2011

DATE

HORIZONTAL SECTION PLAT

Marathon Oil Company
3172 Hwy 22 North, Dickinson, North Dakota 58601
TAT USA 12-23TFH

1520 feet from the north line and 450 feet from the east line (surface location)

Section 22, T. 151 N., R. 94 W., 5th P.M.
McKenzie County, North Dakota

660 feet from the north line and 2250 feet from the west line (bottom hole location)

Section 19, T. 151 N., R. 93 W., 5th P.M.
Mountrail County, North Dakota

Surface owner @ well site - T2195

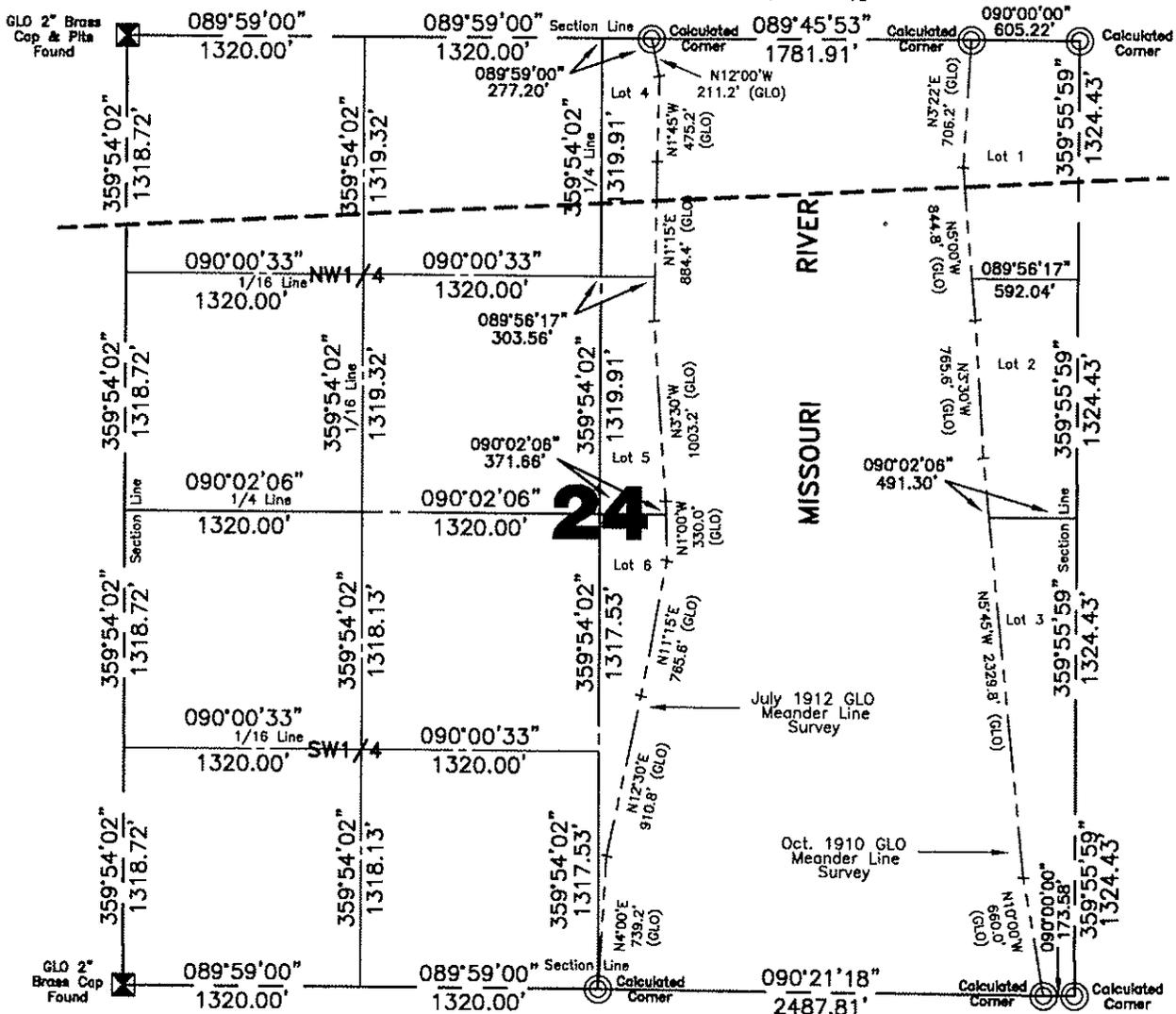
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[Derived from OPUS Solution NAD-83(CORS96)]

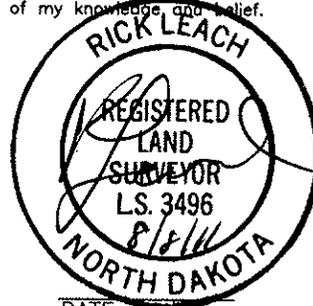


Scale 1"=1000'

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Surveyed By J. Semerad	Field Book OW-244 & OW-216
Computed & Drawn By Roxy Crist	Project No. 3711466

Revised: 8/8/2011

DATE

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HORIZONTAL SECTION PLAT

Marathon Oil Company
3172 Hwy 22 North, Dickinson, North Dakota 58601
TAT USA 12-23TFH

1520 feet from the north line and 450 feet from the east line (surface location)

Section 22, T. 151 N., R. 94 W., 5th P.M.

McKenzie County, North Dakota

660 feet from the north line and 2250 feet from the west line (bottom hole location)

Section 19, T. 151 N., R. 93 W., 5th P.M.

Mountrail County, North Dakota

Surface owner © well site - T2195

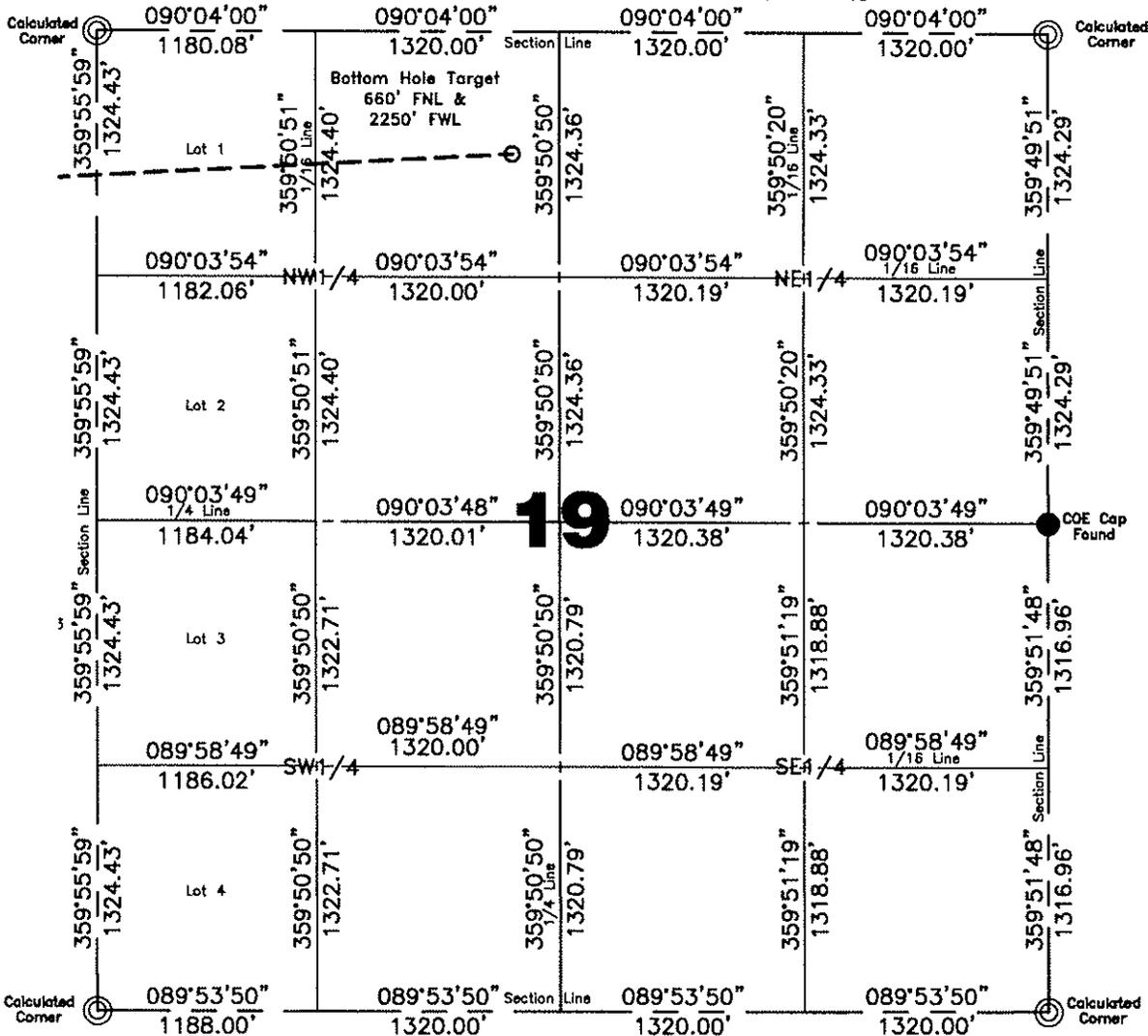
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[Derived from OPUS Solution NAD-83(CORS96)]

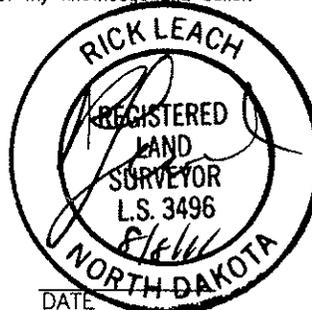


Scale 1"=1000'

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Surveyed By J. Semerad	Field Book OW-244 & OW-216
Computed & Drawn By Roxy Crist	Project No. 3711466

Revised: 8/8/2011

DATE

BOTTOM HOLE LOCATION PLAT

Marathon Oil Company
 3172 Hwy 22 North, Dickinson, North Dakota 58601

TAT USA 12-23TFH

1520 feet from the north line and 450 feet from the east line (surface location)

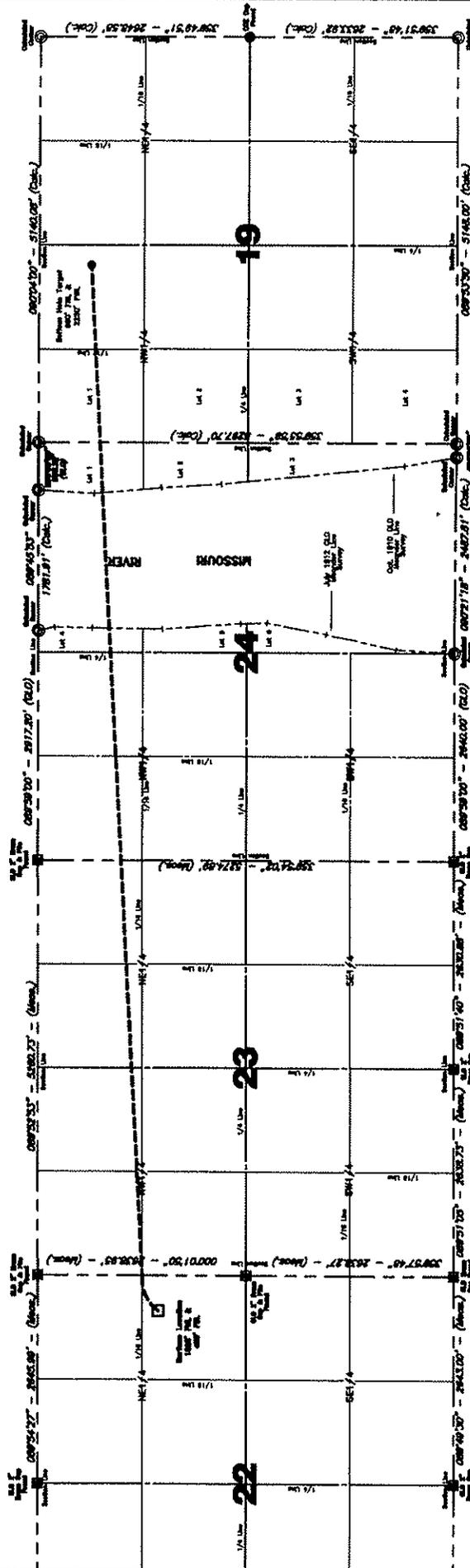
Section 22, T. 151 N., R. 94 W., 5th P.M.
 McKenzie County, North Dakota

660 feet from the north line and 2250 feet from the west line (bottom hole location)

Section 19, T. 151 N., R. 93 W., 5th P.M.
 Mountrail County, North Dakota

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 [Derived from OPUS Solution NAD-83(CORS96)]



Scale 1"=2000'

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Computed & Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale 1"=2000'	Date 8/5/2011
Field Book 0W-244 & 0W-216	Material B.H. Layout	Revised 8/8/2011	Project No. 3711466	Drawing No. 6

**Marathon Oil Company
TAT USA 12-23TFH
Section 22, T 151 N, R 94 W, 5th P.M.
McKenzie County, North Dakota**

Well Site Elevation	2133.3' MSL
Well Pad Elevation	2134.3' MSL
Excavation	27,475 C.Y.
Plus Pit	2,910 C.Y.
	<hr/>
	30,385 C.Y.
Embankment	17,260 C.Y.
Plus Shrinkage (+30%)	5,180 C.Y.
	<hr/>
	22,440 C.Y.
Stockpile Pit	2,910 C.Y.
Stockpile Top Soil (6")	4,315 C.Y.
Road Embankment & Stockpile from Pad	720 C.Y.
Disturbed Area From Pad	5.35 Acres
Area Inside Barbed Wire Fence	6.16 Acres

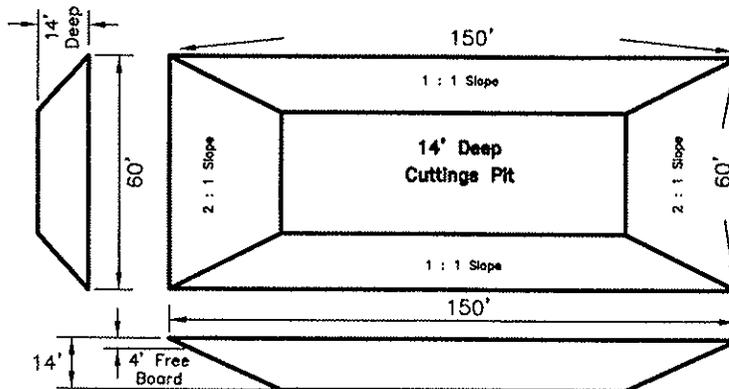
- NOTE:** – All Fill End Slopes Are Designed With 3:1 Slopes To Be Seeded With S31 Erosion Control Blanket Installed.
 – All Cut End Slopes Less Than 8' Are Designed With 2:1 Slopes & Greater Than 8' Are Designed With 3:1 Slopes.
 – Build Water Diversion Trench With Berm Along Cut Slopes.
 – All Stockpiles Are To Be Built At 3:1 Slopes.

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Well Site Location

1520' FNL
450' FEL

Marathon H&P Flex Rig Pit



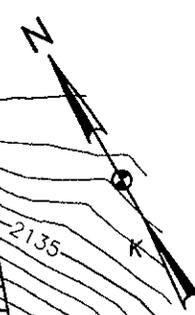
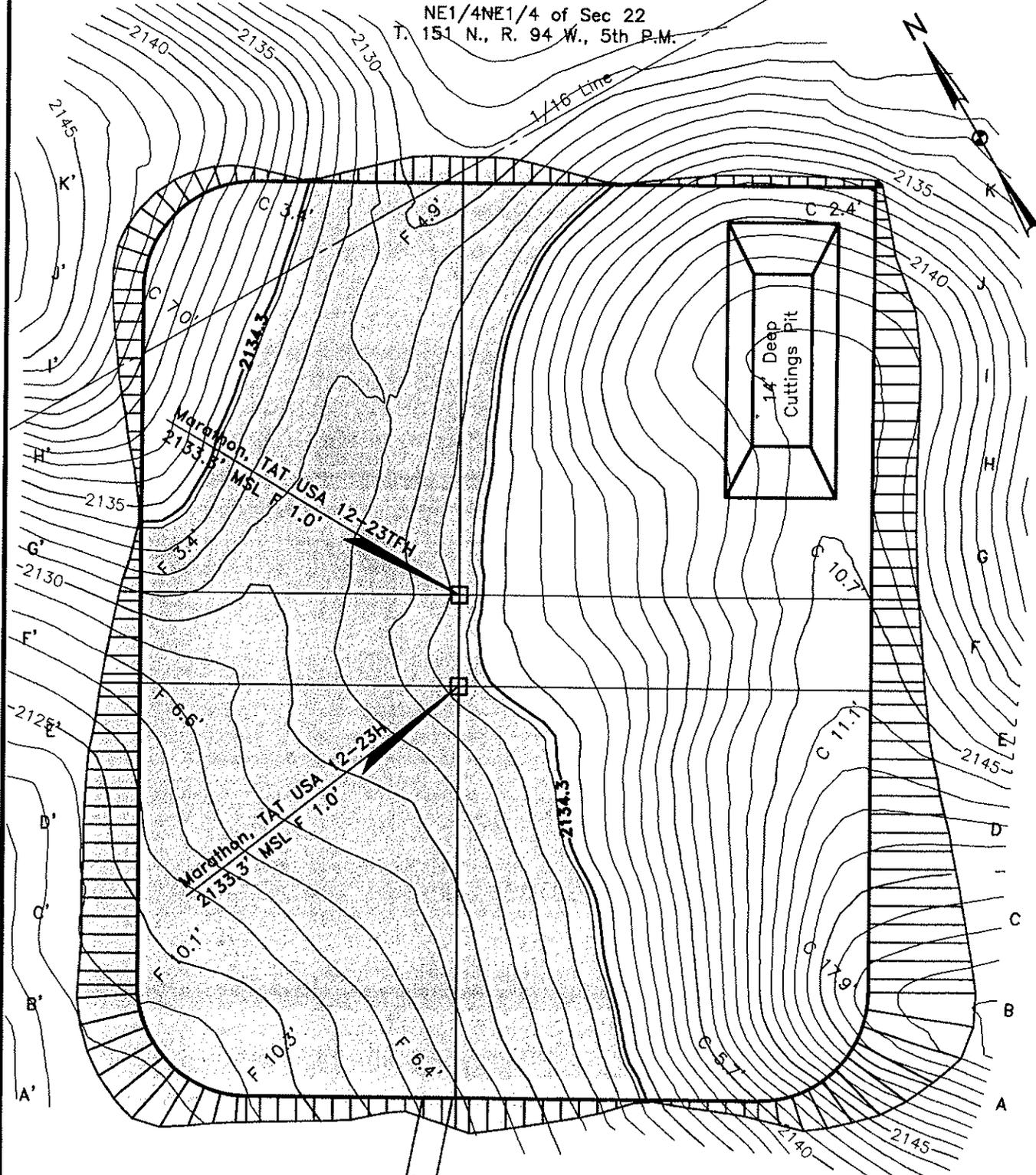
Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale None	Date 8/4/2011
Field Book OW-244 & OW-216	Material Quantities	Revised 8/8/2011	Project No. 3711466	Drawing No. 7

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Jackson**
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TAT USA 12-23TFH

Original Ground

NE1/4NE1/4 of Sec 22
T. 151 N., R. 94 W., 5th P.M.



SE1/4NE1/4 of Sec 22
T. 151 N., R. 94 W., 5th P.M.

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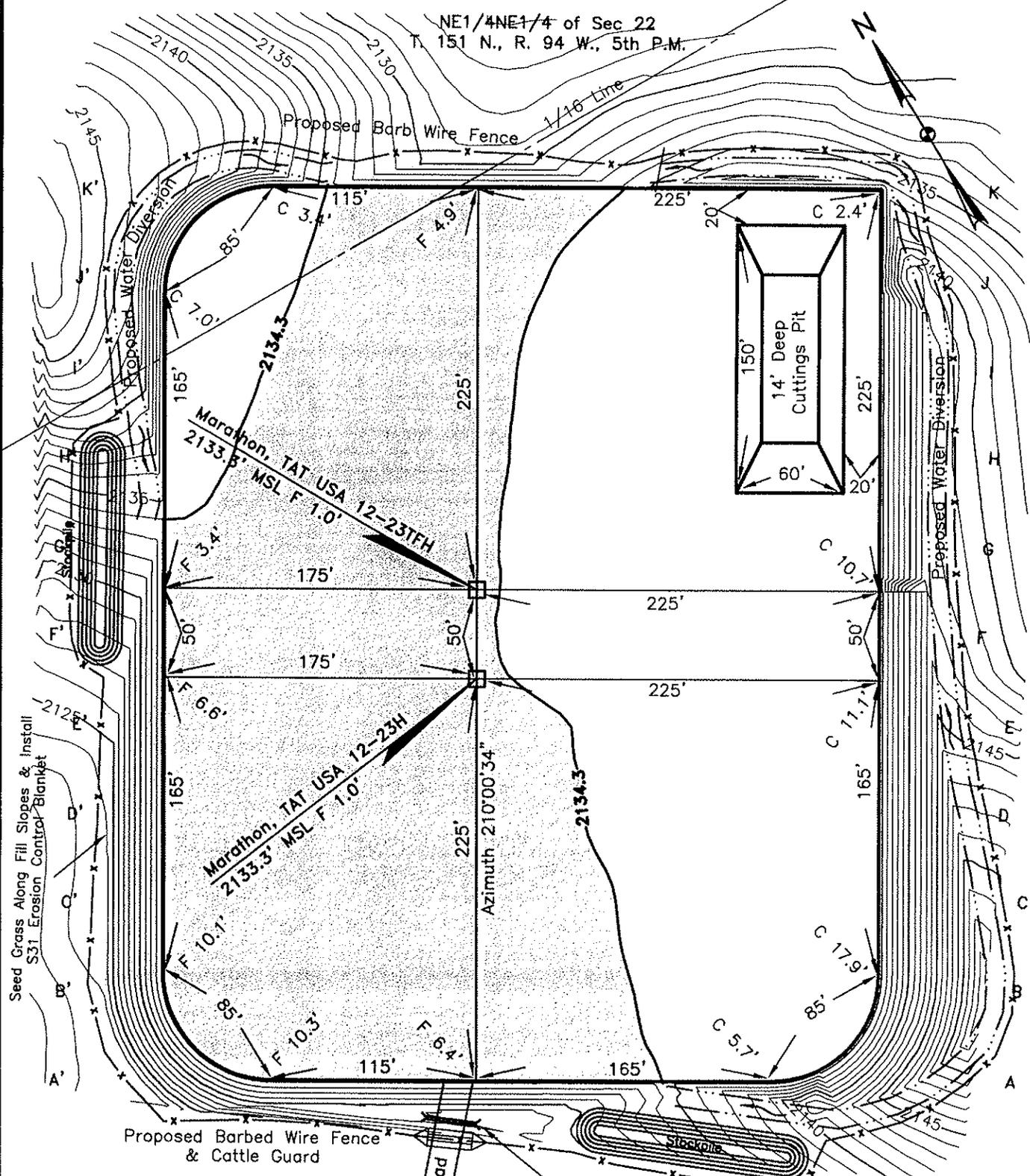
Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale 1" = 80'	Date 8/4/2011
Field Book OW-244 & OW-216	Material Original Ground	Revised 8/8/2011	Project No. 3711466	Drawing No. 8

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TAT USA 12-23TFH

Pad Layout

NE1/4NE1/4 of Sec 22
T. 151 N., R. 94 W., 5th P.M.



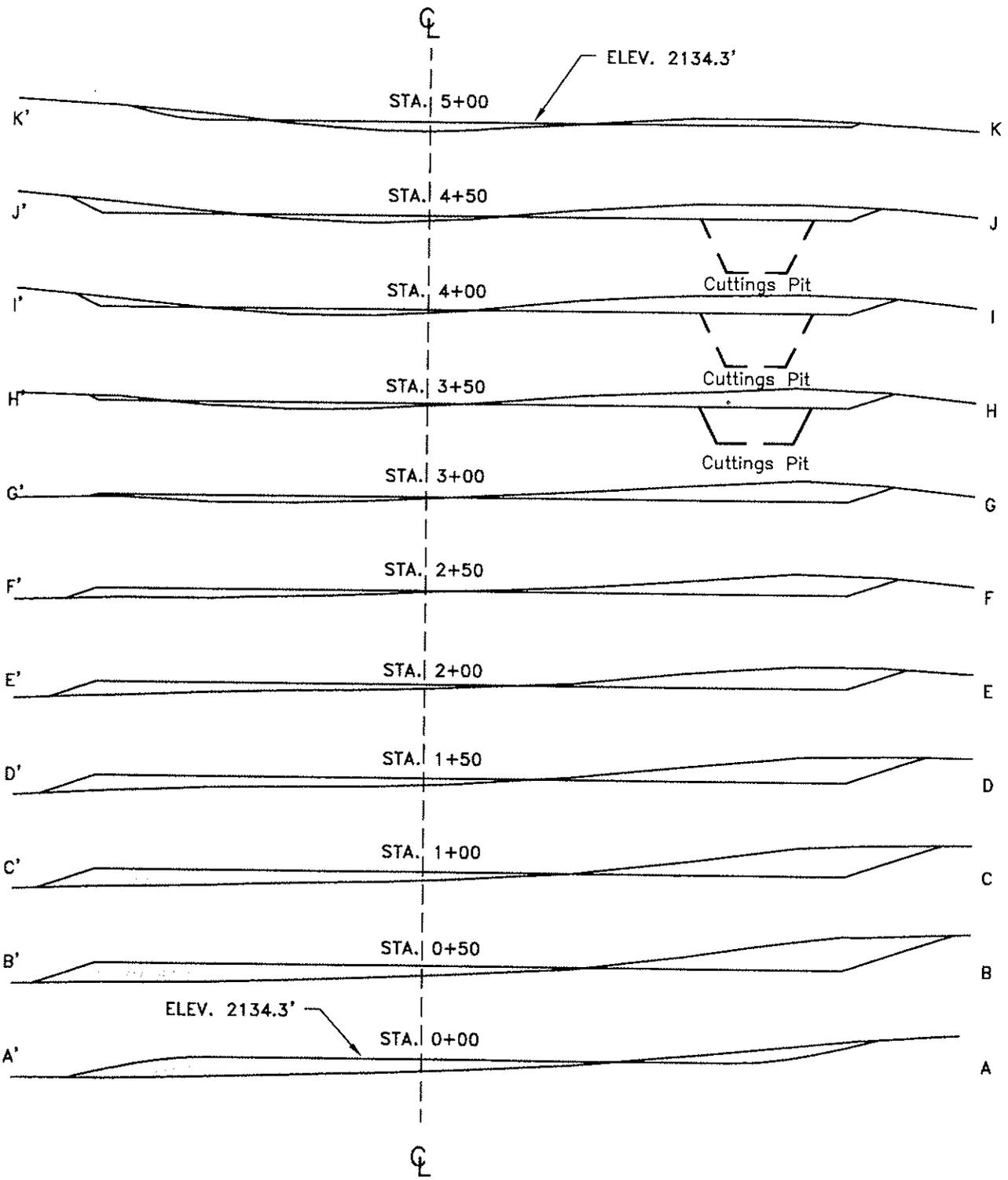
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Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale 1" = 80'	Date 8/4/2011
Field Book OW-244 & OW-216	Material Pad Layout	Revised 8/8/2011	Project No. 3711466	Drawing No. 9

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TAT USA 12-23TFH

Cross Sections



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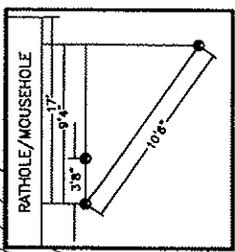
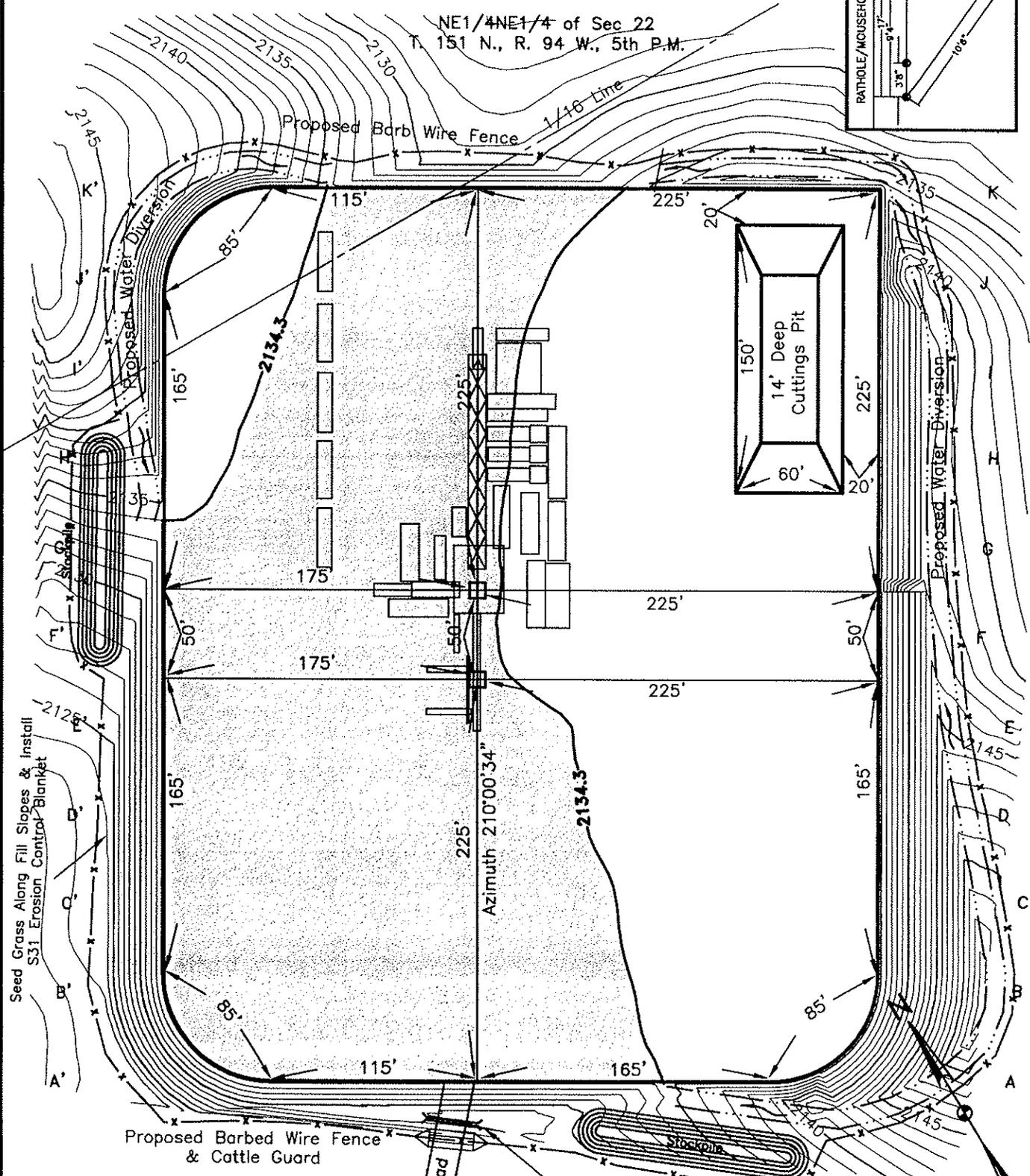
Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale 1" = 80'	Date 8/4/2011
Field Book OW-244 & OW-216	Material Cross Sections	Revised 8/8/2011	Project No. 3711466	Drawing No. 10

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TAT USA 12-23TFH

Rig Layout

NE1/4NE1/4 of Sec 22
T. 151 N., R. 94 W., 5th P.M.



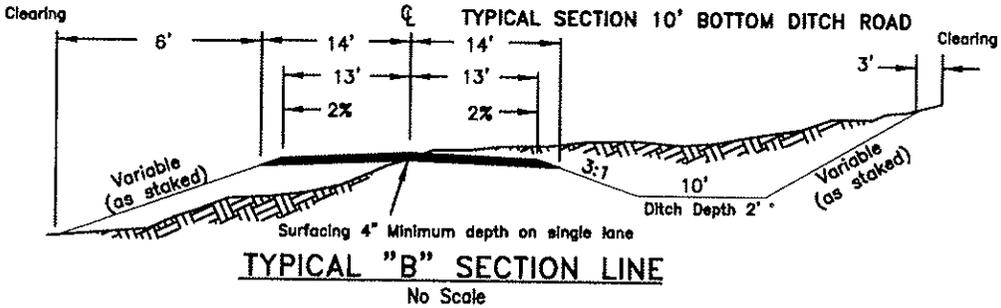
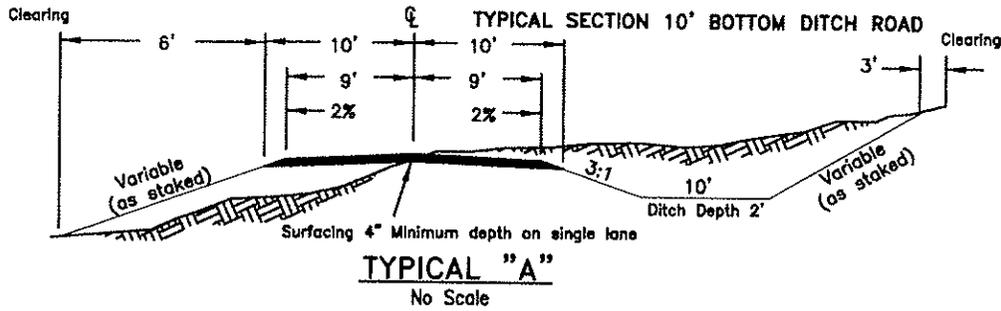
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Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale 1" = 80'	Date 8/4/2011
Field Book OW-244 & OW-216	Material Rig Layout	Revised 8/8/2011	Project No. 3711466	Drawing No. 11

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TAT USA 12-23TFH

Roadway Typical Sections

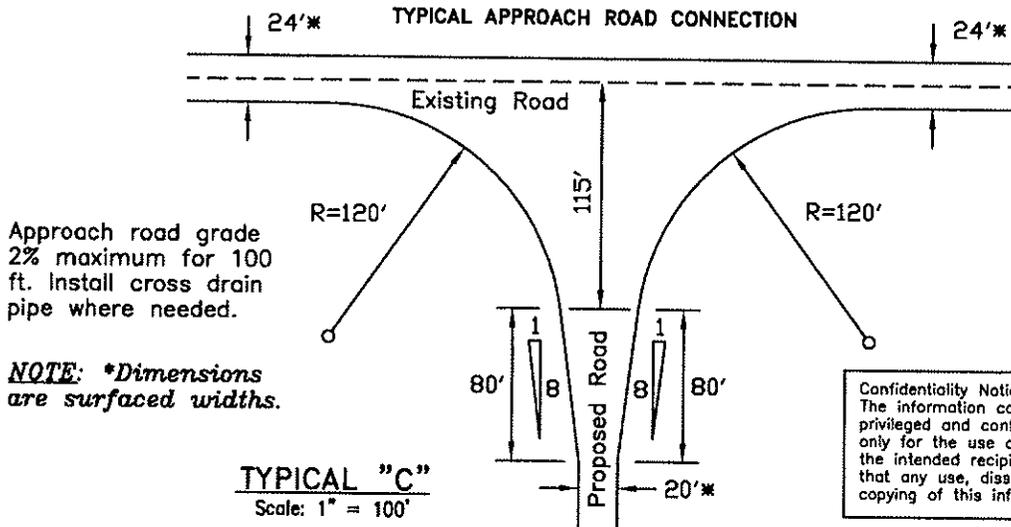


FILL SLOPES
 3:1 Under 4' Height
 2:1 Over 4' Height
 (-) Slopes steeper than 2:1 will be subject to FS approval

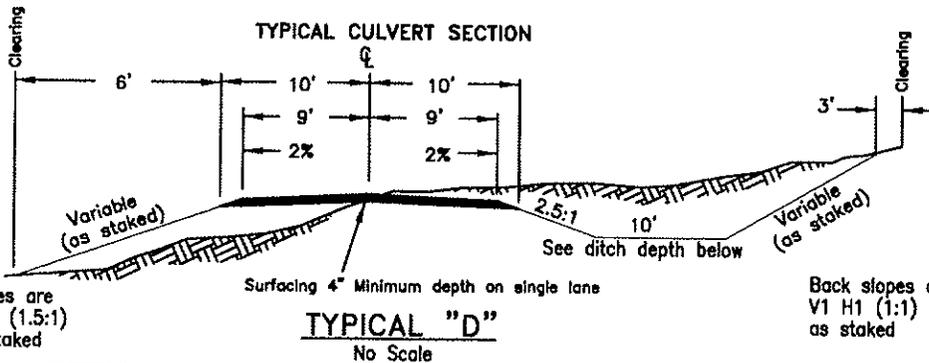
FILL WIDENING
 2' to 5' high/add 1'
 Over 5' high/add 2'

CURVE WIDENING
 130 / R

CUT SLOPES
 3:1 Under 10' height
 2:1 10' to 20' height
 (-) Variable over 20' height W/FS approval



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Fill slopes are V1 H1.5 (1.5:1) or as staked

Back slopes are V1 H1 (1:1) or as staked

Ditch width shall be the larger of the following:
 A. Standard ditch width
 B. 2 times the pipe diameter
 C. 4.25'

Ditch depth shall be:

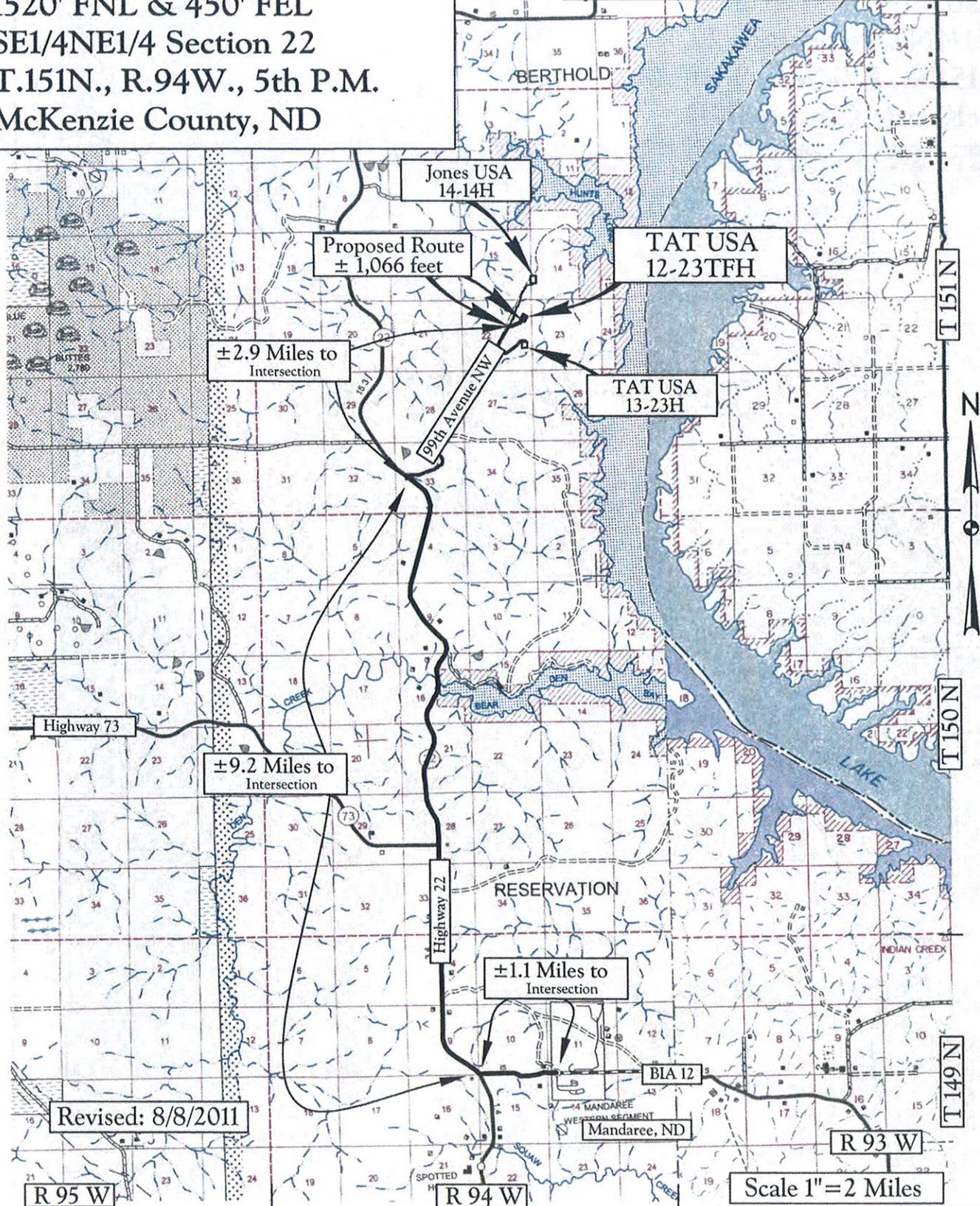
CMP diameter	Ditch depth
18"	2.5'
24"	3.0'
36"	4.0'
48"	5.0'

Drawn By Roxy Crist	Surveyed By J. Semerad	Approved By Rick Leach	Scale None	Date 8/4/2011
Field Book OW-244 & OW-216	Material Road Typical	Revised 8/8/2011	Project No. 3711466	Drawing No. 12

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Lee &
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 Engineers Surveyors
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Marathon Oil Company
 TAT USA 12-23TFH
 1520' FNL & 450' FEL
 SE1/4NE1/4 Section 22
 T.151N., R.94W., 5th P.M.
 McKenzie County, ND

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Revised: 8/8/2011

Scale 1" = 2 Miles

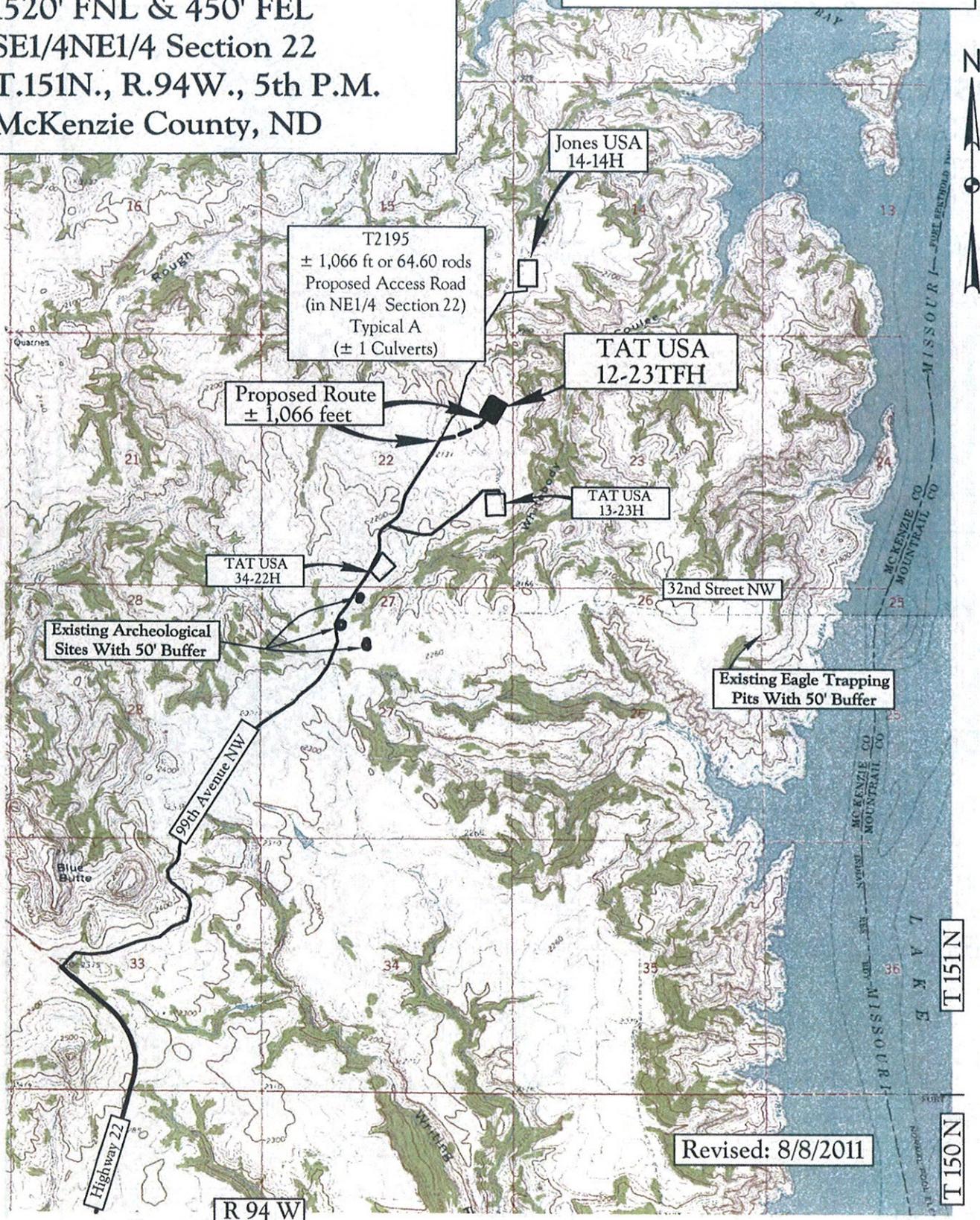
Map "A"
 County Access Route

Legend	
Existing Roads	
Proposed Roads	

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 Planners

Marathon Oil Company
TAT USA 12-23TFH
1520' FNL & 450' FEL
SE1/4NE1/4 Section 22
T.151N., R.94W., 5th P.M.
McKenzie County, ND

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T2195
 ± 1,066 ft or 64.60 rods
 Proposed Access Road
 (in NE1/4 Section 22)
 Typical A
 (± 1 Culverts)

Proposed Route
 ± 1,066 feet

Jones USA
 14-14H

TAT USA
 12-23TFH

TAT USA
 13-23H

TAT USA
 34-22H

32nd Street NW

Existing Archeological
 Sites With 50' Buffer

Existing Eagle Trapping
 Pits With 50' Buffer

99th Avenue NW

Highway 22

R 94 W

Revised: 8/8/2011

T 151 N

T 150 N

Map "B"
Quad Access Route

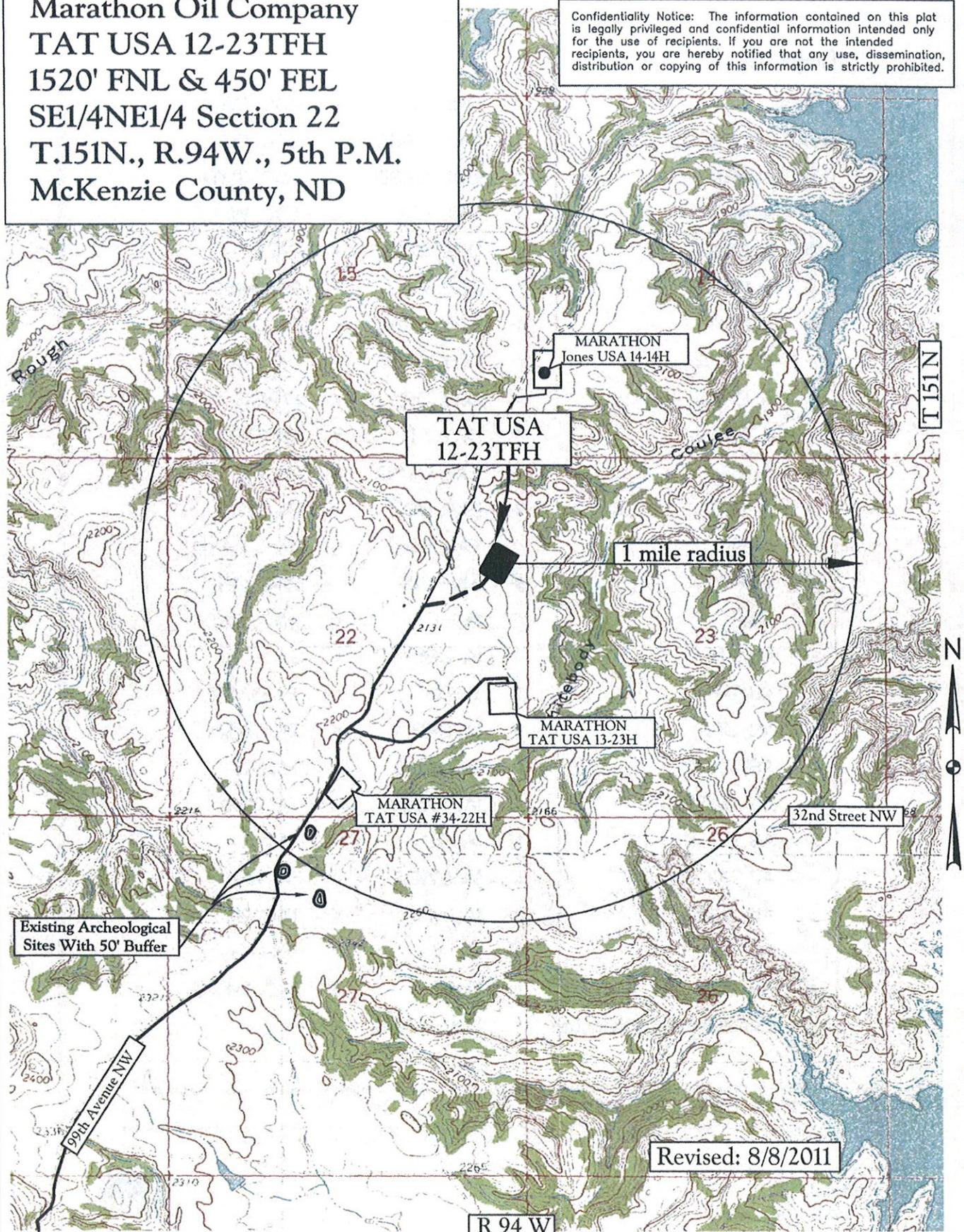
Legend
 Existing Roads —————
 Proposed Roads - - - - -

Scale 1" = 3000'

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Marathon Oil Company
 TAT USA 12-23TFH
 1520' FNL & 450' FEL
 SE1/4NE1/4 Section 22
 T.151N., R.94W., 5th P.M.
 McKenzie County, ND

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Existing Archeological Sites With 50' Buffer

Revised: 8/8/2011

R 94 W

Map "C"
 One Mile Radius Map

Legend
 Existing Roads —————
 Proposed Roads - - - - -

Scale 1" = 2000'

**Kadmas
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 Jackson**
 Engineers Surveyors
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Legend

wells

STATUS, WELL_TYPE

* A, AGD	○ DRL, AI	○ LOC, GASD
⊗ A, AI	○ DRL, GASC	○ LOC, OG
⊗ A, CBM	○ DRL, GASD	○ LOC, SWD
⊗ A, DF	○ DRL, OG	○ LOC, WI
⊗ A, DFP	○ DRL, SWD	◆ PA, DF
⊗ A, GASC	○ DRL, WI	◆ PA, GASC
⊗ A, GASD	⊕ DRY, GASC	◆ PA, GASD
⊗ A, GASN	⊕ DRY, GASD	◆ PA, GS
● A, OG	⊕ DRY, OG	◆ PA, OG
△ A, SWD	⊕ DRY, ST	◆ PA, SWD
⊗ A, WI	⊗ EXP, GASD	◆ PA, WI
⊗ A, WS	● EXP, OG	◆ PA, WS
⊗ A, AI	△ EXP, SWD	⊖ PNC, GASD
⊗ AB, AI	⊗ EXP, WS	⊖ PNC, OG
⊗ AB, DF	⊗ IA, AI	⊖ PNC, SWD
⊗ AB, DFP	⊗ IA, CBM	⊗ TA, AI
⊗ AB, GASC	⊗ IA, DF	⊗ TA, GASC
⊗ AB, GASD	⊗ IA, DFP	⊗ TA, GASD
⊗ AB, GI	⊗ IA, GASC	⊗ TA, OG
● AB, OG	⊗ IA, GASD	⊗ TA, SWD
△ AB, SWD	● IA, OG	⊗ TA, WI
⊗ AB, WI	△ IA, SWD	⊗ TA, WS
⊗ AB, WS	⊗ IA, WI	⊗ TAO, GI
● Confidential, Confidential	⊗ IA, WS	⊗ TAO, OG
	⊗ IA, AI	⊗ TAO, WI
	○ LOC, GASD	

A = Active, AB = Abandoned, DRL = Drilling, Dry = Dry, EXP = Expired, IA = Inactive, LOC = Location, PA = Producer Abandoned, PNC = Permit Now Cancelled
TA = Temporarily Abandoned, TAO = Temporarily Abandoned Observation

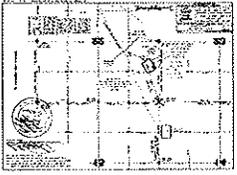
AGD = Acid Gas Disposal, AI = Air Injection, DF = Dump Flood, DFP = Dump Flood Producing, GASN = Nitrogen Gas Well, GASC = Gas Condensate, GASD = Gas Dry,
GI = Gas Injection, GS = Gas Storage, OG = Oil or Gas Well, SWD = Salt Water Disposal, WI = Water Injection, WS = Water Supply, ST = Strat Test

Exhibit "D"
GIS Well Symbols

Kadmas
Lee &
Jackson
Engineers Surveyors
Planners



Prepared by N.D.I.C. Oil and Gas Division





Notice of Availability and Appeal Rights

Marathon Oil Company: TAT USA 11-23TFH/TAT USA 12-23H/TAT USA 12-23TFH Oil & Gas Wells

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to Three Bakken Oil and Gas Wells atop one well pad on the Berthold Reservation as shown on the attached map. Construction by Marathon Oil 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 701-627-6570 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 November 21, 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 701-627-6570.

Project locations.

