

**Canadian Natural Resources Limited  
GENERAL PRESSURE VESSEL INFORMATION**

**Job # 05.002851**

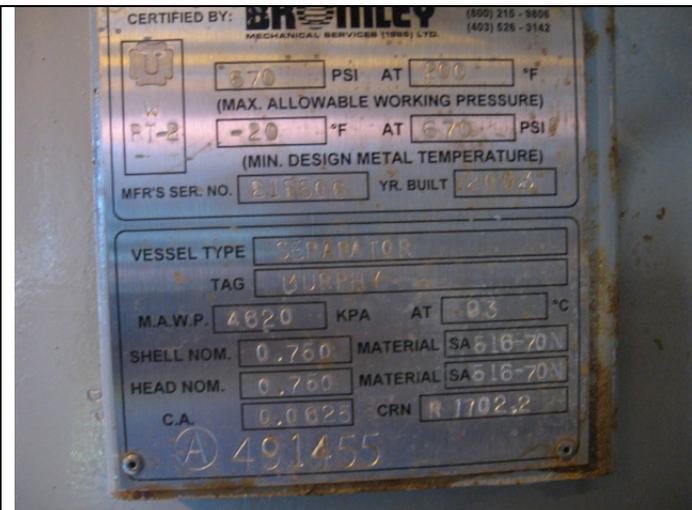
District: <b>Ft St John, B.C.</b>		Skid No.				
Facility: <b>Ladyfern Compressor Station</b>		Location (LSD): <b>10 – 19 – 94 – 12 – W6M</b>				
Vessel Name & Equipment Number: <b>Inlet Separator</b>						
Orientation: <b>Vertical</b>						
Status: <b>Operating</b>		<b>Regulatory Inspection</b>				
<b>PRESSURE VESSEL NAMEPLATE DATA</b>						
Registration Number <b>A 491455</b>		CRN Number R 1702.2				
Vessel serial number: 215508		Size: 36 in. OD x 8 ft				
Shell thickness: 19.1 mm		Shell material: SA 516 70				
Head thickness: 19.1 mm		Head material: SA 516 70				
Tube wall thickness:		Tube material:				
Tube diameter:		Tube length:				
Channel thickness:		Channel material:				
Design pressure	Shell: 670 PSI	Operating pressure	Shell:			
	Tube:		Tubes:			
Design Temp.	Shell: 200 deg F	Operating temperature	Shell:			
	Tube:		Tubes:			
X-ray: RT 2		Heat treatment: Nil				
Code parameters: ASME VIII / Div 1		Coated: No				
Manufacturer: Bromley		Year built: 2003				
Corrosion allowance: 1.6 mm		Man way: No				
<b>PRESSURE SAFETY VALVE NAMEPLATE DATA</b>						
<b>PSV Tag no.</b>	Manufacture	Model	Serial number	Set Pressure	Capacity	Size
7748 F	Farris	27CA33-A120	449984-3-KE	670 PSI	822 scfm	1 x 1
<b>Service By</b>	Date	Block Valve	CRN number	Code Stamp	Location	
<b>Unified</b>	03-14-2008	No	Not Stated	UV	Upper Shell	
<b>SERVICE CONDITONS-INDICATE ALL THAT APPLY</b>						
Sweet X	Sour	Oil	Gas X	Water X		
Amine	LPG	Condensate X	Air	Glycol		
Other (Describe):						

**Inspection Interval** \_\_\_\_\_ **PSV Service Interval** \_\_\_\_\_  
 (Determined by MIC in conjunction with Chief Inspector following guidelines of CNRL's Owner-User Inspection Program)

Reports reviewed and accepted by:  
**Mechanical Integrity Coordinator** \_\_\_\_\_ **Date** \_\_\_\_\_

Fill out all forms as completely as possible. All information is important! Use back of sheets to record additional information or sketch if required.  
 Copy of report to be filed by MIC at site, and copy sent to Chief Inspector

<b>External Inspection Items</b>	<b>G</b>	<b>F</b>	<b>P</b>	<b>N/A</b>	<b>Comments</b>
<b>Insulation:</b> Verify sealed around man ways, nozzles, no damage present, and there is no egress of moisture.				X	This vessel is not insulated.
<b>External Condition:</b> Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				Paint in good condition - no loose or flaking paint.
<b>Leakage:</b> Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaks detected.
<b>Skirt:</b> Assess condition of paint, fire protection, concrete. Look for corrosion, buckling, dents, etc. Look at vessel surface area near supports. Verify no signs of leakage at attachment to vessel and attachment welds are acceptable. Ground wire attached?	X				Skirt – good condition, no distortion or buckles – no leaks at skirt to shell weld. Paint is in good condition – no exposed metal. Skid Package is grounded.
<b>Anchor Bolts:</b> Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Firmly bolted to skid deck.
<b>Concrete foundation:</b> Check for cracks, spalling, etc.				X	
<b>Ladder / Platform:</b> Describe general condition, ensure support is secure to vessel, describe any hazards.				X	
<b>Nozzle:</b> Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				All studs fully engaged to nuts on bolted fittings. Threaded fittings – fully engaged. No deflection of nozzles. No gussets.
<b>Gauges:</b> Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/Temp.	X				Pressure gauge: 0 to 1000 psi. Temperature gauge: 0 to 250 deg F. Gauges cover range listed on data plate.
<b>External Piping:</b> Ensure pipe is well supported. All clamps, supports, shoes, etc. in place. Look for evidence of structural overload, deflection, etc. Paint condition, external corrosion?	X				Firmly supported, no deflection, no loose or missing clamps. Paint is in good condition – no exposed metal.
<b>Valving:</b> Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				Well supported, no leaks.
<b>PSV:</b> Ensure PSV is set at pressure at or below that of vessel.	X				Located on upper shell – set at MAWP of vessel. Seal intact. No block valve. Inlet and discharge piping is same size as orifice.
<b>NDE methods:</b> Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness survey carried out – no metal thickness detected below nominal minus corrosion allowance.
<p><b>Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required)</b> (MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented)</p> <p><b>Recommendations:</b> 1. No recommendations at this time.</p> <p><b>Summary:</b> This vessel is in good condition, visual external and ultrasonic corrosion survey carried out – no metal thickness detected below nominal minus corrosion allowance.</p> <p><b>Vessel is fit for service.</b></p>					



Data Plate

Over view



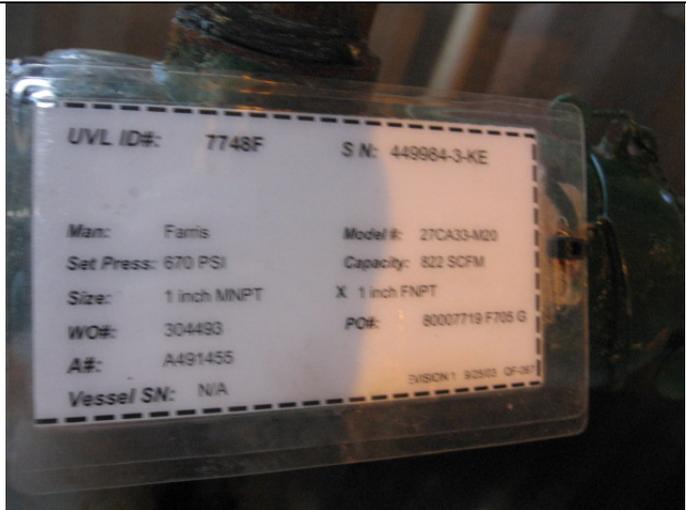
Skirt bolting

Temp gauge



Pressure gauge

PSV location



PSV service tag