

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

Job# 10.110181

District: Fort St John, B.C.	Skid No.
Facility: Drake LadyFern Compressor	Location (LSD): c-10-J/94-H-01
Vessel Name Equipment Number: Line Heater	
Orientation: Horizontal	
Status: Not in Service – Inventory only	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

“A” or “G” or “S” (Sask.) or BC Registration Number. C23331		CRN Number: P-3216-21	
Vessel serial number: 00-2163-1		Size: 30 in. x 90 in.	
Shell thickness: 6.4 mm		Shell material: SA 36	
Head thickness:		Head material:	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: Atmospheric	Operating pressure	Shell:
	Tubes: 3875 kPa		Tubes:
Design Temp.	Shell: 93°C	Operating temperature	Shell:
	Tubes: 93°C		Tubes:
X-ray: Full		Heat treatment: Yes	
Code parameters:		Coated: No	
Manufacturer: Bimac Ind. Ltd.		Year built: 2001	
Corrosion allowance: N/S		Manway: No	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag Shell	Manufacture // Model // Serial	Set Pressure (PSI / kPa)	Capacity (scfm / usgpm)	Block Valve	Size	Location	Service by / Date
PSV Tag Tube	Manufacture // Model // Serial	Set Pressure (PSI / kPa)	Capacity (scfm / usgpm)	Block Valve	Size	Location	Service by / Date

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	Oil	Gas X	Water
Amine	LPG	Condensate	Air	Glycol X

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

External Inspection Items	G	F	P	N/A	Comments
Insulation Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.	X				No damage present- sealed around nozzles and saddles. No egress of moisture. Straps are secure and in place.
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				Paint in good overall condition – No exposed metal.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaks observed.
Saddle/Skirt 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				Saddle: welded directly to skid frame. Skid sits on wood rig mat No buckling or dents. No corrosion at attachment welds to vessel. No Ground wire attached to skid
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Anchor bolts are securely fastened. No deformation.
Concrete foundation Check for cracks, spalling, etc.				X	
Ladder / Platform Describe general condition, ensure support is secure to vessel, describe any hazards.				X	
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				Stud threads are fully engaged to nuts. No leaks observed. No damage or deflections. Nozzles are not gusseted.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.				X	No gauges on vessel.
External Piping 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				Process Piping is removed – Fuel Gas Piping remains attached - all clamps and supports are in place. No structural overloads or deflections. Paint in good condition- no exposed metal.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				No leaks are visible- Valves are supported properly.
PSV Ensure PSV is set at pressure at or below that of vessel.				X	No PSV
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness survey carried out – no corrosion or pitting detected.
Other					
<p>Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required) (MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented) Recommendations: No recommendations at this time Summary: Vessel is in overall good condition, visual external inspection and ultrasonic thickness survey carried out - no corrosion or pitting detected. Vessel is fit for service.</p>					

Inspected By: Andrew Neis / Dellas Wiedman

Date: Sept 28, 2011



Data plate



Vessel overview



Skid not Grounded



Process Piping disconnected