

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

Job 10.112838

District: Fort St. John North	Skid No.
Facility: Daiber Compressor Station	Location (LSD): c-76-D/94-B-16
Vessel Name Equipment Number: Line Heater	
Orientation: Horizontal	
Status: In Service	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. A0434831		CRN Number: N 5049.21	
Vessel serial number: 0001137-150		Size: 30 in. x 133 in	
Shell thickness: 6.4mm		Shell material: SA 36	
Head thickness: 6.4mm		Head material: SA 36	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 8 oz.	Operating pressure	Shell:
	Tubes: 1350 PSI		Tubes:
Design Temp.	Shell: 200 °F	Operating temperature	Shell:
	Tubes: 200 °F		Tubes:
X-ray: RT 4		Heat treatment: No	
Code parameters: ASME B31.3		Coated: not stated	
Manufacturer: NUSCO		Year built: 1997	
Corrosion allowance: 3.2		Manway: No	

PRESSURE SAFETY VALVE NAMEPLATE DATA

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

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	Oil	Gas X	Water X
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				Tin cladding in good overall condition – staining occurring to 30% of top shell area - no open or torn section – sealed around nozzles – no egress of moisture
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 corrosion – no damage
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, and 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 in good overall condition: bolted directly to skid frame – no corrosion – no buckling or dents - no sign of leaking – skid sits on wood blocks – no ground wire attached to skid
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Vessel is securely bolted to skid floor – no sign of deformation
Concrete foundation Check for cracks, spalling, etc.				X	None
Ladder / Platform Describe general condition, ensure support is secure to vessel, and describe any hazards.				X	None
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				Nozzle paint in good condition – all stud threads fully engaged – no leaks – no damage or deflection – nozzles are not gusseted
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				Gauges clean and functional – within range for service: 0 – 2000 PSI and -40 – 160 °F
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				Piping is well supported – all clamps in place – no evidence of structural overload – no deflection – paint in good condition – no corrosion
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				Valves properly supported – no sign of leaking
PSV Ensure PSV is set at pressure at or below that of vessel.	X				No PSV – thief hatch on top of column
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)				X	No NDE at this time.
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: Attach grounding wire to skid Summary: This vessel is in good condition, visual external inspection carried out - no items of concern. Vessel is fit for service.</p>					

Inspected By: Andrew Neis / D. Wiedman

Date: March 6, 2013



LSD



Overview



Data Plate



Burner overview



Pressure gauge



Temperature Gauge