

Off Specification NGL Flowline

C. Specifications:		
i. Bedding materials used in construction;		Pipe is laid on a sand bedding with sand shading and native material backfill
ii. Fluids that will be transferred;		Off Specification NGL
iii. The maximum anticipated operating pressure, testing pressure, test date, and chart of successful pressure test;		Max anticipated operating pressure: 245psig Test pressure: 1100psig Test date: Jul 19, 2019
iv. The pipe description (i.e., maximum size, grade, wall thickness, coating, standard dimension ratio, and material);		Pipe: 3" fiberglass rated to 1500psi @ 150F; manufactured by NOV; product code R1530DS
v. The burial depth of the crude oil transfer line or produced water transfer system;		4ft
vi. Description of corrosion protection;		Fiberglass
vii. Description of the integrity management system utilized in accordance with 1104.f.;		Continuous Pressure Monitoring
viii. Description of the construction method used for public by-ways, road crossings, sensitive wildlife habitats, sensitive areas and natural and manmade watercourses (i.e., open trench, bored and cased, or bored only); and		N/A

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Description of Integrity Management Program

Asset Integrity Program: The Program that describes the governance and systematic implementation of activities such as inspections, tests, surveillance, monitoring, preventative maintenance and repair tasks to help ensure that the equipment is suitable for its intended application throughout its projected service life. The Asset Integrity Program is focused on structures and equipment that are part of the layers of protection to prevent, detect, mitigate and control, and respond and recover to events that might result in severe or catastrophic consequences. Including but not limited to Strict Design Criteria, Continuous Monitoring, Weekly AVO's in Prioritized Areas, Periodic AVO's for all lines, Annual UT Testing, Static Pressure Tests, some Cathodic Protection – sacrificial and induced, and Pre-use/Post Repair/Periodic Hydrotesting.

Description of Corrosion Protection Rangely

The Rangely Field follows strict Design Criteria during Construction. There is a Chemical Protection (Baker Petrolite) used throughout the Field focused on Corrosion Protection. There are sacrificial Anodes and Impressed Current Cathodic Protection Systems. Carbon Steel Flowlines are installed with a Fusion Bonded Epoxy Coating.

Construction Method for Roads Rangely

Boring was used for going under the creeks/river, focus areas, and across location roads.