

**Oasis Midstream Services, LLC
Wild Basin to Johnson's Corner Pipeline
Reclamation and Revegetation
Inspection Report**

Case No. PU-15-733

Prepared for:



Public Service Commission



Prepared by:



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1.0 EXECUTIVE SUMMARY

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission (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 the citizens of North Dakota. Commission construction inspections ensure that energy projects are constructed in compliance with the siting laws (North Dakota Century Code Chapter 49-22), rules (North Dakota Administrative Code Article 69-06) and applicable Commission Orders.

The Commission retained ProSource Technologies, LLC (ProSource) to complete construction inspections of the Oasis Midstream Services LLC (Oasis) Wild Basin to Johnson's Corner Pipeline Project (Project), Case No. PU-15-733, which was constructed between April and November 2016 in McKenzie County, North Dakota. The Project involved the construction of approximately 19 miles of 10.75-inch outside diameter pipeline and associated facilities for the transmission of crude oil.

Construction of the Project commenced on April 11, 2016. ProSource conducted the topsoil removal inspection on April 12, 2016 and filed the inspection report with the Commission, which documented the inspection and provided concerns and corrective actions. On June 14-15, 2016, ProSource conducted a construction inspection to document construction activities and identify construction concerns and corrective actions. ProSource conducted the As-Built Construction Inspection on November 16, 2016 and submitted the inspection report, which documented revegetation concerns and corrective actions.

ProSource conducted the Reclamation and Revegetation Inspection on November 14, 2017. The purpose of the Reclamation and Revegetation Inspection was to observe and document the success of restoration after a full growing season. The inspection report includes a summary of any issues requiring resolution, areas of concern, recommendations for resolution and a determination whether the transmission facility has been restored to as near as practicable to the condition as it existed prior to the beginning of construction, including the reestablishment of desired plant species where applicable.

During the Reclamation and Restoration Inspection, many areas were identified that require reseeded. These areas were communicated to the Oasis representative during the inspection. It is recommended that Oasis conduct a review of the areas where the revegetation has not reestablished similar to the condition as it existed prior to the beginning of construction and to the extent practicable, reseed these areas to establish a uniform vegetative cover.

2.0 PROJECT BACKGROUND

On November 16, 2015, Oasis filed applications in Case No. PU-15-733 for a Certificate of Corridor Compatibility and a Route Permit for the construction of its Wild Basin to Johnson's Corner Pipeline. The Project consists of 19 miles of 10.75-inch outside diameter pipe, three above-ground storage tanks totaling 200,000 barrels of storage capacity, and block valves. The maximum capacity of the Project is 75,000 barrels per day, with a normal throughput of 50,000 barrels per day. The maximum operating pressure is 1,480 psig with the normal operating pressure of 500 psig. The Project is proposed to be designed, constructed, operated and maintained in compliance with Code of Federal Regulations Title 49 Part 195, Hazardous Liquids Pipeline Safety Regulations. The Commission issued a decision approving a corridor and a route on March 23, 2016 in accordance with the Commission's Findings of Fact, Conclusions of Law and Order.

According to Oasis, the purpose of the Project is to transport crude oil from the Wild Basin Gas Processing and Crude Handling Facility where the crude is housed in aboveground storage tanks to third-party pipeline interconnects near Johnson's Corner (Tesoro Johnson's Corner Station and the proposed Dakota Access Pipeline Johnson's Corner Terminal facility). From these facilities, the product will be transported via interconnecting pipelines for distribution to refineries across the United States.

Oasis selected the proposed pipeline corridor based on several criteria designed to conform to the Commission's siting requirements and to avoid or minimize socioeconomic and environmental impacts, while maximizing the benefits to local resource developers in the Williston Basin. According to Oasis, the location of existing assets were also considered during the selection process. The selection of the corridor was also influenced by the opportunity to parallel or co-locate within other utility corridors. Approximately 13 miles of the Project is co-located with existing corridors.

3.0 RECLAMATION AND REVEGETATION INSPECTION

On November 14, 2017, Mr. David Hennen, Project Manager and Director of Environmental Services at ProSource conducted the Reclamation and Revegetation inspection. Mr. Hennen met Mr. Alex Sletto, representative for Oasis, at the work site to discuss restoration and seeding of the right of way. It was determined that the majority of the route could be driven to inspect the revegetation of the right of way. The inspection initiated at station 0+00 and continued until the interconnect at approximate station 983+00. The inspection was conducted after the growing season that followed the restoration and seeding activities. Many areas were identified during the inspection as requiring reseeding to establish a vegetative cover as near as practical to the condition as it existed prior to construction. It was also noted in the inspection that the right of way between approximate Stations 876+00 and 960+00 has been impacted by other pipeline projects constructed adjacent to the Oasis pipeline in the same corridor.

4.0 CONCERNS AND RECOMMENDATIONS

During the inspection, the following concerns were identified and communicated to the Oasis representative during the inspection.

- Many areas require additional restoration and reseeding. The majority of the identified areas were located between approximate Stations 0+00 and 450+00.
- Minor water erosion areas (Photos 13, 19) at approximate Stations 154+00 and 261+00.
- Rock removal (Photo 15) at approximate Station 190+00.
- Two pipeline markers (Photos 23 and 24) requiring repair.

Based on the concerns identified in the Reclamation and Revegetation inspection, ProSource recommends that Oasis inspect the right of way during the Spring of 2018 and reseed the areas that have not established a vegetative cover similar to the condition as it existed prior to construction.

5.0 CONCLUSION

Based on the Reclamation and Revegetation inspection, a determination was made that portions of the project have not been restored to the condition as it existed prior to the beginning of construction. ProSource recommends reseeding of these portions of the right of way.

6.0 SIGNATURE

Recommendations and findings contained in this report are based on available information and technically accepted practices at the present time.

Project Manager David Hennen, Director of Environmental Services, prepared this report.



David E. Hennen, Director of Environmental Services
ProSource Technologies, LLC

12-28-17
Date

7.0 REFERENCES

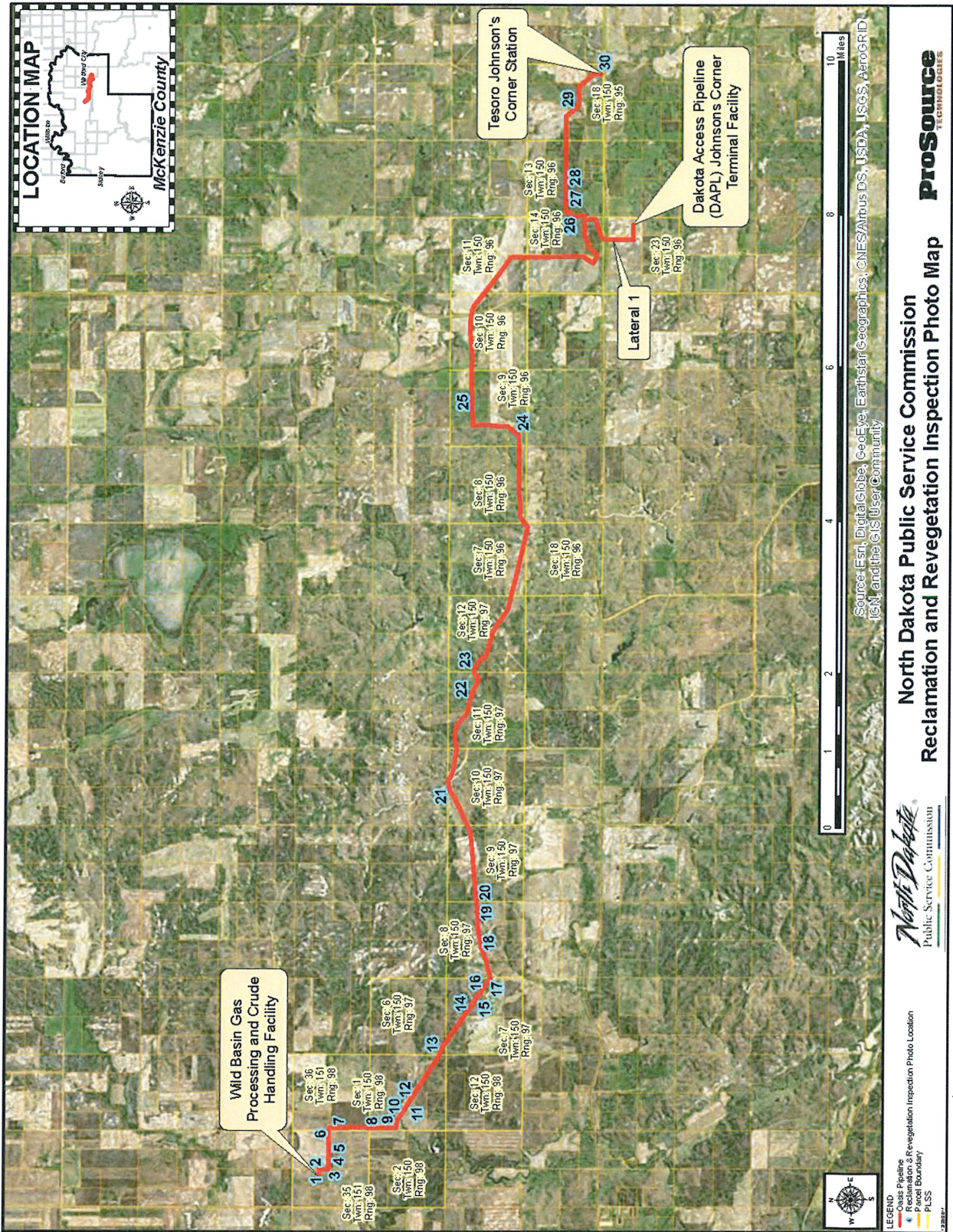
North Dakota Public Service Commission (NDPSC) Online Case Search. Available from <http://www.psc.nd.gov/database/documents>. Accessed December 2017.

8.0 APPENDICES

APPENDIX A

Field Inspection Map

Reclamation and Revegetation Inspection Report
 Oasis Midstream, Wild Basin to Johnson's Corner Pipeline Project



APPENDIX B

Photographs

PHOTOGRAPHS



Photo 1 – Approx. Station 0+00. View of interconnect with pump house.



Photo 2 – Approx. Station 6+00. View of portion of right of way requiring additional seeding.

PHOTOGRAPHS



Photo 3 – Approx. Station 15+00. View of right of way requiring additional seeding.



Photo 4 – Approx. Station 21+00. View of right of way requiring additional seeding.

PHOTOGRAPHS



Photo 5 – Approx. Station 30+00. View of right of way requiring additional seeding.



Photo 6 – Approx. Station 38+00. View of right of way requiring additional seeding.

PHOTOGRAPHS



Photo 7 – Approx. Station 51+00. View of successful restoration.



Photo 8 – Approx. Station 75+00. View of right of way requiring additional seeding

PHOTOGRAPHS



Photo 9 – Approx. Station 93+00. View of successful restoration.



Photo 10 – Approx. Station 104+00. View of successful restoration.

PHOTOGRAPHS



Photo 11 – Approx. Station 107+00. View of right of way requiring additional seeding



Photo 12 – Approx. Station 108+00. View of vegetation difference from right of way to adjacent area.

PHOTOGRAPHS



Photo 13 – Approx. Station 154+00. View of minor erosion.



Photo 14 – Approx. Station 187+00. View of the right of way that requires additional seeding.

PHOTOGRAPHS



Photo 15— Approx. Station 190+00. View of rock to be removed from the right of way.



Photo 16— Approx. Station 200+00. View of half right of way revegetation, half requires seed.

PHOTOGRAPHS



Photo 17 – Approx. Station 207+00. View of the right of way that requires additional seeding.



Photo 18 – Approx. Station 234+00. View of the right of way that requires additional seeding at HDD workspace.

PHOTOGRAPHS



Photo 19 – Approx. Station 261+00. View of minor erosion.



Photo 20 – Approx. Station 267+00. View of the right of way showing successful revegetation.

PHOTOGRAPHS



Photo 21 – Approx. Station 348+00. View of the right of way showing successful revegetation.



Photo 22 – Approx. Station 417+00. View of the right of way that requires additional seeding.

PHOTOGRAPHS



Photo 23 – Approx. Station 434+00. View of pipeline marker needing repair.



Photo 24 – Approx. Station 611+00. View of pipeline marker needing repair.

PHOTOGRAPHS



Photo 25 – Approx. Station 654+00. View of the right of way showing successful revegetation.



Photo 26 – Approx. Station 876+50. View of the other projects inside Oasis right of way.

PHOTOGRAPHS



Photo 27 – Approx. Station 890+00+00. View of the other projects inside Oasis right of way.



Photo 28 – Approx. Station 891+00. View showing half of the Oasis right of way impacted by another project.

PHOTOGRAPHS



Photo 29 – Approx. Station 960+00. View of the right of way showing successful revegetation.



Photo 30 – Approx. Station 891+00. View of the right of way that requires additional seeding.