

# Turnkey Solutions 225 Miles of 24" NGL Pipeline

A midstream contractor required competent, turnkey commissioning solutions in order to meet an established start-up date. The project consisted of 225 miles of 24 inch NGL pipeline in West Texas. Knowledge of pipeline integrity parameters, SIMOPS scheduling, logistical resources, and proven field personnel were critical to project award approval.

## PLAN OF EXECUTION

1. **Project Pre-planning**
  - a. Stakeholder planning meetings. Schedule coordination that incorporated (2) full time work crews on site for the project duration.
  - b. Creation of technical procedures. On site project management support. On site HSEE support.
2. **Pipeline Cleaning**
  - a. Utilized operational experience and technical expertise in pigging mechanics to overcome dirty internal pipe conditions which required abnormal cleaning procedures for new pipe construction.
  - b. Fluids handling plan accounted for compressed alternative schedule impact.
3. **Pipeline Flooding and Hydrostatic Pressure Testing**
  - a. Utilization of appropriate back pressure to mitigate the risk of "air lock."
  - b. Pre-planned controlled pressurization and depressurization process.
  - c. Multiple data points to monitor pressure and temperature along each test segment.
4. **Pipeline Dewatering**
  - a. Controlled release to maintain back pressure to prevent air lock.
5. **Pipeline Drying**
  - a. Developed progressive pigging program utilizing proper air flow rate calculations in order to move drying pigs with maximum efficiency.
  - b. Achieved customer approved -40 degree dew point and 1/4" penetration requirement.

## TECHNICAL ACHIEVEMENTS & BENEFITS

- Multiple integrity tests with no ruptures or leaks verified by test data evaluation.
- Successful integration with end user and general contractor management, consultants, and field personnel. Provided in-house, integrated services for cold cutting and hydraulic bolting. Provided integrated management and project controls. Projected completed with safely with no environmental impact.
- Technical competency identified several potential problems in the initial hydrotest plan. Project team provided mitigation plan in order to met the pipeline parameters, end user specifications, and regulatory requirements.

## LOCATION

Texas (US)

## SPECIFICATIONS

**Diameter: 24 inch**  
**Length: 225 miles**  
**Test Segments: 7**  
**Total Elevation Change: 300 feet**

## SCOPE OF WORK

**Perform full scope commissioning services in order to ready system for first gas.**

## CHALLENGE

- **Integrated scheduling and logistics.**
- **Internal pipe condition required substantial cleaning due to debris accumulation during construction phase.**
- **SIMOPS with construction contractor and operations personnel.**
- **Critical start-up date established by operator.**