



1403 27th STREET NW  
PO BOX 98  
MANDAN, ND 58554-0098  
701-667-1800

October 28, 2015

North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

Attn: Julie Prescott



**Meadowlark Midstream Company, LLC**  
**8-inch Crude Oil Pipeline**  
**Divide Lateral Pipeline Project**  
**Divide and Williams Counties, ND**  
**ND PSC Case No. PU-14-223**  
**Keitu Project No. 569-1057**

In accordance with your request, Keitu Engineers & Consultants, Inc. (Keitu) is pleased to submit for your use two hardcopies and one electronic copy of the Divide Lateral Pipeline Construction Report.

Keitu appreciates the opportunity to work with you on this project and I hope this report meets with your complete approval. If you have questions or comments, please contact me at the phone number above or via email at [ngaffrey@keitu.com](mailto:ngaffrey@keitu.com).

Sincerely,

Nathan J. Gaffrey, PE  
Project Engineer

*Enclosure:* Construction Inspection Report (2 Copies)  
CD-ROM copy of associated files

**52** **PU-14-223** Filed: 10/30/2015 Pages: 11  
**Construction inspection report**

# Construction Inspection Report

Meadowlark Midstream Company, LLC

8-inch Crude Oil Pipeline - Divide Lateral

Divide and Williams Counties, ND

*ND PSC Case No. PU-14-223*

*Keitu Project No. 567-1057*

**Prepared for:**

North Dakota Public Service Commission

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>PURPOSE AND SCOPE OF INSPECTION .....</b>	<b>2</b>
<b>GENERAL PROJECT INFORMATION .....</b>	<b>2</b>
<b>SITE VISIT OBSERVATIONS .....</b>	<b>3</b>
<b>CONCLUSIONS.....</b>	<b>4</b>
<b>CERTIFICATION .....</b>	<b>4</b>
<b>APPENDIX A – GENERAL PROJECT PICTURES .....</b>	<b>5</b>
<b>APPENDIX B – PROJECT MAP .....</b>	<b>7</b>

Meadowlark Midstream Company, LLC  
8-inch Crude Oil Pipeline  
Divide Lateral Pipeline Project  
Divide and Williams Counties, ND  
Prepared by Keitu Engineers & Consultants, Inc.

## **Executive Summary**

The State of North Dakota, acting through its North Dakota Public Service Commission (NDPSC), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for construction and post-construction siting inspections. This report represents the findings of the construction inspection performed on October 22, 2015. The Divide Lateral Pipeline (Project) is located in Divide and Williams counties in the State of North Dakota. Construction for the Project was completed in October 2013. Additional construction on the north tie-in occurred in October 2015. The purpose of the construction inspection was to ensure the Project was being constructed in compliance with the siting laws, rules, and the applicable PSC Order for the Project. Prior to the construction inspection, Keitu reviewed all Project documents to identify any and all aspects requiring site verification.

Overall, the project was very well-maintained and in good condition. It appeared to be constructed as planned with numerous efforts to minimize impacts.

## **Introduction**

The Divide Lateral Pipeline (Project) is an existing installed 8-inch crude oil pipeline. This part of the project involves converting the pipeline to a “transmission facility” from a “gathering facility”. The Project will be operated by Meadowlark Midstream Company, LLC. Two additional block valves will be constructed at either end of the pipeline. One block valve will be installed on the northern end of the Project within the facility boundaries of the Divide Pump Station (DPS) in Divide County, ND and the second block valve will be installed at the southern end within the facility boundaries of the COLT Rail Terminal (CRT), Williams County, ND. This 8-inch pipeline is anticipated to deliver on average 40,000 barrels per day (bpd) of crude oil.

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 on Case No. PU-14-223 on February 25, 2015, granting a Certificate of Site Compatibility for Corridor Compatibility No. 159 and Route Permit No. 171.

## Purpose and Scope of Inspection

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 welfare of the citizens of North Dakota. Construction inspections ensure the Project is constructed in compliance with siting laws, rules, and the applicable Commission Findings of Fact, Conclusions of Law, and Order (Order).

The North Dakota PSC retained Keitu Engineers & Consultants, Inc. (Keitu) to complete construction inspections and post-construction inspections of the Project. The inspection process included a review of the Application for a Certificate of Site Compatibility, Order, and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, site visit observations, documentation of compliance deficiencies and a summary of issues, if any, that should be addressed for the Project to be considered in full compliance.

## Methods

Keitu reviewed North Dakota siting laws and rules, the Application for a Certificate of Site Compatibility and the Order for the Project to identify what Project-specific documentation was required for compliance.

The Project was visually inspected on October 22, 2015 by Keitu Engineers & Consultants, Inc. (Keitu) staff Nathan Gaffrey, PE, Project Engineer. In addition, Keitu was escorted around the project by Dean Blikre, Construction Manager, and Patrick Brierley, Vice President of Project Management, both with Summit Midstream Partners, LLC (Summit). Digital photographs were taken showing typical Project infrastructure and documenting problem areas, if any, and are located in Appendix A. Appendix B contains a map of the pipeline route with points of observation that were taken.

## General Project Information

**Owner:** Summit Midstream Partners, LLC

### **Additional Pertinent Onsite Contractors:**

Pipeline X-Ray Contractor:	Braun InterTech, Minnesota
Pipeline Quality Control:	Chippewa Resources, North Dakota
Pipeline Installation Contractor:	Jones Constructors, Tennessee

## Site Visit Observations

**Temperature:** 35 °F, Calm-No Wind

**Time:** 9:30 AM

**Location:** South Lease Automatic Custody Transfer Station, Epping, ND

The construction inspection began on the south end of the Project at the CRT near Epping, ND. The south Lease Automatic Custody Transfer Station (LACT) had been previously constructed when the original pipeline was installed in October 2013. The LACT is configured to measure the crude oil at a rate of 40,000 barrels per day before it is transferred on to railcars for delivery to its destination. The LACT was premanufactured enclosed skid type unit. Upon visual inspection of the LACT, there appeared to be no crude oil leaks at pipe joints or pipe flanges. This suggests that the proper care and installation methods were performed during the final installation of the unit in October 2013. The LACT and its electric controls components are connected to Summit Midstream's main control system which monitors the operating conditions from their Houston, TX location.

**Temperature:** 46°F, Light Wind

**Time:** 11:40 AM

**Location:** North Pipeline Tie-In, near Fortuna, ND

After the inspection on the south end of the pipeline was performed, the inspection moved to the north end of the pipeline which is approximately 44 miles to the north of the CRT location at the Divide Pump Station (DPS) in Divide County, ND. At this location, the final piping tie-ins were in the process of being made. This tie-in will connect the Global Stampede Pipeline (GSP) to this Project. This connection will allow crude oil delivered to the DPS site to be transported to two different geographical locations. One location, to the east of the DPS, will be at Basin Transload Facility (BTRF), Burke County, ND or a second location, to the south of the DPS, will be at CRT facility near Epping, ND.

Hydro-testing was taking place on the pipeline connection upon arriving on site for the inspection under the direction of Jim Crowe of Chippewa Resources and J.J. Pennington of Jones Constructors. After passing the hydro-test, additional flow control valves and appurtenances were installed. The installation of this section of pipeline was observed to be in compliance with the applicable construction standards and PSC requirements.

It is anticipated that a final-post construction report will be completed in the summer of 2016.

## Conclusions

Overall, the Project appeared to be constructed as designed with minimal impacts to the surrounding natural and human environment. The Project site was in good condition and well maintained.

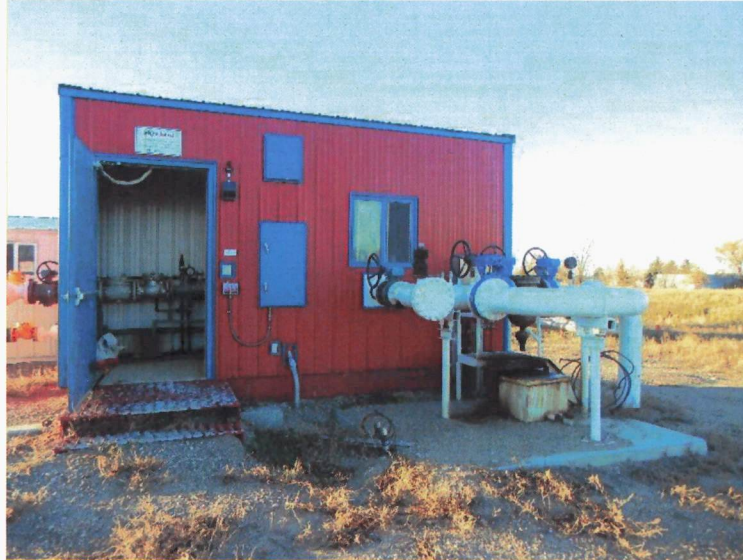
## Certification

I declare that, I have the specific qualifications based on education, training, and experience to assess a property of the nature, I believe to the best of my professional knowledge the contents of this report accurate represents the condition of this project to date.



Nathan J. Gaffrey, P.E.  
Project Engineer

## Appendix A – General Project Pictures



Picture 1 - 40,000 barrel per day LACT near Epping, ND



Picture 2 – General Piping Layout inside LACT near Epping, ND



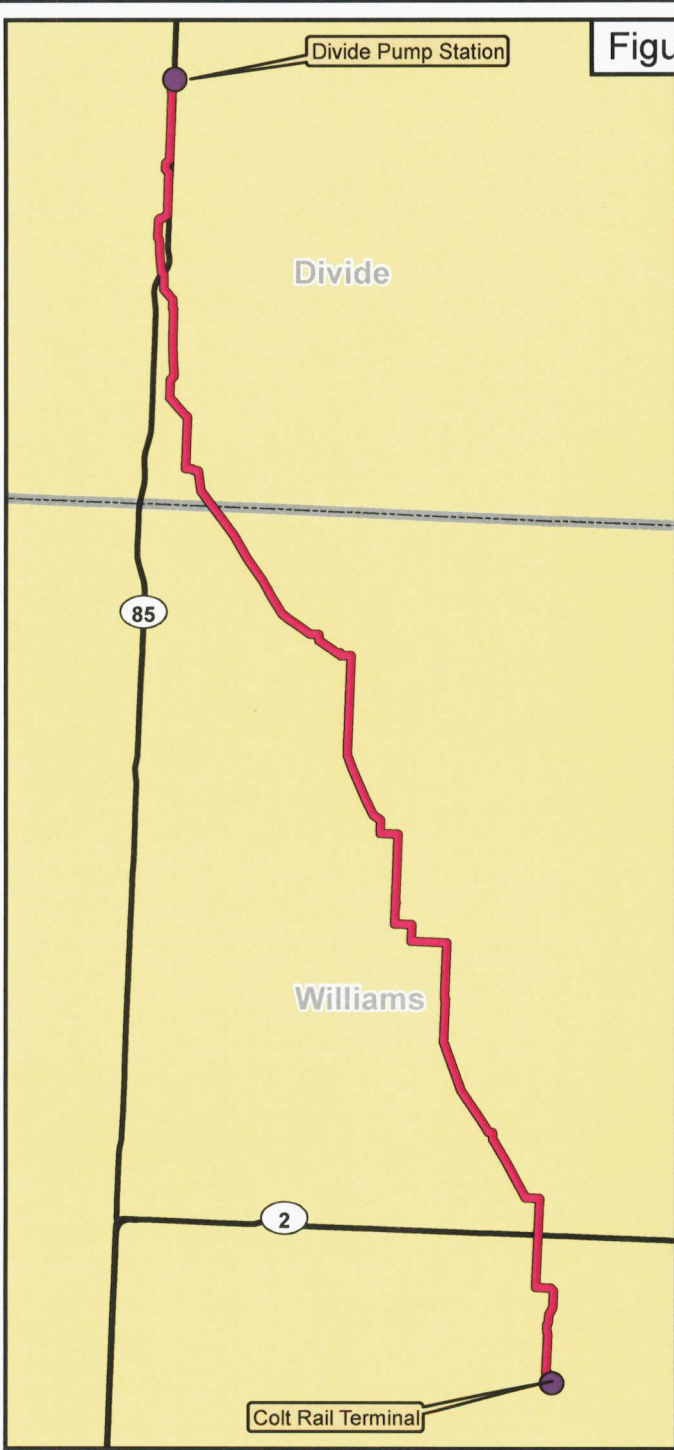
**Picture 3 – Preparation for final tie-in of Global Stampede Pipeline to Divide Lateral Pipeline near Fortuna, ND**



**Picture 4 –Pipe welding near Fortuna, ND**

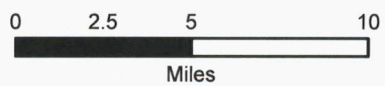
## Appendix B – Project Map

Figure 1



**Legend**

- Observation Points
- Project Centerline
- Counties



**ND PSC Case Number  
PU-14-223**

**Medowlark Midstream  
Company, LLC**

**8-inch Crude Oil Pipeline  
Divide and Williams County, ND  
Divide Lateral Pipeline Project**

Printed: 10/28/2015