

Altana Exploration Ltd. – Sunchild

- Installation of a condensate pump

Atco Gas Services Ltd. – Carbondale, Alberta

- Condensate Stabilizer

CNRL – Kitscoty

- Condensate Blending

Devon Canada – Cabin Creek

- Design review and process engineering for sour conversion of a 50 MMSCF/d TEG glycol dehydration facility
- Design and installation of the addition of two 1480 hp sour compressors to the existing facility. Responsibilities included design review and input for the new compressor package, drawing review and management, regulatory submissions, procurement, construction inspection and start-up supervision
- Facility SO₂ modeling

Devon Canada – Normandville

Permitting, engineering, drafting, and project management of a 20 MMSCF/d sour gas plant:

- 3000 hp compression (inlet & sales)
- 200 hp refrigeration
- 20 US gpm amine sweetening
- Acid gas composition: 10% H₂S and 90% CO₂
- Acid gas compressor: 50 hp @ 2000 psig discharge
- Acid gas pipeline: 1.5 km with wellhead pressure of 1750 psig
- Acid gas rate: 135 kg/hr
- 2002 expansion: Stabilizer, LPG bullet, and pump skid
- 2004 expansion: Installation of condensate flash tank

Encana – Halifax, Nova Scotia

- Facility Cost Estimation

Husky Energy – Ansell

- Condensate Stabilizer Installation

Iteration Energy – Umbach

- Condensate reinjection scheme modifications

Iteration Energy – Umbach

- Add condensate tank to compressor station

Keyera – Simonette

Engineering, procurement and construction management (EPCM) for the brownfield installation of a 150 MMSCF/d inlet and sweetening equipment, 10,000 bbl/d sour condensate stabilizer and ancillary items at an existing facility near Valleyview, Alberta. Design features of the installation:

- 10' x 60' condensate feed drum (500 psig MAWP)
- 10,000 bbl/d sour condensate stabilizer package:
 - Provided capability with loading rack full length Stabilizer column (42" diameter x 60')
 - 2 x 50% reboilers
 - Feed/bottoms exchanger
 - Feed preheat exchanger
 - 2 x 50% overheads compressors (125 hp each)
 - Condensate product cooler
- New 12,000 bbl tank farm
- VRU compressor (75 hp, 2 stage rotary vane)
- 32 MMBtu/hr heat medium system c/w 2 x 100% pumps (100 hp each)
- Low pressure flare stack and FKOD/drain vessel
- Inlet condensate filtration
- Fuel gas letdown package c/w heat exchanger and separator
- Pump skid:

- 2 x 100% condensate sales pumps (75 hp each)
- 2 x 100% condensate recycle pumps (60 hp each)
- Condensate transfer pump (5 hp)
- 2 x 100% LP to HP plant condensate feed pumps (50 hp each)
- New MCC (20' x 70')
- Two (2) inlet line heaters
- Repurposed and relocated an existing inlet separator
- Installed a new inlet rack through the plant
- New Inlet separator
- Two (2) new coalescing filters
- Two (2) sets of gas-gas exchangers
- New amine contactor
- OPPSD system

Manical Energy Inc. – Pembina

- Gas Liquids Engineering Ltd. (GLE) conducted a condensate study.

Murphy Oil – Tupper West Gas Plant

- Increased condensate capacity at the Tupper West facility.

Numac Energy Inc. – Martin

- Installation of a condensate metering system

Paramount Resources – South of Grand Prairie

- Well pad site sweetening at three well pad sites. Design and construction of greenfield well site sweetening facility, includes sweetening unit, condensate tanks, VRU, compressor, separator, and pigging.

Pengrowth Energy – Olds, Alberta

- Condensate handling and flare mitigation.

Plains Midstream Canada – Sundre, Alberta

- Sundre condensate treating

Plains Midstream Canada – Nipisi, Alberta

Mechanical, civil, and structural design and construction support for storage capacity expansion to an existing truck terminal in Northwest Alberta. Project scope included:

- Two new API bulk storage tanks and related pumps
- 150,000 bbl and 130,000 bbl crude oil / condensate tanks fitted with floating roofs
- Two tank pads with a concrete dike, synthetic liner, and earth works to ensure proper drainage both inside and outside of the tank farm
- Sweet crude from existing tank will have option to flow into either of the new tanks, which require an expansion on the existing North/South pipe rack on the east side of the existing earthen berm.
- New MCC building due to the large amounts of motors, pumps, heat tracing required. Designed to allow for future expansion.
- All motor operate valves, controls and
- Installation of a new hot standby Vertical Multistage Condensate Pump.

Plains Midstream Canada – Northeast, British Columbia

- Class 5 Fractionation Train Study

Seven Generations – Karr, Alberta

- Installation of power generation equipment at a compressor site for use in feeding a new Pembina LACT. Also includes the low pressure condensate Feed pipeline to the new LACT.

Seven Generations – Karr, Alberta

- Prepared a Class 5 estimate, BDFs, and a high level schedule for producing diesel using sales condensate at the Karr facility.

Seven Generations – Kakwa

- Installation of six (6) 3000 barrel condensate storage tanks.

Seven Generations – Kakwa

- Modification of the Seven Generations Super Pads (2, 4 and 29) condensate pumping systems design to include a recycle scheme required to maintain a steady outlet flowrate of condensate to the Seven Generations Karr Battery (07-11-064-04 W6M).

Seven Generations – Lator

- Installation of six (6) 3000 barrel condensate storage tanks.

Shell Canada – Montney 4 Gas Plant

- Slug Finger Tie-In

Shell Canada – Sunset, British Columbia

- Gas Liquids Engineering Ltd. (GLE) completed engineering work on a 198 MMSCF/d sweet natural gas facility for Shell in 2012. The facility was to be named Sunset 1, and was to be located near Fort St. John, British Columbia. Although the Sunset 1 facility was never built, a sour gas facility (called Saturn) was engineered by GLE utilizing similar engineering practices.

Talisman Energy Inc. – Limewire

- Condensate handling study.

Tom Brown Resources Ltd. – Carrot Creek

- Utility heat for condensate stabilizer

Transgas Limited – Coleville, Saskatchewan

- Install 3" (previously 2") truck-out and vapour return lines.

Wascana Energy Inc. – Balzac, Alberta

- Trim Amine Reboiler condensate pot.