Canadian Natural Resources Limited GENERAL PRESSURE VESSEL INFORMATION Job# 10.116302													
District: Fort St.	John B.C.	Skid No.											
Facility: Dahl C	Location (LSD): LSD b-61-H/94-H-7 Compressor												
Vessel Name Equipment Number: Line Heater													
Orientation: Horizontal													
Status: In Service Regulatory Inspection													
PRESSURE VESSEL NAMEPLATE DATA													
"A" or "G	CRN Number:												
	P3216.21												
Vessel serial num	Size: 28 in. X 92inch.												
Shell thickness: 7	Shell material: SA 36												
Head thickness: 6	Head material: SA 36												
Tube wall thickne	ess:			Tube material:									
Tube diameter:		Tube length:											
Channel thicknes	s:			Channel material:									
Design pressure	Shell: 2025PSI	Shell: 2025PSI					Shell:						
	Tubes: 5625PSI				Tubes:								
Design Temp.	Shell: 200 Deg F				Operating temperature		Shell:						
	Tubes:				Tubes:								
X-ray: RT 1	Heat treatment: HT												
Code parameters:	Coated: no												
Manufacturer: W	Year built: 2001												
Corrosion allowa	Manway: Yes												
	PRES	SSURE SAFETY	VALV	E NA	MEPLATE D	ATA							
PSV Tag #	Manufacture / Model / Serial	Set Pressure (PSI / kPa)	Capao (scfr		Size	Block Valve		Location	Service Date				
No PSV													
	SERVIC	CE CONDITION	S-INDI	CAT	E ALL THAT	APPL	Y	L					
Sweet X				il			Gas X		Water				
Amine	LPG Co			ndensate			Air		Glycol X				
Other (Describe):													
Inspection Interval													

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	Р	N/A	Comments
		•		1 1/11	
Insulation Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.	X				Insulation in good condition. No ripped or torn sections. No signs of moisture egress.
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, 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				Saddles: bolted directly to skid floor. No buckling or dents. No corrosion at attachment welds to vessel. Ground wire attached to vessel.
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, and describe any hazards.				X	No Ladder
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 to nuts- no short bolting. No damage or deflections – no leaks. 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 operational range of vessel. 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; no deflection, all clamps and supports are in place. Paint in good condition – no exposed metal.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				Valves are supported properly – no leaks.
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				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 condition, visual external and ultrasonic thickness inspection carried out – no metal thickness detected below nominal minus corrosion allowance.

Vessel is fit for service.

Inspected By: Matt Wood (API 510 # 42758) (PESL#677) **Date:** June 14th, 2015



Burner end

Temperature Gauge