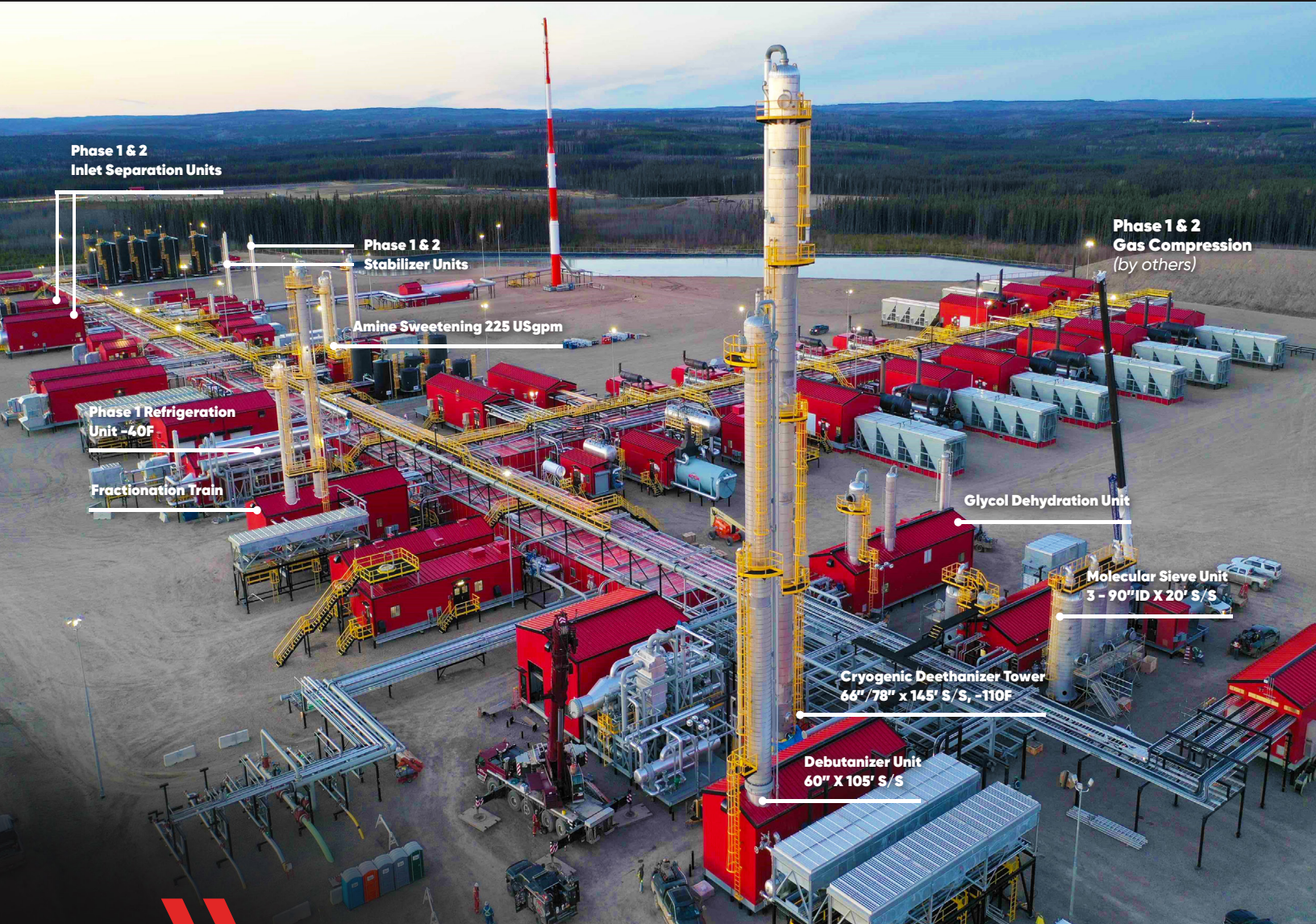




Project Profile

180 MMSCFD Gas Processing Plant



Phase 1 & 2
Inlet Separation Units

Phase 1 & 2
Stabilizer Units

Amine Sweetening 225 USgpm

Phase 1 Refrigeration
Unit -40F

Fractionation Train

Phase 1 & 2
Gas Compression
(by others)

Glycol Dehydration Unit

Molecular Sieve Unit
3 - 90" ID X 20' S/S

Cryogenic Deethanizer Tower
66" / 78" x 145' S/S, -110F

Debutanizer Unit
60" X 105' S/S



Project:

Nig Creek Gas Plant

Customer:

Tourmaline Oil (formerly Black Swan Energy)

Location:

British Columbia, Canada

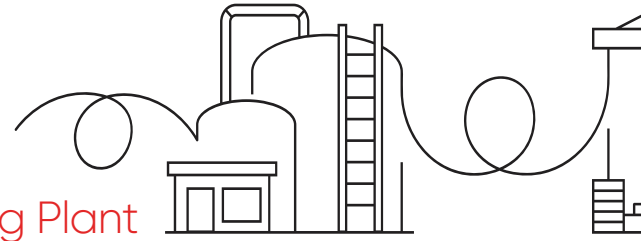
Year:

2021



Project Profile

180 MMSCFD Gas Processing Plant



Objective

To design and manufacture modular gas processing equipment to process 180 MMSCFD of raw sour inlet gas into sales gas, sales LPG, and sales condensate at the Nig Creek Gas Plant.

Solution

ALCO's Role:

ALCO designed, manufactured, and supplied the below mentioned modular products and services for this gas processing facility.

Products Supplied:

- **Inlet Separation:** Two (2) 100 MMSCFD units to efficiently separate raw sour gas from hydrocarbon condensate, produced water, and solid components.
- **Condensate Stabilization:** Two (2) 2,500 BPD stabilizers producing sales-grade condensate.
- **Amine Sweetening:** One (1) 180 MMSCFD unit for H₂S and CO₂ removal, with a solvent circulation rate of 225 USGPM.

- **Glycol Dehydration:** One (1) 180 MMSCFD unit for bulk removal of water vapour from sweet gas down to 10 lb/MMSCF.
- **Molecular Sieve Dehydration:** Three (3) tower 180 MMSCFD unit, including regeneration gas heater, outlet dry gas dust filter and mercury guard bed, lowering water content to 4 ppmv for cryogenic processing.
- **Shallow Cut NGL Recovery:** 100 MMSCFD propane refrigeration unit for Phase 1, including de-ethanizer and de-butanizer trains.
- **Deep Cut NGL Recovery:** 180 MMSCFD unit for Phase 2, including a brazed aluminum heat exchanger, turbo expander-compressor, cryogenic de-ethanizer and a 9,500 BPD de-butanizer utilizing the GSP process.

Conclusion

Both phases of the project were designed, built, and delivered on schedule; Phase 1 in 12 months and Phase 2 in 14 months—demonstrating ALCO's commitment to efficient execution and reliable project delivery.

180
MMSCFD
Inlet Gas Flow Rate

4 PPM
Maximum H₂S Content

7,139 BPD
Mixed LPG (C₃/C₄)

6,479 BPD
Condensate (C₅+)

95%
Propane (C₃) Recovery