FORT ENERGY CORPORATION 8B REFRIGERATION UNIT FORT ASSINIBOINE, ALBERTA

LSD: 15-10-62-06-W5M

SEPTEMBER, 2005

S.O.#: 054468

VOLUME 1

K-690.



Last Ran fall 2013. Jotal his 53 900. Lost service 50 600.

FIELD SERVICES GROUP

Propak's Field Services Group, a part of the Compression and Field Services Department, provides complete field services for all your gas processing needs.

> Compressor revamps - 600 P8WB, 150 HP.
> Exchanger Re-tubing & Renairs

Vessel Repairs & Modifications

Maintenance & Repairs

Piping Modifications & Repairs

> Tower Inspections & Re-traying

Aerial Cooler Repairs

Turnaround Planning

Plant Mothballing

Operator Training

Plant Troubleshooting

Extensive Parts Inventory

Mycom Compressor Parts & Services

> Direct Fired Heater Coil, Burner, Refractory Repairs

Direct Fired Heater Re-rating & Burner Management

Engineering Feasibility & Plant Optimization Studies

AVAILABLE 24 HRS

QUALITY PRODUCTS AND SERVICE

Contacts: Service 403-912-7250 Ken Jeske Office:

> Cell: 403-818-0889

403-948-5470 Home:

1-800-408-4434 (Canada & US) Toll Free: Phone Service: 403-912-7000

3. BASIS OF DESIGN

3.1 <u>Design Basis</u>

The plant has been designed on the basis of the following inlet conditions, flowrates and analysis.

Gas flowrate:

339.8 x 10 ³ M3 (12.0 MMSCFD)

(does not include recycle gas)

Inlet Pressure:

4800 kPa(g) (696 psig) (Fridge Plant)

Inlet Temperature:

normal 48.8°C (120 °F)

LTS Temperature:

-21°C (-5°F) @ 12 MMSCFD

Equipment Design:

8963 kPa(g) @ -28.8 / 66°C (1300 psig)

INLET GAS COMPOSITION (mole percent)

H2O	Saturated	
HE	0.03	
N2	0.90	
CO2	2.00	
C1	90.37	
C2	4.51	
C3	1.33	
I-C4	0.25	
N-C4	0.26	
I-C5	0.10	
N-C5	0.08	
C6	0.08	
C7	0.09	
C8	Trace	
C9	Trace	
C10	Trace	
Cyclopentane	0.00	
140	0.00	

MCyclopentane 0.00

Mcyclohexane 0.00

TOTAL

100.00

FORT ENERGY CORPORATION 6B STOCK REFRIGERATION PLANT

CORBETT GAS PLANT

LSD: 15-10-62-06 W5M

OCTOBER, 2004

S.O.#: 043167

K-640.



Product and Field Services Group

ENGINEERS, FABRICATORS & CONSTRUCTORS FOR OIL & GAS PROCESSORS

PROCESS | PARTS | SERVICE

Toll Free: 1-800-408-4434 Phone: 403-912-7000 Fax: 403-912-7252

Email: parts@propaksystems.com
Web: www.propaksystems.com
Service: Pat Randall 403-912-7257

prandall@propaksystems.com
Parts: Sean Corcoran 403-912-7367
scorcoran@propaksystems.com

Propak Compression's Product and Field Service group provides complete field services for all of your gas processing needs, including:

Engineering feasibility and plant optimization studies

Plant troubleshooting

Plant mothballing

Turnaround planning

Operator training

Maintenance and repairs

Vessel repairs and modifications

Exchanger re-tubing and repairs

Aerial cooler re-rating and repairs

Direct fired heater re-rating and burner management

Direct fired heater coil, burner and refractory repairs

Tower inspections and re-traying

Piping modifications and repairs

Extensive parts inventory

Mycom screw compressor parts and service

Compressor revamp

Currently running.

0 73100 ms.

*** ALL YOUR PROCESS PARTS & SERVICE NEEDS ***

PARTS AND SERVICE: 24 HOURS A DAY | 7 DAYS A WEEK | 52 WEEKS A YEAR

WITH PROPAK COMPRESSION YOU CAN EXPECT MORE AND SPEND LESS

Revised: January 12, 2004

3.3 Product Specifications

Propak Systems Ltd., based on the inlet conditions, guarantees the following product specifications, flowrates and analysis stated earlier. Product rates may vary \pm 5% due to uncertainty in equilibrium calculations.

Residue Gas Volume:

Residue Gas Dewpoint:

Residue Gas Temperature:

Residue Gas Pressure:

Stabilized Volume:

C5+ RVP:

C5+ Temperature:

7.9 MMSCFD

under 15°F @ 800 psig

under 120°F

(Maximum plant

pressure drop 35 psig)

9.5 BBLS/D @

865 psig operating.

12 psia @ 100°F

120°F or less