

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

Job # 10.110421

District: Ft. St. John B.C.	Skid No.
Facility: Rigel Compressor Station	Location (LSD): d-75-A/94-A-15 W6M
Vessel Name Equipment Number: Glycol Dehy	
Orientation: Vertical	
Status: In Service	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. A0462522		CRN Number: P 0622.21	
Vessel serial number: 01441-108		Size: 24.0 in. X 26.0 ft.	
Shell thickness: 25.4 mm		Shell material: SA516 70N	
Head thickness: 23.8mm		Head material: SA516 70N	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 1480 PSI	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: 100 F	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: RT 2		Heat treatment: HT	
Code parameters: ASME VIII, Div 1		Coated: no	
Manufacturer: Propak Systems		Year built: 2001	
Corrosion allowance: not stated		Man way: no	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (KPa)	Capacity (scfm)	Service Date
	Mercer	8133251T125G21	69597	1000 PSI	8037	06/10 2011
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
OG2606.5C	Unified Valve	No	Lower shell	1.5 x 2.0	UV/NB	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	Oil	Gas X	Water
Amine	LPG	Condensate X	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** _____

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			Roof seal is leaking. 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 is blistered. No signs of damage or distortion.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No signs of leaking.
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				Skirt is welded to lower head. No signs of cracking or leaking at welds. No signs of buckling Vessel grounded through the skid package.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Secured.
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				Studs are fully engaged. Threaded fittings are secure.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				Liquid level gauge is clear and working.
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				Well supported. No signs of deflection. No leaks.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				Well supported – no leaks.
PSV Ensure PSV is set at pressure at or below that of vessel. Discharge piping is same size as inlet to valve and is properly supported and routed. Ensure no block valves between PSV and vessel or if there are they are locked open.	X				Located on lower shell. Set pressure is below MAWP. Seal intact. No block valve.
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic corrosion survey carried out – no metal thickness detected below nominal minus corrosion allowance.
<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)</p> <p>Recommendations: 1. None at this time.</p> <p>Summary: This vessel is in good condition, visual external and ultrasonic thickness inspection carried out – no metal thickness detected below nominal minus corrosion allowance.</p> <p>Long term corrosion rate based on greatest thickness loss – no corrosion rate to assess.</p> <p>Vessel is fit for service.</p>					



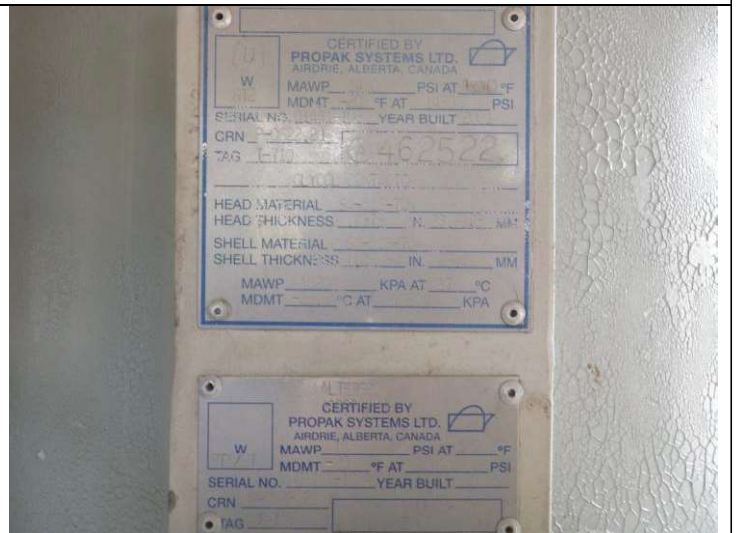
LSD



Overview



Overview



Data Plate



PSV



PSV Data Tag



PSV Data Plate



PSV Data Plate



Roof Seal leaking



Paint blistered