

Canadian Natural Resources Ltd. GENERAL PRESSURE VESSEL INFORMATION							Job# 105.01000
District: Fort St. John, BC				Skid No. Line Heater Building			
Facility: BEG Main Compressor Station				Location (LSD): b-13-B / 94-G-01			
Vessel Name Equipment Number: Fuel Gas Scrubber							
Orientation: Vertical							
Status: In Service				Regulatory Inspection			
PRESSURE VESSEL NAMEPLATE DATA							
"A" or "G" or "S" (Sask.) or BC Registration Number. A0408372				CRN Number: K-9874.231			
Vessel serial number: 60564-200				Size: 24 in. x 60 in.			
Shell thickness: 9.5 mm				Shell material: SA 516 70N			
Head thickness: 9.3 mm				Head material: SA 516 70N			
Tube wall thickness:				Tube material:			
Tube diameter:				Tube length:			
Channel thickness:				Channel material:			
Design pressure	Shell: 1724 Kpa			Operating pressure	Shell:		
	Tubes:				Tubes:		
Design Temp.	Shell: 38°C			Operating temperature	Shell:		
	Tubes:				Tubes:		
X-ray: RT-3				Heat treatment: No			
Code parameters: ASME VIII, Div 1				Coated: No			
Manufacturer: Nusco Ltd.				Year built: 1996			
Corrosion allowance: 1.6 mm				Manway: No			
PRESSURE SAFETY VALVE NAMEPLATE DATA							
PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date	
1997F	Mercer	8143251V0922	31046	125 PSI	1097	07/2006	
CRN #	Service By	Block Valve	Location	Size	Code Stamp		
0G2606.5C	Unified	No	Upper Shell	2" X 2"	UV/NB		
SERVICE CONDITIONS-INDICATE ALL THAT APPLY							
Sweet X	Sour		Oil		Gas X	Water	
Amine	LPG		Condensate		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.

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 insulation.
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				Paint is in good overall condition – No chipped or exposed metal - no previous corrosion.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaking detected.
Saddle 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				No saddle. No corrosion – no missing paint. Ground cable secured to skid unit.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Fuel Gas Scrubber is firmly welded to skid floor. No signs of cracking at the time of inspection.
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				All threads connections fully engaged. No deflection – no leaks. No gussets.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				Gauge is visible, appears to be functional, no leaks and suitable for range of Temp. Pressure gauge 0 to 200 PSI / 10 PSI @ gauge. Temperature gauge -40 - 120 deg F / 75 deg F @ gauge.
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 deflection – all clamps and shoes in place. Piping is painted and in good condition – no surface corrosion found.
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.	X				Located on upper shell – set below the fuel gas scrubbers MAWP. Discharge piping is larger than the inlet to PSV. No block valve present. Seal is intact. PSV vents to flare.
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 minus corrosion allowance.
Other					
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: 1. No recommendations at this time. Summary: This vessel is in good over all condition, visual external and ultrasonic thickness survey carried out-no metal thickness detected below nominal minus corrosion allowance. Long term corrosion rate based on greatest thickness loss (shell) 0.050mm per year. Retirement Date to “T”min is year 2086. Vessel is fit for service.					



LSD Location



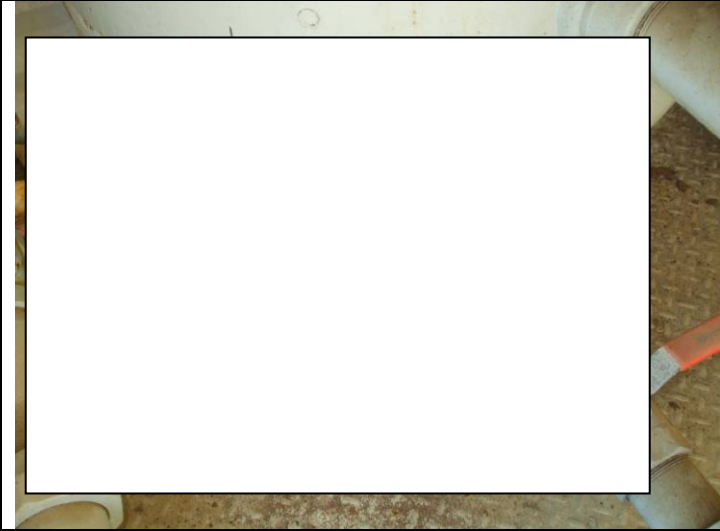
Site overview



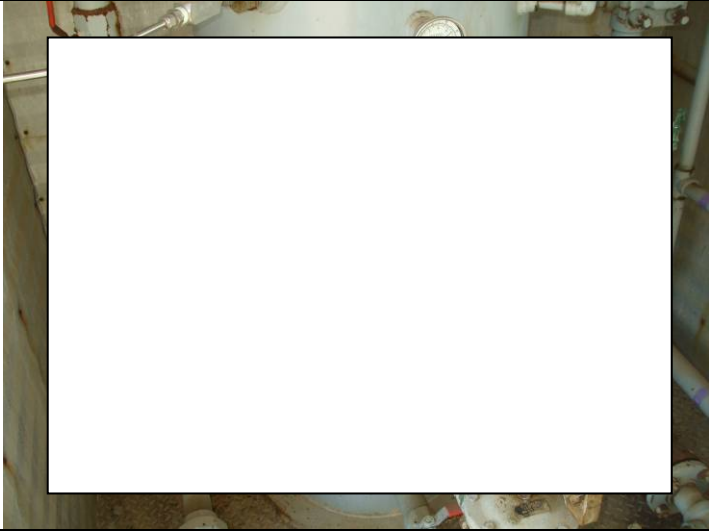
Data plate



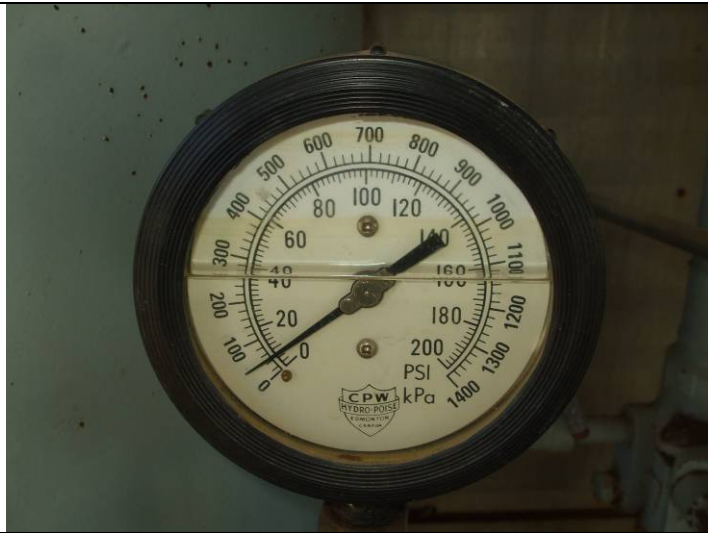
Vessel overview



Anchored securely



Lower shell overview



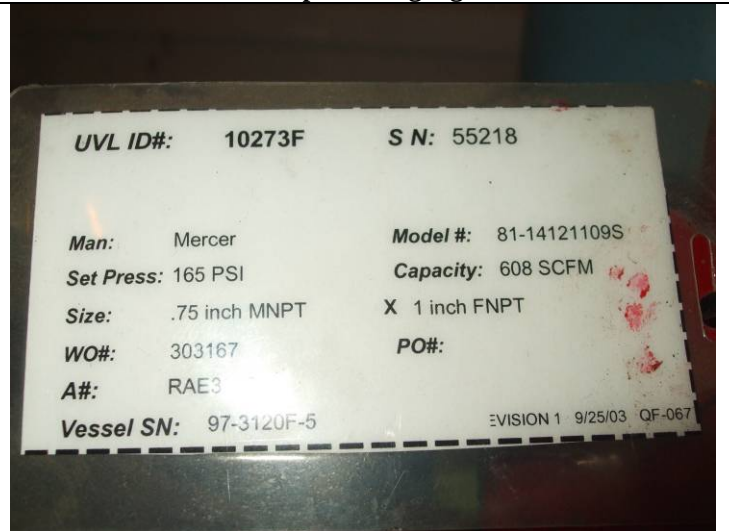
Pressure gauge



Temperature gauge



PSV service tag



PSV service tag