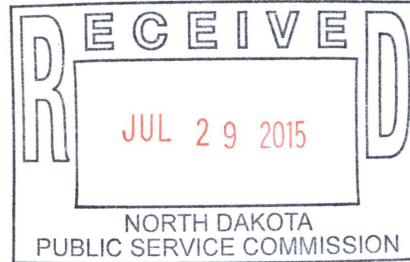


July 27, 2015

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

Attn: Julie Prescott



**Meadowlark Midstream Company, LLC**  
**10-inch Crude Oil Pipeline**  
**Global Stampede Pipeline Project**  
**Divide and Burke Counties, ND**  
**ND PSC Case No. PU-14-823**  
**Keitu Project No. 569-1062**

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 Global Stampede 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

Meadowlark Midstream Company, LLC  
10-inch Crude Oil Pipeline  
Global Stampede Pipeline Project  
Divide and Burke Counties, ND  
*ND PSC Case No. PU-14-823*  
*Keitu Project No. 569-1062*

Construction Inspection Report

*July 2015*



Prepared By:  
Keitu Engineers & Consultants, Inc.  
1403 27<sup>th</sup> Street NW  
Mandan, ND 58554



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Meadowlark Midstream Company, LLC  
10-inch Crude Oil Pipeline  
Global Stampede Pipeline Project  
Divide and Burke 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 Wednesday, July 22, 2015. The Global Stampede Pipeline (Project) is located in Divide and Burke counties in the State of North Dakota. Construction for the Project began in June 2015 with anticipated completion 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.

The Project was visually inspected on July 22, 2015 by Keitu Engineers & Consultants, Inc. (Keitu) staff Nathan Gaffrey, PE, Project Engineer and Samantha Swanberg, Staff Consultant. In addition, the Keitu staff was escorted around the project by Dean Blikre, Construction Manager, with Summit Midstream Partners, LLC. Mr. Blikre has been overseeing the construction of the project since its inception.

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 Global Stampede Pipeline is currently under construction at the time of this report. The Project will be operated by Meadowlark Midstream Company, LLC. The Project will be approximately a 46 mile long 10-inch crude oil pipeline and is intended to deliver approximately 50,000 barrels per day under normal operation conditions between the Divide Pump Station (DPS), Divide Co. and the Basin Transload Facility (BTRF), Burke Co. 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-14-823 on May 13, 2015, granting a Certificate of Site Compatibility for Corridor Compatibility No. 166 and Route Permit No. 178.

## 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.

Nathan Gaffrey, Project Engineer, and Samantha Swanberg, Staff Consultant, of Keitu visited the Project site on July 22, 2015. The site was visually inspected by Keitu staff with a jobsite site survey lead by Dean Blikre, Construction Manager, with Summit Midstream Partners, LLC. 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

**General Contractor:** Summit Midstream Partners, LLC

**Additional Pertinent Onsite Contractors:**

Pipeline X-Ray Contractor: Braun InterTech, Minneapolis, MN

Pipeline Survey Contractor: LW Survey Company, Denver, CO

Pipeline Environmental Contractor: Benchmark Environmental, Dallas, TX

## Site Visit Observations

**Temperature:** 78 °F, Calm-No Wind

**Time:** 8:30 AM

At the time of the inspection, the project was in numerous stages of construction depending on which section of the project was visited. The project construction has been started at both the west end and the east end and will eventually meet in between the two ends. The inspection started on the west end of the pipeline where the existing Meadowlark Midstream Divide County Lateral Pipeline and new Global Stampede Pipeline will meet together. At this location there is an existing 20,000 barrel crude oil breakout tank, a new 50,000 barrel crude oil breakout tank under construction and also a truck Lease Automatic Custody Transfer (LACT) stations under construction.

It was mentioned that the containment dike containing both breakout tanks was currently not large enough in capacity. As a result, additional land to the east of the existing containment dike was purchased to enlarge the containment area that serves these tanks so that containment requirements can be met. Per EPA standards for a nonproduction site, the containment must have the capacity for a secondary means of containment sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

Pipeline installation was viewed from initial trenching to backfilling. The pipeline is welded, inspected, and hydro tested to 125% of its maximum operating pressure. Inspection of the pipeline welds is being performed using the X-Ray method which detects any defects in the weld. The pipes' epoxy coating thickness is tested three separate times. It is tested upon material arrival to the job site, after coating the weld joint, and lastly before it is lowered in to the trench. The pipes' epoxy coating must test to be 13 mils along the length of the pipe and 30 to 45 mils at each coated and welded joint to meet the project specifications. In instances where the piping fails the test, the pipe is both recoated and retested. At the time of inspection, the right-of way had been cleared approximately 10 miles from the west end and approximately 16 miles from the east end of the pipeline, respectively.

Along the right-of-way of the pipeline, the road crossings where being bored under and not trenched. Boring under the road crossings allows for a much cleaner, non-destructive method of construction. A special type of pipe is being used at the bored locations that has additional epoxy coating applied to it that allows it to be more durable when pulled through the bore hole.

The pipeline is being buried at a minimum depth of 5 feet below grade. The topsoil is being segregated and placed on the backfilled trench last. The topsoil will eventually be seeded to have native species of the area.

Many erosion control measures were being employed along the construction right-of-way. Silt fences are being used in probable high erosions area in order to prevent the trenching soil to flow out of the right-of-way during precipitation events. Throughout the project the construction crews were diligent in laying down matting where excessive rutting could occur. The environmental contractor inspects the erosion control measures every 14 days t or after a rain event greater than 0.25 inches to verify that they are properly intact.

## 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. An additional construction inspection will be performed in the near future.

## 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.



Nathan J. Gaffrey, P.E.  
Project Engineer

## Appendix A – General Project Pictures



Picture 1 - New 50,000 barrel breakout tank under construction



Picture 2 - Piping serving future truck LACT area



**Picture 3 - Future truck LACT area**



**Picture 4 - Start of West End of pipeline. Notice soil segregation.**



Picture 5 - West End – Trench Backfill



Picture 6 - Soil Sifting Machine



**Picture 7 - Intersection of Bore Pipe and Standard Epoxy Covered Pipe**



**Picture 8 - Pipe Trenching Machine**



Picture 9 - Soil Hole Boring Machine



Picture 10 - Pilot Hole being bored



Picture 11 - East End – Future Pipe Launcher and Receiver



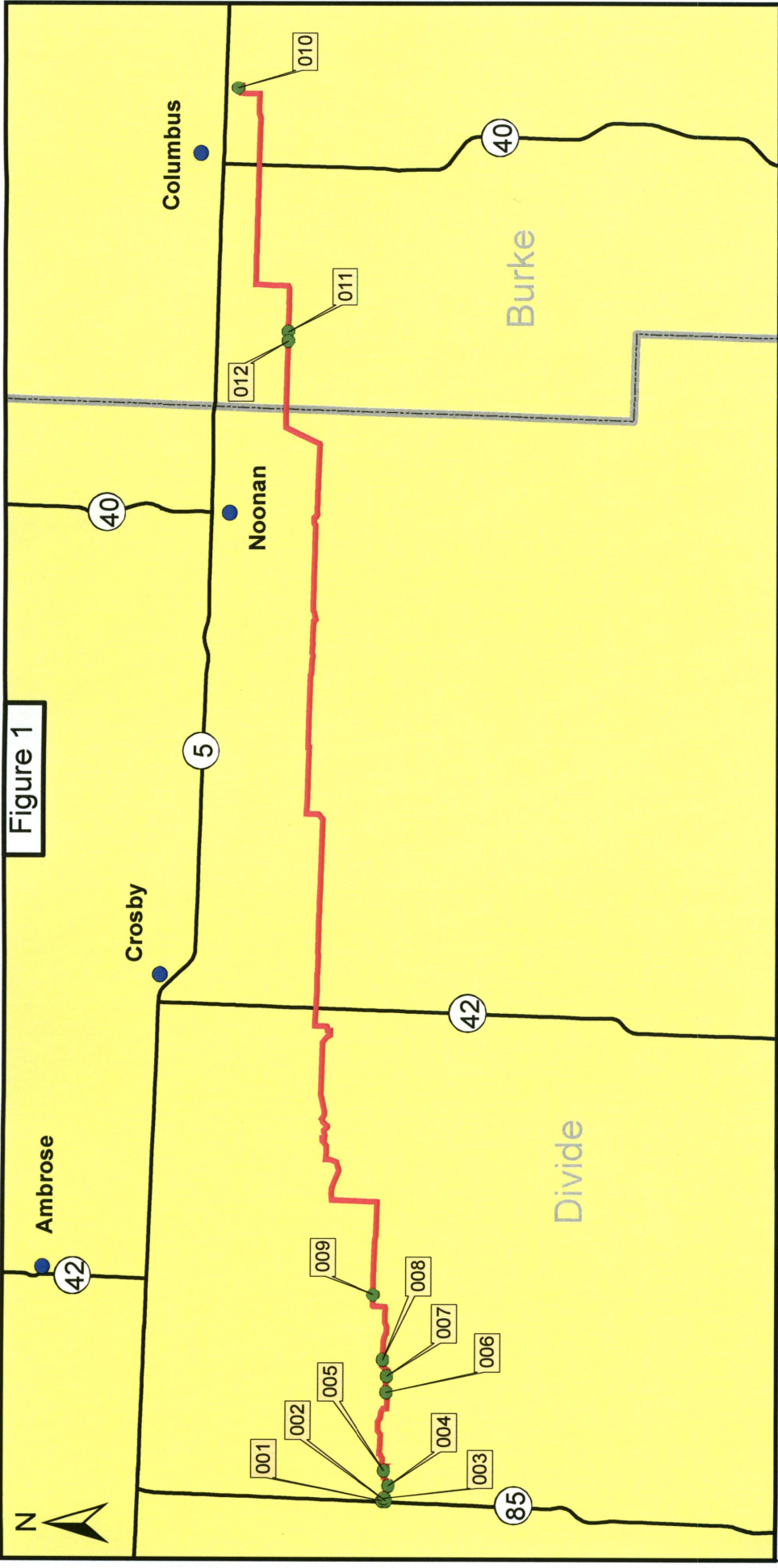
Picture 12 - East End – Pipeline Welding Crew



Picture 13 - Typical Pipe Weld and Inspection Marking

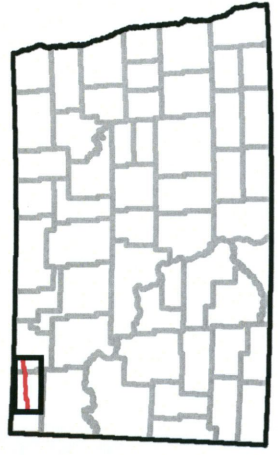


## Appendix B – Project Map



ND PSC Case Number PU-14-823  
 Meadowlark Midstream Company, LLC

**10-inch Crude Oil Pipeline  
 Divide and Burke County  
 Global Stampede Pipeline Project**



**Legend**

- Observation Points
- Pipeline Route
- ▭ Counties

