

**Phoenix Equipment Corporation** 130 Maple Ave, Unit 4A, Red Bank, NJ, 07701 www.phxequip.com



# **Natural Gas Refrigeration System - 450 MCFD**

Capacity: 450 MCFD

Raw Materials: Natural Gas

### **Major Equipment:**

#### Unit 1:

- Suction Scrubber V101
- Compressor Intercooler E101
- Interstage Scrubber V103
- Compressor Aftercooler E102
- NGL Product Cooler E103
- Compressor C101

#### Unit 2:

- Seperator V104
- NGL Tower V106
- NGL Heater V107
- Gas/gas Heat Exchanger E104
- Gas/liquid heat Exchanger E105
- Gas chiller E106
- Cold Gas Seperator V105
- Fuel Scrubber V108
- Methanol Storage Tank T100
- Methanol Injection Pump and Motor P101 & PD101
- 18000 Gallon NGL Storage Tank

#### Unit 3:

- Power generator
- Engine
- Air compressor

## **Brief Plant Description**

Used 450 MCFD natural gas refrigeration system. The plant is designed by Toromont Energy Systems. Consisted of the following components: Unit 1: 125 BHP two stage natural gas compressor, manufactured by Ariel. Model JG, 1200 RPM electric motor, Inlet Scrubber, Interstage Scrubber, 1st and 2nd stage Coolers, 800 psig Discharge Separator and Allen Bradley PLC that controls the gas plant.

Unit 2: 450+ MCFD mechanical refrigeration unit with 3-phase electric compressor manufactured by Copeland. Gas chiller, gas/gas exchanger, gas/ liquid exchanger, 725# 3-phase cold separator, 8" x 35' NGL stabilizer tower with 24? x 3' electric reboiler, methanol injection pump, inlet 3-phase 800 psig separator and fuel gas scrubber. Unit 3: 301KW - 480V Dual Fuel Generator, manufactured by Wagner Power Systems with 425 BHP Caterpillar G3408TA engine and 2 BHP Champion air compressor. Pneumatic control systems for all (3) units.