

STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION

Whiting Oil and Gas Corporation  
8-inch Oil Line/Mountrail County  
Siting Application

Case No. PU-08-844

**AFFIDAVIT OF SERVICE BY CERTIFIED MAIL**

STATE OF NORTH DAKOTA  
COUNTY OF BURLEIGH

**Janet Marquart** deposes and says that:

she is over the age of 18 years and not a party to this action and, on the 27<sup>th</sup> day of **February, 2009**, she deposited in the United States Mail, at Bismarck, North Dakota, **one** envelope with certified postage, return receipt requested, fully prepaid, securely sealed and containing an original of:

**Certificate of Corridor Compatibility Number 109  
Route Permit Number 119**

and a photocopy of:

**Order Granting Corridor Certificate and Route Permit**

The envelope was addressed as follows:

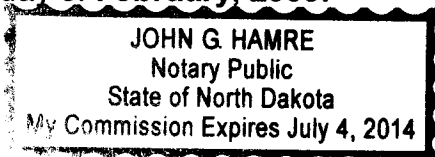
John W Morrison  
Attorney for Whiting Oil and Gas  
Crowley Fleck PLLP  
400 E Broadway, Ste 600  
Bismarck ND 58502-2798

**Cert. No. 7008 2810 0000 4606 6613**

Each address shown is the respective addressee's last reasonably ascertainable post office address.

Subscribed and sworn to before me  
this 27<sup>th</sup> day of **February, 2009**.

SEAL



*Janet Marquart*  
\_\_\_\_\_  
*John D. Hamre*  
\_\_\_\_\_  
Notary Public

34 PU-08-844 Filed: 2/27/2009 Pages: 15  
Affidavit Cert. – Order Granting Corridor Cert. &  
Route Permit

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Whiting Oil and Gas Corporation  
8-inch Oil Line/Mountrail County  
Siting Application**

**Case No. PU-08-844**

**ORDER GRANTING CORRIDOR CERTIFICATE AND ROUTE PERMIT**

**February 25, 2009**

**Appearances**

Commissioners: Kevin Cramer, Tony Clark, and Brian P. Kalk.

John W. Morrison, Attorney-at-Law, Crowley Fleck PLLP, 400 East Broadway, Suite 600, Bismarck, North Dakota 58502, on behalf of Whiting Oil and Gas Corporation.

Annette Bendish, Legal Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Patrick Fahn, Director - Compliance and Competitive Markets Division, Public Service Commission, 600 East Boulevard, Bismarck, North Dakota 58505 on behalf of the Public Service Commission.

Allen C. Hoberg, Office of Administrative Hearings, 1707 North Ninth Street, Bismarck, North Dakota 58501-1882, as Administrative Law Judge.

**Preliminary Statement**

On November 17, 2008, Whiting Oil and Gas Corporation (Whiting) filed an application to site a 17-mile, eight-inch crude oil pipeline (Pipeline) from a storage site near its Robinson Lake Gas Processing Plant to an existing Enbridge Pipelines (North Dakota) LLC (Enbridge) facility southeast of the town of Stanley, all in Mountrail County, North Dakota.

Whiting requests that the Commission (1) waive the requirement of separate filing applications for a corridor certificate and a route permit and (2) reduce the minimum width of the corridor to 1 mile under North Dakota Administrative Code Section 69-06-04-02; and (3) designate the corridor and route as requested.

On November 26, 2008, the Commission deemed the application of Whiting complete and issued a Notice of Filing and Notice of Hearing scheduling a hearing for

January 13, 2009, at 12:00 noon in the Mountrail County Courthouse, Community Room, 101 North Main Street, Stanley, North Dakota. Due to inclement weather, the hearing was rescheduled for February 3, 2009 at 12:00 noon at the same location.

The Notice of Hearing identified the following issues to be considered:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?
4. Is it appropriate for the Commission to waive procedures and time schedules as requested, including the requests for single consolidated applications for corridor certificates and route permits?

Having allowed all interested persons an opportunity to be heard and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

### **Findings of Fact**

1. Whiting is a Delaware corporation based in Denver, Colorado. Whiting owns and operates oil and gas properties in the Permian Basin, Rocky Mountain, Mid-Continent, Gulf Coast and Michigan regions of the United States and is currently developing new oil and gas production fields in North Dakota, including Mountrail County, North Dakota.
3. Whiting is coordinating construction with Nexen Inc., a crude oil marketing firm, that is expected to construct a facility at the Robinson Lake Gas Processing Plant to prepare the crude oil for transportation in the Pipeline and a separate facility at Enbridge's Stanley Station which will receive the oil from the Pipeline for further transportation in Enbridge's system.
4. Whiting has recently constructed a natural gas pipeline from the Robinson Lake Gas Processing Plant (Plant) to a point of interconnection with the Williston Basin Interstate Pipeline Company (WBI) system approximately 16 miles north of the Plant. Whiting proposes to install the oil pipeline adjacent to the natural gas pipeline for the first 16.4 miles of the oil pipeline's route, specifically approximately 15 feet east of the

natural gas pipeline. The last 1.4 miles of the oil pipeline would proceed north for approximately 1/3 mile and then west and southwest into Enbridge's Stanley Station.

4. The oil and gas development occurring in the Mountrail County area is primarily horizontal development of the Bakken formation. At the present time the primary transportation route for oil produced from the Bakken formation in Mountrail County is on Enbridge's pipeline system which transports oil to Clearbrook, Minnesota. The pipeline which is the subject of this hearing will provide a means to transport approximately 60,000 barrels per day of this oil from the collection point at the Plant to the Stanley Station. In the absence of the pipeline, the only practical means to transport the oil is by truck. While some oil in North Dakota is being transported by rail car, there is no rail infrastructure between the collection point and either a refining facility or a pipeline, so rail shipment is not a viable alternative. Truck transportation of the 60,000 barrels per day would require approximately 273 truck runs per day. The pipeline is needed to provide for efficient transportation of crude oil from the collection point to the receiving station and minimize the cost and adverse impact of excessive truck traffic.

### **Pipeline Integrity**

4. The pipeline will be an eight-inch, nominal size diameter with a minimum 0.250 inch wall thickness and a grade of X-52/X42. The maximum operating pressure will be at 1000 pounds per square inch. The maximum design flow rate is 60,000 barrels per day.

5. Whiting affirms that the design, construction and operation of the pipeline will be in accordance with the United States Department of Transportation regulations governing the transportation of hazardous liquids as prescribed under 49 CFR Part 195-Transportation of Hazardous Liquids by Pipeline: Minimum Federal Safety Standards.

14. A cathodic protection system will be installed to prevent against corrosion.

### **Exclusion and Avoidance Areas**

6. North Dakota Administrative Code Chapter 69-06-08, sets forth certain criteria to guide the Commission in evaluating the suitability of granting an application for a certificate of corridor compatibility and route permit. The criteria as set forth in North Dakota Administrative Code Section 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria. A transmission facility route must not be sited within an Exclusion Area. A transmission facility route must not be sited within an Avoidance Area unless the applicant shows under the circumstances there are no reasonable alternatives. In determining whether an Avoidance Area shall be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. In accordance with the Commission's Section Criteria, a transmission route shall be approved if it is demonstrated that no significant adverse impacts will result from the

location, construction, and maintenance of the transmission facility. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility.

7. Whiting retained Merjent, Inc. of Minneapolis, Minnesota, to coordinate environmental studies and reports. As part of the environmental studies and reports, Merjent, Inc. reviewed a one-mile wide study corridor centered on the pipeline (Merjent Corridor). Merjent, Inc. retained Keitu Engineers & Consultants, Inc. of Mandan, North Dakota, to conduct a field survey for biological resources and a wetland assessment within a 170-foot-wide corridor, 90 feet wide on the west side of the Pipeline and 80 feet on the east side on the Pipeline (Keitu Corridor). Merjent, Inc. retained Metcalf Archaeological Consultants to conduct a Class III cultural survey within a 120-foot-wide corridor, 55 feet on the west side of the Pipeline and 65 feet on the east side of the Pipeline (Metcalf Corridor).

8. The Merjent, Inc. staff contacted the following state and federal agencies: the United States Army Corps of Engineers, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, North Dakota State Historical Society, North Dakota Game and Fish Department, North Dakota State Land Department, North Dakota State Health Department, and the North Dakota Parks and Recreation Department.

#### **Exclusion Areas**

9. No exclusion areas were identified in the Merjent Corridor.

#### **Avoidance Areas**

10. Avoidance areas in the Merjent Corridor include national wildlife refuges, state management areas, historical resources which are not specifically designated as exclusion or avoidance areas, residences, schools, and business.

11. No national wildlife refuges are found within a 45-foot wide corridor encompassing the construction footprint which was used to excavate the trench and lay the pipeline.

12. Several large sections of private land holdings are subject to wetland and grassland conservation easements held by the U.S. Fish and Wildlife Service (FWS). Whiting consulted with FWS personnel and has moved the Pipeline route laterally in nine places to avoid wetlands or grasslands.

13. Wetlands are scattered through the Merjent Corridor and along the proposed route. Whiting intends to minimize any impacts on these wetlands by stripping topsoil in unsaturated area.

14. The FWS letter dated February 6, 2009 with attached September 30, 2008 letter outlines measures that the FWS believes should be included as conditions of the

Commission's order. In its letter dated February 11, 2009, Whiting agrees to fully comply with the conditions outlined by the FWS, including the retention of a qualified biologist to conduct field surveys, if, as is likely, the oil pipeline is constructed during the breeding season between February 1 and July 15.

15. There is one parcel of School Trust Land within the corridor but it will not be crossed by the proposed route.

16. There are two parcels of Conservation Reserve Program (CRP) lands and two parcels of Private Land Open To Sportsmen (PLOTS) crossed by the 45-foot wide construction corridor. The North Dakota Game and Fish Department requests that the two tracts of PLOTS land be restored to pre-construction conditions. Whiting will restore the CRP and PLOTS lands to preconstruction conditions and reseed the CRP land according to specifications from the Natural Resources Conservation Service.

17. A Class I Literature Search disclosed five archaeological site leads, one prehistoric isolated find, three archaeological sites, and three standing structures within a two-mile wide study corridor. Additionally, one missile site was also located within the two-mile wide study corridor. A Class III Intensive Inventory field survey was conducted along a 120-foot wide corridor except that on the north end of the proposed pipeline, all of the SE/4 and the E/2SW/4 of Section 27, which is where the final 1.4 miles of pipeline will be located, were surveyed. The Class III survey discovered a total of 17 new archaeological sites and six isolated finds. As a result, Merjent, Inc. consulted with the North Dakota State Historic Preservation Office (NDSHPO) and obtained approval for a mitigation plan which includes maintaining a 50-foot buffer around certain of the features.

18. No residences, schools or businesses are within 500 feet of the 45-foot wide construction corridor.

19. Prior to pipeline trenching, up to 12 inches of topsoil will be segregated before the pipeline trench is excavated. Whiting has further agreed that the pipeline will be buried to a minimum depth from ground surface to the top of the pipe of 48 inches and 72 inches across undeveloped section lines. Upon completion of construction, subsoil will be placed on the pipe first followed by respread of the topsoil.

20. All crossings and graded roads will be bored unless the responsible governing agency specifically permits Whiting to open cut the road.

21. The proposed pipeline will cross or potentially impact three tree rows. One contains only small, immature chokecherry and buffalo berry shrubs or trees. Approximately 10 trees were removed at this location. The second crossing of a mature tree row was bored to avoid any impact. The third tree row had no live trees at the point of crossing and only one dead tree was removed.

22. Whiting agreed to comply with the Tree and Shrub Mitigation Specifications attached to this Order.

23. There will be no significant long-term irreversible effects to the environmental or to cultural resources by construction of the Pipeline.

24. The project will have no significant impact on fish and wildlife resources and no endangered or threatened plant or animal species are known to occupy the proposed route.

25. The Commission finds the location, construction, and operation of the Pipeline will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

26. The Commission finds the proposed project compatible with environmental preservation and the efficient use of resources.

27. The Commission finds that the proposed project minimizes adverse human and environmental impact while ensuring continuing system reliability and integrity, and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

28. The Commission finds the proposed project is of such length, design, location and purpose that it will produce minimal adverse effects, so that procedures and time schedules may be waived.

From the foregoing Findings of Fact, the Commission now makes its:

### **Conclusions of Law**

1. The Commission has jurisdiction over the applicant, Whiting Oil and Gas Corporation, and over the subject matter of this application under North Dakota Century Code Chapter 49-22.

2. Whiting is a utility as defined in North Dakota Century Code Section 49-22-03(13).

3. The proposed pipeline is a transmission facility as defined in North Dakota Century Code Section 49-22-03(12).

4. The location, construction, and operation of the pipeline will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

5. The location, construction and operation of the pipeline are compatible with environmental preservation and the efficient use of resources.

6. The pipeline will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
7. The project is of such design and location that it will produce minimal adverse effects, as defined under North Dakota Century Code Section 49-22-07.2.
8. It is appropriate for the Commission to waive those certain procedures and time schedules as requested in the Application and provided under North Dakota Century Code Section 49-22-07.2.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now issues its:

### **Order**

The Commission orders:

1. Whiting Oil and Gas Corporation's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility Number 109 is issued to Whiting, designating a corridor for its proposed pipeline project.
3. Route Permit Number 119 is issued to Whiting, granting authority to construct and operate an 8-inch crude oil pipeline in Mountrail County.
4. The Certificate of Corridor Compatibility Number 109 and Route Permit Number 119 are effective for the life of the pipeline, but are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.
5. Whiting must obtain approval from the Commission prior to any changes in the facility route or structure locations.
6. Whiting shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed pipeline, shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission.
7. Whiting shall conduct a preconstruction conference prior to the commencement of construction, which must include a Whiting representative, its construction supervisor, and a representative of Commission staff to ensure that Whiting fully understands the conditions set forth in the Commission's order.
8. Whiting shall inform the Commission of its intent to start construction on the pipeline prior to the commencement of construction, report to the Commission on the

date construction has started, and once construction has started, it shall keep the Commission updated on construction activities on a weekly basis.

9. Whiting shall construct and operate the pipeline in the manner described in its application, in any late filed exhibits and supplemental materials, and in accordance with all applicable safety requirements.

10. The pipeline shall be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in rangeland, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.

11. All crossings of graded roads shall be bored unless the responsible governing agency specifically permits Whiting to open cut the road.

12. The width of clear cuts through any wooded areas and shelterbelts shall be kept at a maximum of 50 feet where possible.

13. Whiting shall promptly report to the Commission the presence in the permit area of any critical habitat of threatened species, endangered species, bald eagles, or golden eagles that Whiting becomes aware of and which were not previously reported to the Commission.

14. Whiting shall comply with the measures set forth in the U.S. Fish and Wildlife Service's February 11, 2009 and September 30, 2008 letters, including the conduct of a field survey by a qualified biologist if construction occurs during the February 1 and July 15 breeding season, and shall provide copies of any notifications to the Fish and Wildlife Service to the Commission.

15. Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken.

16. All cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and any further construction activity.

17. If any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made by the State Historical Society, a report of such examination is filed with the Commission, and clearance to proceed is given by the SHPO and Commission.

18. Where available, at least 12 inches of topsoil where available or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be stripped and segregated from the topsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling is

completed, and excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced

19. Reclamation and clean up along the right-of-way must be continuous and coordinated with construction.

20. All pre-existing roads and lanes used during any further construction must be restored to a condition that will accommodate their previous use, and areas used as temporary roads or working areas during construction must be restored to their original condition.

21. Reclamation, fertilization, and reseeding are to be done by Whiting according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

22. Whiting shall comply with the Tree and Mitigation Specifications attached to this order.

23. Whiting shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the route of the pipeline.

24. Whiting shall provide the Commission with a hard copy of the facility alignment drawings with alignment data showing the facility as built (hardcopy and electronic versions), and an electronic version of the as-built facility that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction.

25. Whiting's obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the pipeline.

26. The authorizations granted by the corridor certificate and route permit are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

### **PUBLIC SERVICE COMMISSION**

  
\_\_\_\_\_  
**Tony Clark**  
**Commissioner**

  
\_\_\_\_\_  
**Kevin Cramer**  
**President**

  
\_\_\_\_\_  
**Brian P. Kalk**  
**Commissioner**

## Case No. PU-08-844

### Tree and Shrub Mitigation Specifications

#### Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), shall be inventoried before cutting. The inventory shall record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, shall be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height ("dbh") or greater shall be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way shall be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs shall be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil shall be preserved and replaced after construction. Shrubs shall be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared shall be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by sampling method that will properly represent the woody

vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (NDPSC) and approved prior to the start of construction shall define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots shall be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

#### **Clearing for Construction**

7. Trees and shrubs shall be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The width of clear cuts through windbreaks, shelterbelts and all other wooded areas shall be limited to 50 feet or less unless otherwise approved by the NDPSC.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced shall be noted on the inventory.

#### **Replacement**

10. Prior to tree/shrub replacement, documentation identifying the number and variety of trees removed as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings shall be filed with the NSPSC for approval.
11. Tree replacement shall be on a 2 to 1 basis with 2-year-old saplings. Shrub replacement shall be on a 2 to 1 basis with stem cuttings.
12. Trees and shrubs shall be replaced by the same species or similar species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement shall not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners shall be given the option of having replacement trees/shrubs planted off the right-of-way on the landowner's property or waiving that requirement in writing and allowing those replacement trees/shrubs to be planted at alternative locations.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings shall be filed with the NDPSC.
16. Tree/shrub replacements shall be inspected once a year for three years, on about the anniversary of the plantings, and, on or shortly before October 1 of each year, a report shall be submitted to the NDPSC documenting the condition of replacement planting and any woodlands work completed. If after three years from the anniversary of the plantings the survival rate is less than 75%, the NDPSC may order additional planting(s).

# STATE OF NORTH DAKOTA

## Certificate of Corridor Compatibility

Number 109

*This is to certify that the Commission has designated a transmission facility corridor for Whiting Oil and Gas Corporation to construct and operate approximately 17 miles of eight-inch crude oil pipeline with associated facilities and pipeline interconnections in Mountrail County, North Dakota.*

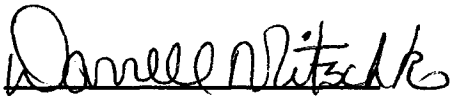
*The transmission facility route is designated by the Commission's February 25, 2009 Order in Case No. PU-08-844.*

*This certificate is subject to the conditions and limitations noted in that order.*

*Bismarck, North Dakota, February 25, 2009.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**



**Executive Secretary**



**Commissioner**

# STATE OF NORTH DAKOTA

## Route Permit

Number 119

*This is to certify that the Commission has designated a transmission facility route for Whiting Oil and Gas Corporation to construct and operate approximately 17 miles of 8-inch crude oil pipeline with associated facilities and pipeline interconnections in Mountrail County, North Dakota.*

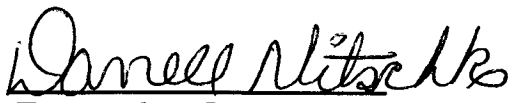
*The transmission facility route is designated by the Commission's February 25, 2009 Order in Case No. PU-08-844.*

*This permit is subject to the conditions and limitations noted in that order.*

*Bismarck, North Dakota, February 25, 2009.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**

  
**Executive Secretary**

  
**Commissioner**