



Aux Sable Canada Inc - Whitecourt

- Conceptual, DBM and front end design of a 4,000 bbl/d fractionation and truck unloading facility.

Gibson Petroleum Company Ltd. - Edmonton

- Engineering of the design, specification, and selection of mechanical equipment and piping installations for a 14,300 BPD MTBE (gasoline additive) loading facility for twenty-two railcars. The MTBE storage tank was a 20,000 bbl, API 650 floating deck, permanent roof design. The scope included a VRU and a gathering system for odor abatement.

Kinetic LPG - Alberta

- Preliminary design and cost estimation of a “rail in / truck out” propane terminal, consisting of eight-spot rail unloading rack, nine propane storage tanks, truck loading station, loading pumps, propane vapor compressors, and associated utility and safety facilities.

Plains Marketing - Canada

Central Alberta

- Detailed engineering and project management for a 30,000 m³/month (6,300 bbl/d) crude oil blending facility for a truck terminal.

Furness

- Detailed engineering and project management for the installation of a LACT unit, pumps, motor control center and associated piping.

Harmattan

- Detailed engineering and project management for the installation of 30 kilometers (20 miles) of dual 114 mm (4") and 168 mm (6") steel pipelines and associated butane and condensate pumping and metering equipment (LACT).

Medicine River

- Detailed engineering and project management for 1000 m³/day (6,285 bbl/d) crude oil pumping, metering facility, satellite station and tie in (LACT) for Alberta Clipper.

Nipisi

- Detailed engineering and project management for the truck terminal and storage tank expansion comprised of 30,000 m³/month (6,300 bbl/d) crude oil blending facility c/w 3000 bbl storage tanks, pumps, butane bullets, 80,000 bbl, 55,000 bbl tanks and foundations, heavy crude pipeline modifications and major civil upgrades.

Sturgeon Lake

- Detailed engineering and project management for and extensive FEED for a 20,000 m³/month (4,200 bbl/d) crude oil blending facility for Kereco

Sundre

- Detailed engineering and project management for major tank manifold modifications to crude oil storage, pumping, metering, on a 63,000 m³ (396,000 bbl) blending facility.
- Detailed engineering and project management for incinerator upgrade including blowers, detonation arrestors, piping and controls to three additional oil tanks.

Polish Oil and Gas Company - Debno, Poland

- Design basis memorandum and project specifications for a 45,000 SCM/Hr sour gas plant including fractionation and sulphur plants. Economic evaluation of 200 cum/d fractionation train options.
- Project management of a US \$70 million gas plant development involving 21 wells and the production of 45 MMSCFD gas, 6000 BPD oil, 120 t/d sulphur, 600 BPD LPG and 200 BPD condensate.
- Fabrication and construction inspection.
- Pipeline gathering system design and evaluation.
- HAZOP evaluation. Start-up and operations support. Training – plant management and Dębno Plant Operations personnel.
- Conceptual design and design review of Barnówko Oil Terminal which had the capacity to load six rail cars simultaneously with crude oil or liquid sulphur.



Polish Oil and gas Company – Dębno, Poland

Solex Energy Inc.(now Altagas) - Harmattan

- Design, equipment specifications as well as procurement for the \$1.5 M addition of a new 10,000 B/D (two pumps) NGL unloading and 5,000 B/D condensate loading facility to the existing Harmattan Gas Plant. The NGL unloading facility was designed for unloading 3 trucks simultaneously. The Terminal Boss™ control systems developed by Kilowatt Design Company Inc (alliance Partner) was used for NGL unloading and condensate loading control. This is a sophisticated, state-of-art software and integrated database designed specifically for terminals of this type.
- Design, equipment specification as will as procurement for adding a new CO₂ recovery facility to the existing Harmattan Gas Plant. The CO₂ production capacity is 9,000 kg/h. The project includes CO₂ filtration, sweetening, dehydration, refrigeration, storage and truck loading facility.
- Converted surplus equipment and piping into a 600 bbl/d frac oil system.
- Design and project management for the addition of an inlet separator package to the existing Harmattan Gas Processing Plant. The package is sized to process 55 MMSCFD of sour natural gas.

Suncor Inc. - Lagarde, BC

- Oil battery expansion to accommodate additional 485 BOPD, 398 BPD water and 2.45 MMSCFD of associated gas. The new facilities comprised of a treater skid c/w inlet group separator, four oil storage tanks, two water storage tanks, a pop tank, gas compression and dehydration, a flare stack and K.O. drum, office/warehouse/ MCC trailer, pipeline and meter skid.