

**FORM U-3 MANUFACTURER'S CERTIFICATE OF COMPLIANCE  
COVERING PRESSURE VESSELS TO BE STAMPED WITH THE UM SYMBOL, SEE U-1(j)  
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1**

1. Manufactured and certified by PROPAK SYSTEMS LTD, 505 EAST LAKE BLVD, AIRBORNE ALBERTA T4B 2C3 CANADA  
(Name and address of Manufacturer)  
Manufactured for Fort Energy Corp. C/O Bower Damberger Rolseth Engineering Ltd. 1300,401-9th Ave. SW Calgary AB T2P 3C5  
(Name and address of Purchaser)

3. Location of installation Fort Assiniboine, AB., LSD: 15-10-62-06-W5M  
(Name and address)

4. Type Vertical Carbon Filter 1.8 cu.ft. 054468-114  
(Horz., vert., or sphere) (Tank, separator, etc.) (Capacity) (Mfg's. serial No.)  
P-0718.213 2005  
(CRN) (Drawing No.) (Year built)

5. ASME Code, Section VIII, Div. 1 2001, 2003 N/A  
(Edition and Addenda (date)) (Code Case No.)

6. Shell (a) No. of course(s): 1 (b) Overall length (ft & in.): 2' - 6.7"

Course(s) No.	Diameter, in.	Length (ft & in.)	Material		Thickness		Long Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment		
			Spec./Grade or Type	Nom.	Corr.	Type	Full	Spot	None	Eff.	Type	Full	Spot	None	Eff.
1	11.374"	2' - 6.7"	SA-106-B	0.688"	0.0625"	SMLS	None	1.0	7	None	1.0	N/A	N/A		

7. Heads: (a) SA-516-70N (b) SA-516-70N  
(Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.) (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A				
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full	Spot	None	Eff.
(a) Top	0.875"	0.0625"						1'-5.4" o/d							
(b) Bottom	0.875"	0.0625"						1' - 4" sq							

If removable, bolts used (describe other fastening) 8 - 0.625" Studs, SA-193-B7, c/w (1) Hex Nut Ea., SA-194-2H, 8 Round Bar Pins 1.437" SA-36 / "  
(Mat'l Spec. No., Grade, Size, No.)

8. Type of Jacket Jacket Closure  
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions; if bolted describe or sketch

9. MAWP 145 psi at max. temp. 200 °F. Min. design metal temp. -20 °F at 145 psi.  
(internal) (external) (internal) (external)

Impact test No - UG20(f) 1-5 at test temperature of \_\_\_\_\_ °F.  
(Indicate yes or no and the component(s) impact tested)

11. Hydro., ~~pass~~, ~~essent~~ test press. 189 psi Proof test \_\_\_\_\_

12. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Spec.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet, Outlet	2	1"	TOL	SA-105N		CL3000	0.0625"	Integral		UW16.1(a)	Shell
Drain	1	0.5"	CPLG	SA-105N		CL3000	0.0625"	Integral		UW16.1(c)	Shell
Vent	1	0.75"	TOL	SA-105N		CL3000	0.0625"	Integral		UW16.1(a)	Top Head
DPI	2	0.5"	TOL	SA-105N		CL3000	0.0625"	Integral		UW16.1(a)	Shell

13. Supports: Skirt No Lugs N/A Legs N/A Others \_\_\_\_\_ Base Plate \_\_\_\_\_ Attached \_\_\_\_\_ Shell - Welded \_\_\_\_\_  
(Yes or no) (No.) (No.) (Describe) (Where and how)

14. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: (List the name of part, item number, mfg's. name and identifying number)

15. Remarks: Built to Drawing D-FLT-054468-114 SHTS 1/2 Rev 1, \* D-FLT-REF250-112 Shts 1 Rev 4

Tag F-602, \*\* 16 Swing Bolt Lugs 0.375 Thick SA-516-70N

Pressure Relief Devices installed by others prior to operation per UG-125.

**CERTIFICATE OF SHOP COMPLIANCE**

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

UM Certificate of Authorization No. 21,628 Expires 11/12/2006

Date 9/01/2005 Name PROPAK SYSTEMS LTD. Signed \_\_\_\_\_  
(Manufacturer) (Representative)

Signed \_\_\_\_\_  
(Individual)

133008

## Pressure Vessel Calculation-Procedure

**AREA:** North Corbett

**LSD:** 15-10-62-06W5

**A#:** S/N 054468-114

**Shell** SA-106B

	<b>Nominal Thickness (inches)</b>	0.688
	<b>Corrosion Allowance</b>	0.0625
<b>Variable</b>	<b>Lowest Measured (inches)</b>	0.675
<b>R</b>	Internal Radius (inches)	5.687
<b>S</b>	Max Allow Stress (psi)	17100
<b>E</b>	Joint efficiency	1
<b>P</b>	Design Pressure (psi)	145
	Minimum Req Thick (inches)	0.05
	Minimum Req Thick (mm)	1.2

$$t = \frac{PR}{SE-0.6P}$$

**COMMENTS:**

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