

# Dakota Prairie Refinery Post-Construction Inspection Report PU-13-799



*Prepared for:*  
**North Dakota Public Service  
Commission**

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Responsive partner.  
Exceptional outcomes.

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# 1.0 Executive Summary

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The North Dakota Public Service Commission (PSC) retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the Dakota Prairie Refinery (Project) in Stark County, North Dakota (ND), constructed by Bilfinger Westcon Inc. and currently jointly operated by Dakota Prairie Refining LLC (DPR) and Lario Shipping, LLC. Construction for the Project began on 2 January 2014, and was completed in October 2014. Wenck reviewed all Project documents to identify those aspects that required compliance and visually inspected the Project area on 12 August 2014 and 13 August 2015.

The Project was first inspected on 12 August 2014. Wenck observed that the construction site was in good condition with silt fence and erosion control devices installed at appropriate locations and working effectively. A second inspection of the Project took place on 13 August 2015 and similar findings were documented as during the first inspection. In addition, construction was complete, the site had been cleaned up, and reclamation had occurred on the acreage that was not needed for long-term use.

There were several non-critical issues that may need to be resolved for the Project to be considered complete and in full compliance, including written verification of some items. Wenck expects follow-up actions taken by DPR to address these particular issues can be corroborated in writing and will not require a subsequent site visit. Wenck recommends the PSC take the following steps to resolve these issues.

## **Recommended Action Steps**

- **Review internally, clarify, then request if needed**
  - Provide as-built design specifications and associated GIS files.
  - Provide 10-Year Plan.

## 2.0 Background and Scope

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### 2.1 INTRODUCTION

The Dakota Prairie Refinery Pipeline Project (Project) connects a pipeline from a new petroleum processing facility to the Lario Rail Hub. The Project was constructed by Bilfinger Westcon Inc. The Project consists of two pipelines; an eight inch pipe transporting Atmospheric Tower Bottoms, and a six inch pipe transporting Naphtha. These liquid hydrocarbon products are obtained in the process of stripping diesel from sweet crude oil. This pipeline will be run mostly above ground level on racks with supports less than 20 feet apart. The below ground level portion will occur where the pipeline crosses 116<sup>th</sup> Avenue SW, where it will be horizontally bored beneath the road. With a total length of approximately 5,680 feet, the project is under the jurisdiction of the North Dakota Public Service Commission (PSC), which issued its Findings of Fact, Conclusions of Law, and Order in Case No. PU-13-799 on 30 December 2013, granting a Certificate of Corridor Compatibility No. 151 and Route Permits No. 162 and No. 163 for the Project.

### 2.2 PURPOSE

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and the welfare of citizens of North Dakota. Post-construction inspections ensure that such projects are constructed in compliance with the siting laws (North Dakota Century Code Chapter 49-22) and rules (North Dakota Administrative Code Article 69-06) and the applicable Commission Findings of Fact, Conclusions of Law, and Order (Order). The North Dakota PSC retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the Project.

### 2.3 METHODS AND SCOPE OF INSPECTION

#### 2.3.1 Project Compliance Items Identified

Wenck identified a list of "Project Specifications", which Westcon is obligated or responsible to follow and that can be verified either in written documentation or by an on-site inspection. These items were taken from 1) Siting laws and rules, 2) Project activities or specifications proposed in the Application for a Certificate of Corridor Compatibility (Application), 3) Project plans described in the Findings of Fact, 4) Orders, and 5) recommendations by other agencies. These Project specifications are listed in Table 2.1 under 7 categories: Siting & Location; Project Design & Engineering; Pre-Construction; Cultural Resources; Natural Resources; Construction, Reclamation & Soils; and Operation.

#### 2.3.2 Document Review

Wenck staff reviewed publicly-available Project documents in the PSC Online Case Search (ND PSC 2015) to find written verification of compliance for the Project specifications listed in Table 2.1. If written verification was filed, the findings are described in Section 3 and the source and name of the documentation is listed in Table 2.1, Column 3 (Written Verification). Green boxes in the table represent Project specifications that are potentially non-compliant because they have no written verification.

## 2.4 ON-SITE INSPECTIONS

An initial inspection was performed by Jeffrey Lorsung, a Wenck environmental scientist, who visited the project site on 12 August 2014. Randy Harris, a representative from Westcon, the company currently operating the pipeline, accompanied Wenck staff during the site visit. Both the refinery and pipelines were under construction at that time. A report for this inspection has been filed with the PSC (Docket #63, Field Inspection Notes).

Luke Nelson, Wenck project engineer, visited the Project site on 13 August 2015. He was escorted throughout the site by David Linn (WBI Energy).

The site was inspected visually by walking the perimeter of site and examining several points of interest within the site. Points of interest included the locations where the pipeline crosses the Heart River and underground crossing of 116<sup>th</sup> Ave SW. Digital photographs (Canon Power Shot SD1300 IS, 12 megapixel) were taken showing typical Project infrastructure and documenting problem areas (**Appendix A**).

If on-site inspection of a Project specification was completed, the findings are described in Section 3 and referenced in Table 2.1, Column 4 (Site Verification). Shaded boxes in the table represent Project specifications that are potentially non-compliant based on site verification.

**Table 1: Project Specifications with Written or Site Verification Information**

Source of Project Specification	Description of Project Specification	Written Verification *	Site Verification *
<b>SITING &amp; LOCATION</b>			
Findings of Fact 3; Application p. 2	Project is located in Stark County. Project is located 3 miles southwest of Dickinson, ND. The two refining product pipelines will be constructed between the storage tanks at the refinery and the Lario rail hub, a total distance of approximately 1.08 miles (5,680 feet). The pipelines will cross 116 <sup>th</sup> Avenue SW and the Heart River.	Docket #21, p.23 (Exhibit 3)	Section 3.1.1
Findings of Fact 12-18; ND Admin. Code § 69-06-08-01;02	Siting Criteria analysis – Exclusion, Avoidance, Selection, and Policy. There are no Exclusion Areas or Avoidance Areas located on the proposed Project corridor and routes. The Project meets Selection and Policy criteria.	Docket #1, 27, 31, 21(Exhibit 3) Application	Section 3.1.2
<b>PROJECT DESIGN &amp; ENGINEERING</b>			
Findings of Fact 4, 5, 6; Application p. 2	Project will consist of the construction of two pipelines from the storage tanks at the Dakota Refinery to the Lario Rail Hub a distance of approximately 5680 feet. A 6- inch diameter pipeline will transport Naptha, and an 8-inch pipeline will transport ATB (Atmospheric Tower Bottoms). Both pipelines will be schedule 40, seamless ASTM A53 grade B carbon steel with 150 class (naphtha pipeline) or 300 class (ATB pipeline) raised-face weldneck flange designed according to the ASME Code for Pressure Piping.	Docket #21, p.23 (Exhibit 3)	Section 3.1.1
Findings of Fact 5, 6	6-inch pipeline carrying Naptha above grade will be primed and painted. 6-inch pipeline below grade will be wrapped and cathodically protected. 8-inch pipeline carrying ATB above grade will be primed, painted, electrically traced, and insulated. 8-inch pipeline below grade will be wrapped and cathodically protected.	N/A	Section 3.2.1
Findings of Fact 7	Pipeline installed above grade will be installed on pipe supports 3 to 17 feet above grade, with supports being no more than 20 feet apart. Approximately 10 expansion loops will be incorporated. Pipe line will be installed on the bridge crossing the Heart River and will be designed to divert any leak off the bridge into containment basins away from the river. Pipeline will be installed beneath 116th Avenue SW via horizontal boring techniques according to a design approved by the Stark County Road Superintendent.	Docket #27, 31	Section 3.2.1

Source of Project Specification	Description of Project Specification	Written Verification *	Site Verification *
Order 6	Design for crossing at 116 <sup>th</sup> Avenue SW shall be filed with the Commission.	Docket #13	N/A
Certification 28	Upon request, provide engineering design drawings prior to construction.	Docket #37	N/A
Certification 30	Provide as-built design specifications and associated GIS files within 3 months after construction is complete.	None	N/A
<b>PRE-CONSTRUCTION</b>			
ND Century Code Ch. 49-22-08; ND Admin. Code Article 69-06-04	Application for a Certificate of Site or Corridor Compatibility and Route Permit.	Docket #1	N/A
ND Century Code Ch. 49-22-07; Certification 1, 7, 34	Certificate of Site Compatibility or Route Permit; subject to suspension or revocation.	Docket #31, Findings of Fact-Conclusions of Law and Order with Certificate 151 and Route Permit 162 and 163	N/A
ND Century Code Ch. 49-22-04; ND Admin. Code Article 69-06-02	Ten-year Plan (submit before July 1).	None	N/A
Certification 2, 5	Conduct Pre-construction Conference. Provide notice of intent to start construction. Once started, Company shall keep the Commission and the Commission's third-party construction inspector updated of construction activities on a weekly basis.	Docket #37	N/A
Certification 29, 32	Inform Commission of plans to modify the facility or site plan, and obtain written approval. Any facilities not included in current Application must be applied for in a separate Route Permit or Site Certificate.	None filed to date.	N/A
Certification 3, 4	Compliance with rules and regulations of other jurisdictional agencies. Obtain permits and approvals from other agencies and provide copies prior to applicable permitted activity.	Docket #11, approvals for crossing of Heart River, Docket #13, approvals for 116 <sup>th</sup> Ave crossing	N/A
<b>CULTURAL RESOURCES</b>			
Certification 11	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	Docket #10,32 Letters of Concurrence	Section 3.4.1

Source of Project Specification	Description of Project Specification	Written Verification *	Site Verification *
	disturbances until a professional examination can be made, report filed with the Commission and the State Historical Society, and clearance to proceed is given.		
Findings of Fact p.5; Certification 14	The project will have no impact on Exclusion areas defined by ND Admin. Code §69-08-08(1). There are no Exclusion areas located on the proposed Project corridor and routes.	Docket #10, 32, Letters of Concurrence	Section 3.1.3
Findings of Fact; Certification 11	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, report filed with the Commission and the State Historical Society, and clearance to proceed is given.	None reported to date	N/A
Findings of Fact p.5	State Historical Society: Complete a Class III (pedestrian) survey of the project area for review by State Historical Society.	Docket #30, Class III Intensive Cultural Resources Inventory	N/A
<b>NATURAL RESOURCES</b>			
Findings of Fact p. 5; ND Admin. Code § 69-06-08-02	The Project will not have a significant impact on the Selection Criteria set forth in ND Admin. Code § 69-06-08-02(3). The Project will have no adverse impact on agriculture, wetlands or woodlands. The Project will have no adverse sound or visual impact on adjacent land uses; no impact on radio television or other communication and electronic control facilities. The Project length and design minimizes impacts to the environment and minimizes risks to human and animal health and safety. The Project will have minimal impact to plant life.	Docket #27, 31	Section 3.5
Certification 18	Reclamation, fertilization, and reseeding according to NRCS (or landowner if approved). Mulch and erosion control fabric will be applied according to desires of landowner. USFWS request: reseed with grass/forb mixture of native species from local seed sources.	None.	N/A
Certification 19	Tree and shrub removal and replacement will comply with "Tree and Shrub Mitigation Specifications".	None	N/A

Source of Project Specification	Description of Project Specification	Written Verification *	Site Verification *
	<b>CONSTRUCTION, RECLAMATION &amp; SOILS</b>		
Certification 6	Underground pipeline to be buried at a minimum depth of 48 inches in range land, 48 inches in cultivated land, 48 inches at the bottom of a ditch at road crossings, and 72 inches across undeveloped section lines.	None	Section 3.2.1
Supporting Documentation for Application (SWPPP)	Minimize erosion and sedimentation by use of BMPs during and after construction to protect surface water soils.	None	Section 3.6.1
Certification 15	During construction, up to 12 inches of topsoil, where available, must be stripped and separated from subsoil. Topsoil and subsoil must be segregated and replaced separately. After backfilling, subsoil and topsoil must be replaced and blended into existing topography. Rocks (> 3in diameter) will be removed from cultivated lands post-construction.	None.	N/A
Certification 13, 24	Disturbed areas and temporary roads will be restored to original condition. Pre-existing township and county roads used during construction restored to equal or better than pre-construction condition. Restoration of area to pre-construction contours and conditions as soon as practicable upon completion of construction. ROW will be de-compacted per landowner request.	None	N/A
Certification 14	Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land.	None	N/A
Certification 16	Reclamation, fertilization, and reseeding are to be done according to NRCS recommendations, unless otherwise specified by the landowner and approved by the Commission.	None	Section 3.6.4
Certification 20, 21	Temporary fences and gates will be installed as necessary. Repair/replace all damaged fences and gates. Repair/replace damaged drainage tile.	None	N/A
Certification 33	Underground irrigation or water lines and wells will be avoided or shutoff coordinated. Notify the Commission if any damage occurs to underground facilities during construction, suspend construction until compliance with One-Call Excavation Notice System requirements has been determined and clearance to proceed has been given.	None reported.	N/A

Source of Project Specification	Description of Project Specification	Written Verification *	Site Verification *
Certification 22	No staging areas on land not owned by Company, unless otherwise negotiated with landowners.	None	N/A
Certification 23	Waste removed and disposed of regularly.	None	N/A
	<b>OPERATION</b>		
Certification 8, 9, 26	Construct and operate in accordance with Application and safety requirements. Maintain records of compliance with Order and Certificate of Site Compatibility. Extraordinary events (e.g. injuries, T+E wildlife fatalities) reported within 5 business days.	None reported to date.	Section 3.7
Certification 17, 18, 23	Reclamation and maintenance of right-of-way, transmission facility, associated facilities, and roadways throughout life of facility. Waste removed & disposed regularly.	None	N/A
Findings of Fact 22	Dakota Prairie will develop an emergency response program which will include the refinery and the Project pipelines.	None	N/A
Certification 25	Provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.	None	N/A
Certification 27	Implement a procedure for handling complaints concerning the proposed facility.	Docket #37	N/A

## 3.0 Findings

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### 3.1 SITE INFORMATION

#### 3.1.1 Designated Location

The Project was built generally as proposed in the designated location described in the Application and Order (Figure 1). Maps of the approved corridor and observations of structures during the site inspection appeared to coincide (Appendix A, Photos 10-18).

#### 3.1.2 Siting Criteria

Siting criteria were analyzed in detail in the Application for the Project (Docket #1, Application). Wenck confirmed during the site inspection that there were no exclusion or avoidance areas within the Project area. Wenck also confirmed that impacts to selection and policy criteria were considered and kept at a minimum.

#### 3.1.3 Land Use & Agricultural Impacts

The project corridor and route are located almost entirely on property owned by the applicants. No privately owned land was impacted. Wenck confirmed during the site inspection that there were no impacts to the surrounding agricultural lands.

#### 3.1.4 Setbacks

The Project was in a rural setting, with no occupied dwellings or structures along the pipeline route or within the ROW corridor, complying with the 500ft setback specified in the Application.

### 3.2 PROJECT DESIGN & ENGINEERING

#### 3.2.1 Structure Specifications

Steel beam pipe rack structures were observed along the pipeline route. Piping and the associated structures appeared to match those specified in the application. Span lengths and structure heights appeared to match those specified in the Application (Appendix A, Photos 10-18). Concrete box culvert sections were observed for the facilities road crossing and underground boring used for the crossing of 116<sup>th</sup> Ave SW. Wenck was unable to confirm with the design as no road crossing design drawings have been uploaded to the PSC online database to date.

#### 3.2.2 Codes & Specifications

There was no written verification of compliance with the National Electric Safety Code (NESC) or Avian Power Line Interaction Committee (APLIC) raptor-safe standards.

#### 3.2.3 Right-of-Way Corridor

The Project was authorized to construct within the ROW of 116<sup>th</sup> Ave SW along the designated route and corridor. The pipeline appeared to have been constructed within the proposed route and corridor (Appendix A, Photos 7-18).

#### 3.2.4 Engineering Design Drawings

Engineering design drawings were provided prior to construction (Docket #37).

### 3.2.5 As-built Drawings and GIS Files

Wenck Associates has not received as-built GIS files from the contractors. No as-built information has been uploaded to the PSC online database to date.

## 3.3 PRE-CONSTRUCTION

### 3.3.1 PSC-Required Documents

A Letter of Intent was filed with the PSC on 18 September 2013 (Docket #5, Notice of Filing and Notice of Hearing). The PSC moved that it was appropriate to waive certain procedures and time schedules as requested in the application (Docket #30, 31, Findings of Fact and Commission Motion adopting Findings of Fact). The Application for Certificate of Corridor Compatibility and Route Permit were submitted on 14 June 2013. (Docket #1, Application). The PSC issued Certificate of Corridor Compatibility No. 151 and Route Permit No. 162 and 163 on 30 December 2013 (Docket #31, Findings of Fact).

### 3.3.2 Pre-Construction Conference/Weekly Updates

A pre-construction meeting conference call was held on 30 December 2013. Notice was provided during the meeting of intent to start construction within the next week (Docket #37, Notes from Preconstruction Conference). Construction progress reports were filed weekly during the 8 months of construction (Dockets #34, 36, 39, 41, 44-62, Progress Reports).

### 3.3.3 Permits & Approvals from Other Agencies

A total of 13 permits and approvals were received from various governing agencies for the pipeline construction. Permits and approvals received are included in the Supporting Documentation for Application and Additional Supporting Documentation for Application files (Docket#11, 13). A list of the received permits and approvals is shown below along with the associated issuing party.

- ▲ Air Pollution Control Permit to Construct - *NDDH*
- ▲ Stormwater Pollution Prevention Plan (SWPPP) – *NDDH*
- ▲ SWPPP Signed NOI – *DPR/MDU*
- ▲ Spill Prevention Control and Countermeasure (SPCC) – *Barr Engineering*
- ▲ Authorization to construct a bridge across the Heart River – *Army Corps of Eng.*
- ▲ 404 Permit Submittal-New vehicular bridge and stormwater outlet – *Stark County*
- ▲ Letter of Consent to install an access road/vehicular bridge. – *Bureau of Reclamation*
- ▲ NWP 39 - *Army Corps of Eng.*
- ▲ Sovereign Land Permit – *State of North Dakota*
- ▲ Floodplain Development Permit – *Stark County*
- ▲ Preliminary Jurisdictional Determination Form - *Army Corps of Eng.*
- ▲ Class I and Class III Cultural Resource Inventory – *Barr Eng. & SWCA Environmental*
- ▲ Road Crossing Permit – *Stark County*

### 3.3.4 PSC Approval of Modifications

Dakota Prairie Refining filed an affidavit to the PSC on 16 December 2013 (Docket#26). The purpose of the affidavit was to state their intentions to explore alternatives to the currently approved crossing of 116<sup>th</sup> Ave SW. No further alternative designs were submitted and the crossing was completed to the original approved design specifications. Observations of on-the-ground infrastructure coincided with maps on the Application.

### **3.4 CULTURAL RESOURCES**

#### **3.4.1 Cultural Site Avoidance**

A Class I and Class III Cultural Resources Inventory was completed for the Project (Docket #11, Supporting Documentation for Application) in February 2013, which resulted in a “No Historic Properties Affected” recommendation. The North Dakota State Historical Society reviewed the Cultural Resources Inventory and concurred with the “No Historic Properties Affected” determination (Docket #10, 32, Letter Concurrence).

#### **3.4.2 Reporting of New Discoveries**

No new discoveries of cultural, archeological, or historic sites have been reported to the PSC to date and no discoveries were recorded on the weekly construction reports for the Project. Presumably no new sites were encountered during construction of the Project.

### **3.5 NATURAL RESOURCES**

#### **3.5.1 Wetlands, Surface Water, & Floodplain**

A wetland delineation report was not included in the Application. The project had no adverse impact on wetlands. The crossing of the Heart River was done by means of a road bridge. DPR obtained a Section 404 permit from the Army Corps of Engineers for impacts to wetlands associated with the construction of the road bridge. Any potential leaks from the pipelines on the bridge will be graded towards containment basin near bridge abutments to prevent spills from reaching the river.

#### **3.5.2 Wildlife**

In general, it appeared DPR attempted to minimize impacts to wildlife and habitat. Wenck also confirmed that impacts to wildlife were considered and kept at a minimum.

#### **3.5.3 Reporting**

There were no reports filed documenting the presence of threatened or endangered species or bald or golden eagles during construction or operation to date and no observations were recorded on the weekly construction reports for the Project. It is assumed none were observed during construction.

#### **3.5.4 Tree & Shrub Mitigation**

As concluded in the Findings of Fact (Docket #27) the project will have no adverse impacts to the surrounding trees and shrubs. During construction if it was determined that trees/shrubs would be impacted, DPR was to submit a mitigation plan to the PSC. There were no reports or submittals pertaining to tree/shrub mitigation throughout the project.

### **3.6 CONSTRUCTION, RECLAMATION & SOILS**

#### **3.6.1 Erosion & Sedimentation Control**

The Project Application states that BMPs would be utilized during construction to minimize the potential for sedimentation and erosion control. No erosion or sedimentation issues were observed during the site inspection (Appendix A, Photo 6).

#### **3.6.2 Reclamation & Roads**

Areas disturbed during construction appear to have been restored to their previous condition. No significant issues were observed during the site inspection. The land adjacent to the new structures has returned to its previous use. The Project did not require crossing

or cutting into an existing roadway. Roads accessing the site appeared to be in a condition typical for the area, and do not appear to have been negatively impacted by construction traffic (Appendix A, Photos 5, 11). Evidence of new roads or temporary roads was not observed during the site inspection.

### **3.6.3 Construction Management**

Westcon Industries fulfilled the general contractor duties for the pipeline project. Construction progress reports were filed weekly during the 8 months of construction (Dockets #34, 36, 39, 41, 44-62, Progress Reports).

### **3.6.4 Reseeding**

Areas disturbed by construction appear to be successfully restored to previous conditions (Appendix A, Photos 12, 14, 17, and 18).

## **3.7 OPERATION**

### **3.7.1 Operation & Maintenance**

The site appeared to be operating as described in the Application and seemed to be regularly maintained. Wenck did not observe any areas of exposed soil from construction activity or the on-going operation of the Project that were in need of reclamation. There were no waste, debris, or abandoned equipment observed during the inspection.

### **3.7.2 Safety & Record-keeping**

No concerns were identified during the site inspection that would indicate that Project construction or operation was out of compliance with the Application or safety regulations. Weekly reports document no safety concerns. No injuries or extraordinary events have been reported to date.

### **3.7.3 Public Complaints**

No records of complaints regarding the facility have been filed to date.

### **3.7.4 Public Safety**

The Project spans private property owned by the applicants, so safety concerns regarding the public are minimal.

## 4.0 Issues to Resolve and Recommendations

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### 4.1 PROJECT SPECIFICATIONS NEEDING WRITTEN VERIFICATION

Several components of the Project were asserted in the Application or proposed construction and could be verified in writing, but have not been filed with the PSC. Table 2-1 summarizes these items, which are indicated as those shaded in the "Written Verification" column, indicating no written verification was provided where applicable and necessary. Wenck does not consider any of these items to be critical for Project compliance. However, Wenck suggests they be on file with the PSC to confirm compliance. Wenck recommends the PSC request from DPR the following list of "Necessary" items.

#### Necessary Items

- Provide as-built design specifications and associated GIS files within 3 months after construction is complete.
- Provide 10-Year Plan.

### 4.2 FINAL RECLAMATION

At the time of the site inspections the project areas appear to be reclaimed. Wenck recommends that DPR notify the PSC if they decide to construct "on-site" roads in the future.

## 5.0 Conclusions

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Overall, the Project appeared to have been constructed as designed, with minimal impacts to the surrounding natural or human environment. The Project site was well-maintained and in good condition. However, Wenck observed several issues that may need to be resolved before the Project is considered complete and in full compliance. This includes: clarification of the approved Project with as-built drawings and submittal of the 10-Year Plan. None of these are critical issues, but the PSC should determine which are necessary for the company to comply with and then notify the company what actions are required on their part.

## 6.0 References

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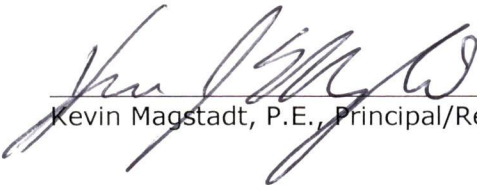
North Dakota Public Service Commission (ND PSC). 2014. Online Case Search. Available from: [http://www.psc.nd.gov/database/company\\_case\\_list.php](http://www.psc.nd.gov/database/company_case_list.php). Accessed September -December 2014.

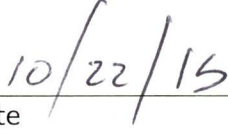
# 7.0 Signatures

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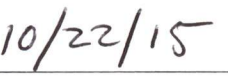
The services performed by Wenck scientists for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints. Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically-accepted practices at the present time and location. Other than this, no warranty is implied or expressed.

Lead Project Manager, Kevin Magstadt and Secondary Project Manager, Luke Nelson, prepared the report.

  
\_\_\_\_\_  
Kevin Magstadt, P.E., Principal/Regional Manager

  
\_\_\_\_\_  
Date

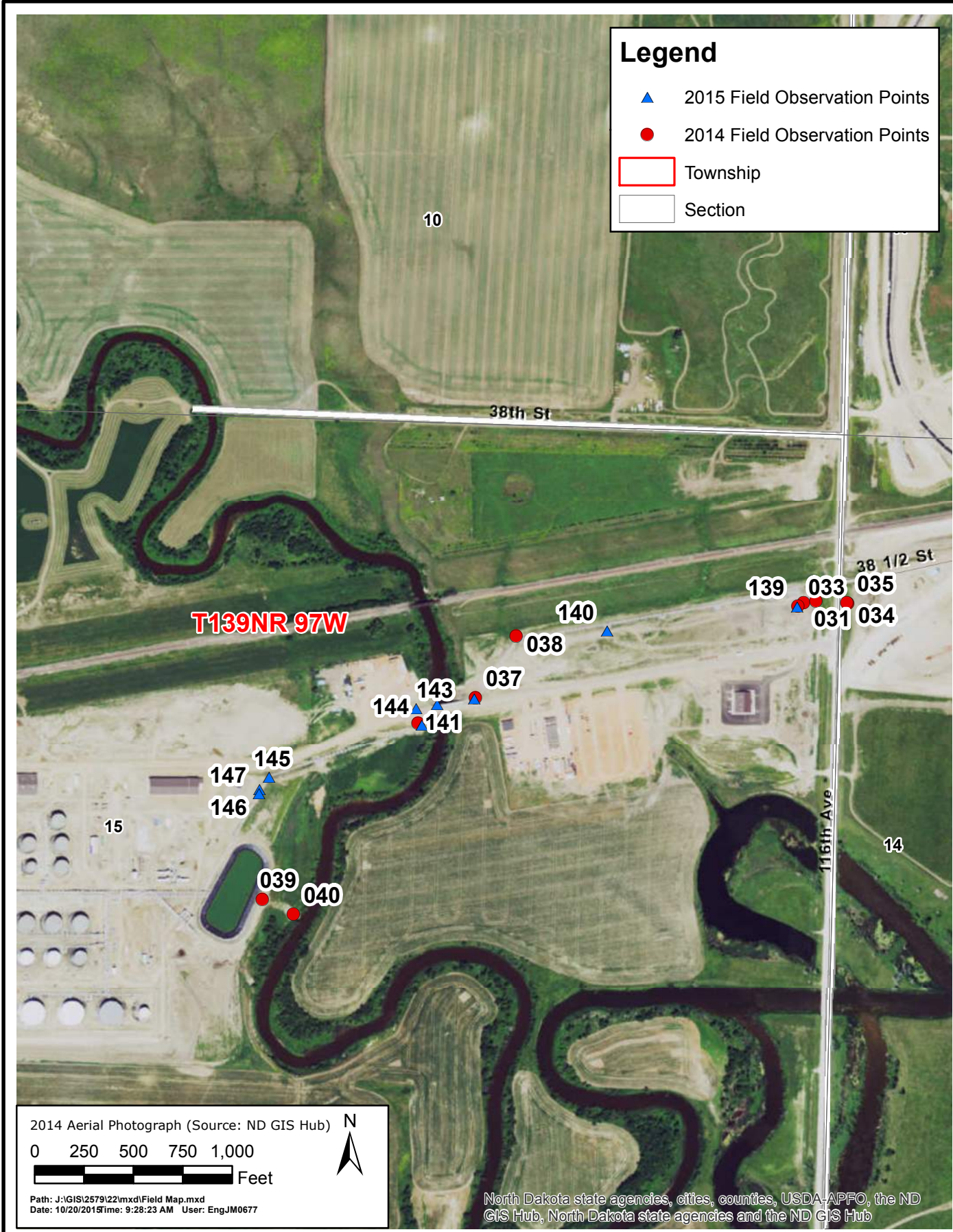
  
\_\_\_\_\_  
Luke Nelson, Project Engineer

  
\_\_\_\_\_  
Date



## Figures

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## Photographs



**Photo 1.** Direction: Northwest. Pipeline leaving the Dakota Prairie Refinery and under construction in the photo.



**Photo 2.** Direction: Southeast. Pipeline entering underground box culvert beneath the facility access road and running parallel to the Heart River.



**Photo 3.** Direction: North. View of the pipeline section that runs through the box culvert underneath the facility access road. Preventative spill/leak containment measures taken are depicted in the photo above as well.



**Photo 4.** Direction: Northeast. Vertical entrance point of pipeline where it bends south, parallel to the Heart River and underneath the facility access road.



**Photo 5.** Direction: East. Pipeline running east and west, crossing the Heart River along a bridge. While installing the pipeline damage was done to the bridge or roadway as depicted above.



**Photo 6.** Direction: East. Erosion control measures and BMP's (Best Management Practices) in place along bridge and pipeline crossing the Heart River.



**Photo 7.** Direction: Northeast. Pictured above is the pipeline bending to the northeast, where it will continue to run north of the facility access road. Also pictured is the corridor where no permanent impacts to the ROW can be seen.



**Photo 8.** Direction: East. Pictured above is the pipeline bending back to the east to run parallel to the rail road tracks and facility access road and approaching 116<sup>th</sup> Ave SW from the west. Pictured also is no permanent impacts to the ROW.



**Photo 9.** Direction: Northwest. Termination of the Pipeline prior to boring under 116<sup>th</sup> Ave SW.



**Photo 10.** Direction: Northwest. Pictured above is the pipeline bending to the south prior to boring under 116<sup>th</sup> Ave SW and entering underground structure. (This photo is from the second and final inspection of the pipeline).



**Photo 11.** Direction: East. View of the location of the boring that went underneath 116<sup>th</sup> Ave SW before entering and terminating at the rail yard. (This photo is from the second and final inspection of the pipeline).



**Photo 12.** Direction: West. Completed pipeline with 8" line insulated and heat traced, ROW returned to pre-construction conditions. (This photo is from the second and final inspection of the pipeline).



**Photo 13.** Direction: Southwest. The picture above depicts where the pipeline enters the Dakota Prairie Refinery, the security measures in place are also depicted. (This photo is from the second and final inspection of the pipeline).



**Photo 14.** Direction: Northwest. Depicted above is an example of the recovery of the ROW to preconstruction conditions. (This photo is from the second and final inspection of the pipeline).



**Photo 15.** Direction: East. Pipeline running east and west, crossing the Heart River along a bridge. While installing the pipeline damage was done to the bridge or roadway as depicted above. (This photo is from the second and final inspection of the pipeline).



**Photo 16.** Direction: North. View of the insulated pipeline section that runs through the box culvert underneath the facility access road. Preventative spill/leak containment measures taken are depicted in the photo above as well. (This photo is from the second and final inspection of the pipeline).



**Photo 17.** Direction: East. Depicted above is an example of the recovery of the ROW to preconstruction conditions. This section of the pipeline is south of the facility access road running east to west. (This photo is from the second and final inspection of the pipeline).



**Photo 18.** Direction: East. Depicted above is an example of the recovery of the ROW to preconstruction conditions. This section of pipe is north of the facility access road, runs east to west until it reaches the bore location at 116<sup>th</sup> Ave SW. (This photo is from the second and final inspection of the pipeline).



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