

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

Job # 05.002263

District: Fort St John, B.C.		Skid No.				
Facility: Pee Jay Unit # 3		Location (LSD): d-43-H / 94-A-15				
Vessel Name Equipment Number: 3 Phase Separator						
Orientation: Vertical						
Status: In Service			Regulatory Inspection			
PRESSURE VESSEL NAMEPLATE DATA						
"A" or "G" or "S" (Sask.) or BC Registration Number. A 210264			CRN Number: F-3266.1			
Vessel serial number: AB222-1200			Size: 30 in x 96 in			
Shell thickness: 12.7mm			Shell material: SA 516 70			
Head thickness: 12.9mm			Head material: SA 516 70			
Tube wall thickness:			Tube material:			
Tube diameter:			Tube length:			
Channel thickness:			Channel material:			
Design pressure	Shell: 300 PSI		Operating pressure	Shell:		
	Tubes:			Tubes:		
Design Temp.	Shell: 68 deg F		Operating temperature	Shell:		
	Tubes:			Tubes:		
X-ray: RT-1			Heat treatment: Yes			
Code parameters: ASME Sec VIII, Div 1			Coated: No			
Manufacturer: ABAX Ltd.			Year built: 1983			
Corrosion allowance: 3.2mm			Manway: No			
PRESSURE SAFETY VALVE NAMEPLATE DATA						
PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
3596F	Farris	26DA12-120/S5M/SP	24338-A10	2000	348	09-2008
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
N/S	Unified Valve	No	Top Head	1" X 2"	UV/NB	
SERVICE CONDITIONS-INDICATE ALL THAT APPLY						
Sweet	Sour X		Oil	Gas X	Water X	
Amine	LPG		Condensate X	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 – little to no exposed metal and surface corrosion. Little to no pitting.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaking detected.
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		No saddle – No corrosion – no missing paint. No Ground cable attached to skid.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Firmly bolted to the skid floor.
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 engaged. No deflection – no leaks. No gussets. Painting good overall condition.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.				X	None.
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.
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 Top Head. Lead Seal –No Block Valve. Outlet piping same size as orifice. PSV set below MAWP.
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness inspection carried out, pipe metal thickness detected below nominal minus corrosion allowance. Thickness calculations were carried out to ensure sufficient metal exists for safe operation.
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) Install a ground cable. Summary: This vessel is in good overall condition, visual external and ultrasonic thickness inspection carried out, pipe metal thickness detected below nominal minus corrosion allowance. Thickness calculations were carried out to ensure sufficient metal exists for safe operation. Vessel is fit for service at this time.					



Static Data



Overview



Overview