

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

Job # 105.001609

District: Fort St. John BC	Skid No.
Facility: Lagarde Compressor Stn.	Location (LSD): 01-21-87-15-W6M
Vessel Name Equipment Number: Glycol Contactor	
Orientation: Vertical	
Status: In Service	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. A3182406		CRN Number: M 2316.21	
Vessel serial number: 988306-OREL/01-2674-1861		Size: 24 in. x 32 ft.	
Shell thickness: 28.6 mm		Shell material: SA 516-70N	
Head thickness: 27.0 mm		Head material: SA 516-70N	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 1440 PSI	Operating pressure	Shell: 0- 1500 PSI
	Tubes:		Tubes:
Design Temp.	Shell: 130 Deg F	Operating temperature	Shell: 0 – 250 Deg F
	Tubes:		Tubes:
X-ray: RT 1		Heat treatment: Yes	
Code parameters: ASME VIII, Div 1		Coated: no	
Manufacturer: Hanover Wells-Hall Fabrication		Year built: 1996	
Corrosion allowance: 3.2 mm		Manway: no	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
15935FV	Consolidated	1912FC-1-1-1-1-1	89C1578	1100 PSI	7146	04/10
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
O1832.52	Unified Valve	no	Lower shell	1.5"x 2"	UV/NB	

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	Vessel not insulated
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				Skirt: bolted directly to skid floor. No buckling or dents. No corrosion at attachment welds to vessel. 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 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				Clear and clean – no leakage Suitable for range of MAWP/Temperature Pressure gauge 0 – 1500 PSI Temperature gauge 0 – 250 Deg 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 and supports are in place. No structural overloads or deflections. Paint in good condition
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				Location: lower shell of vessel set below MAWP of vessel. Discharge piping is larger than valve outlet. PSV is not registered for us in British Columbia.
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness survey carried out – no metal thickness detected below nominal.
<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: The PSV appears to be registered for use in Ontario and Alberta, confirm suitability for service in British Columbia. Summary: Vessel is in overall good condition, visual inspection and ultrasonic corrosion survey performed—no metal thickness detected below nominal. No corrosion rate to assess. Vessel is fit for service.</p>					

Inspected By: Brent Agrey

Date: February 14, 2011



LSD



Vessel name plate



Vessel overview



Vessel overview



Temp. gauge



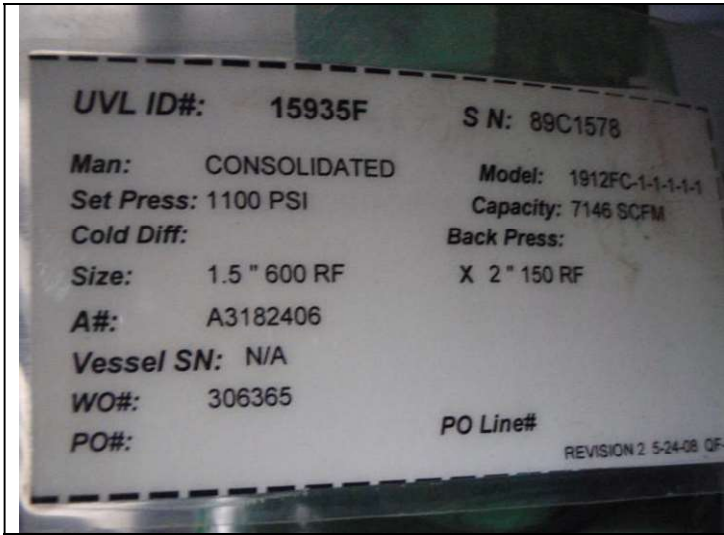
Pressure gauge



Site glass



PSV data tag



PSV service tag



PSV service tag