

PROJECT PROFILE

Company:	AltaGas (Alton Natural Gas Storage LP)
Application:	Self-Contained Nitrogen Generator Package
Project:	Alton Underground Natural Gas Storage Caverns
Location:	Alton, Nova Scotia



THE PROJECT:

To help meet the fluctuating demand for natural gas in Nova Scotia, AltaGas, through their subsidiary Alton Natural Gas Storage LP, developed an underground cavern natural gas storage facility.

To form the caverns, water is injected with high pressure pumps, into each of the wells to dissolve the salt deposits and create the large underground storage chambers.

When the project required a self-contained "plug and play" nitrogen generation package, they looked to Applied Compression Systems.

The injected nitrogen floats on top of the water during this salt-dissolving process to prevent the pumped-in water from deteriorating the top of the cavern.

Working with Advanced Gas Technologies and AltaGas engineers, Applied Compression designed and fabricated a turn-key package consisting of a rotary screw feed-air compressor, nitrogen generator, buffer tanks and a high-pressure booster compressor all housed inside a cold climate enclosure.

The package produces 170 SCFM of nitrogen with a purity of 97%, and injects it into the cavern at a pressure of 1300 PSIG.

ABOUT APPLIED COMPRESSION SYSTEMS LTD.:

Applied Compression offers a full range of both PSA and membrane type nitrogen generators, with a strong focus on complete self-contained modules ready for plug and go operation.

These ready-to-use nitrogen generator packages typically include the following:

- Feed Air Compressor (Lubricated or Oil-Free)
- Compressed Air Filtration System
- Compressed Air Dryer
- Compressed Air Storage Tank
- PSA or Membrane Type Nitrogen Generator
- Discharge Particulate Filter
- Nitrogen Buffer Tank
- Nitrogen Booster Compressor (Optional)
- PLC or Microprocessor Based Control Panel
- Carbon or Stainless Steel Process Piping
- Weather Proof or Cold Climate Enclosure (Optional)
- Detailed Package Engineering and Design
- CAD Drawings
- Project Documentation