



Processing Facilities

Keyera Corporation Fort Saskatchewan Facility Expansion

The project goal was to expand the salt cavern liquids storage and fractionation capacity at this facility.

The liquids storage capacity project included the addition of four (4) 1,750 hp injection pump units and high pressure piping system (1500# ANSI) for injection/storage and sales of liquid products C2+, C3+ and C5+ in the underground salt dome storage cavern system. Each pump has the nominal capacity of 250 m³/hr, for a total increase of 1000 m³/hr additional site storage capacity. The liquids storage expansion also included a brine handling capacity upgrade, including the addition of two new 450 hp brine pumps.

Our scope of work for the pump addition projects included:

- Conceptual Design (pre-FEED)
- FEED
- Detailed Engineering

- Procurement and expediting
- Field Construction Support
- HAZOP Reviews
- DBM preparation
- Capital Cost Estimate Report (Appropriation Grade)
- 60% and 90% 3D Model Reviews
- Shutdown Key Reviews
- Constructability Reviews

Engineering deliverables and construction drawings/documents in the different engineering/design disciplines, including Process, Mechanical, Piping, Instrumentation, Civil and Structural, design and 3D model, sourcing of equipment and bulk items, procurement and expediting were completed by our team.

The fractionation addition project scope included



Processing Facilities

Keyera Corporation Fort Saskatchewan Facility Expansion

pre-FEED and FEED studies for the addition of a single Deethanizer train capacity 218 m³/hr (33,000 BBL/day) inlet design for fractionation of C2+ liquids into C2 and C3+ products. The Deethanizer contactor tower size is 10' diameter x 120' overall length, and the overhead condenser system requires approximately 5,000 hp of refrigeration compression.

Our scope of work for the fractionation addition project included:

- Scoping Letter preparation
- Conceptual design (pre-FEED)
- FEED
- Process and equipment investigation scenarios
- Material and energy balances
- Utility requirement estimates
- Constructability reviews
- Regulatory action plan

- Equipment sizing
- List of mechanical long lead items
- Detailed schedule estimate
- DBM preparation
- Capital cost estimate report (Appropriation Grade)
- 3D Model Layout reviews

Engineering deliverables and construction drawings/documents in the different engineering/design disciplines, including Process, Mechanical, Piping, Instrumentation, Civil and Structural, design and 3D model were completed by our team.