Canadian Natural Resources Limited
GENERAL PRESSURE VESSEL INFORMATION **Job 10.112837**

District: **Fort St. John North**	Skid No.
Facility: **Chowade Compressor Station**	Location (LSD): c-29-L/94-B-09
Vessel Name Equipment Number: **Flare Knock Out Drum**	
Orientation: **Horizontal**	
Status: **In Service**	**Regulatory Inspection**

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. **A0459148**		CRN Number: **L 6182.21**	
Vessel serial number: 004013-50		Size: 96 in x 120 in	
Shell thickness: 9.5 mm		Shell material: SA 516 70N	
Head thickness: 7.9 mm		Head material: SA 516 70N	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 50 PSI	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: 100 F	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: Nil		Heat treatment: No	
Code parameters: ASME VIII, Div 1		Coated: Yes	
Manufacturer: Nusco		Year built: 2000	
Corrosion allowance: Nil		Manway: Yes	

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	Water X
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_____

Fill out all forms as completely as possible. <u>All information</u> 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**				**Tar over foam insulation in good overall condition – small isolated tares**
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)			**X**		**Paint in poor condition - Under belly has paint loss and surface corrosion to 100% - pitting to 0.020 inch**
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 buckling or dents – no corrosion or leaks at attachment welds – skid sits on wood blocks – ground wire attached to pilings**
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	**X**				**Vessel is securely welded to skid frame – 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 poor condition – drain nozzle paint loss and surface corrosion to 100%– 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**	**No gauges**
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**
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)				**X**	**Unable to Perform UT inspection at this time due to Heavy External Corrosion.**
Other					

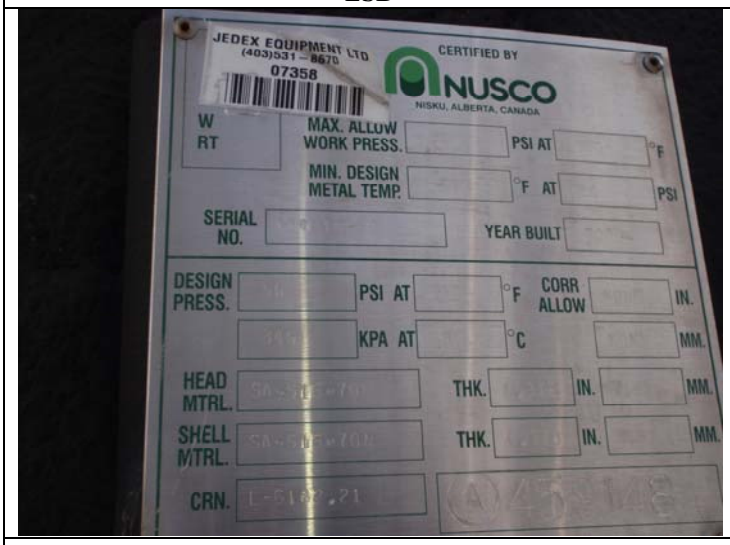
Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required)
(MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented)
Recommendations: 1. Vessel needs to be cleaned up and Painted. 2. Schedule for Internal Inspection.
Summary: This vessel is in fair condition, visual external inspection carried out.

Vessel is fit for service.

Inspected By: Andrew Neis / D. Wiedman **Date:** March 1, 2013

LSD

Overview



Data Plate

Under belly overview – Paint loss and surface corrosion to 100%