Canadian Natural Resources Limited
GENERAL PRESSURE VESSEL INFORMATION **Job 10.114481**

District: **Grande Prairie, AB**	Skid No.
Facility: **Karr Creek South West Field**	Location (LSD): **01-19-63-01 W6M**
Vessel Name Equipment Number: **Line Heater**	
Orientation: **Horizontal**	
Status: **Not in service**	**Inventory Inspection**

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. **A0400033**		CRN Number: **L 3768.2 // L 3769.2**	
Vessel serial number: C-013		Size: 44 in x 155 in	
Shell thickness:		Shell material:	
Head thickness:		Head material:	
Tube wall thickness:		Tube material: SA 106 B	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 20684 kPa (3000 PSI) 9608 kPa (1350 PSI)	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: 93°C	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: RT-1		Heat treatment: Nil	
Code parameters: ASME B31.3		Coated: No	
Manufacturer: RJV Gas Field Services Ltd.		Year built: 1999	
Corrosion allowance: Nil		Manway: No	

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 X	Sour	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 Canadian Natural Resources Limited'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.					
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)					
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.					
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?					
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.					
Concrete foundation Check for cracks, spalling, etc.					
Ladder / Platform Describe general condition, ensure support is secure to vessel, and describe any hazards.					
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?					
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.					
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?					
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.					
PSV Ensure PSV is set at pressure at or below that of vessel. Discharge piping is same size as valve outlet and is properly supported and routed. Are psv seals in place? Ensure no block valves between psv and vessel, or if there are that they are locked/sealed open.					
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	**X**				**No NDE – Vessel is removed from service.**
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: Carry out a pre-commissioning inspection prior to putting vessel back in service.
Summary: Inventory inspection only.
Line heater is removed from service.

Inspected By: Chris Maxsom ABSA# 0539 **Date:** August 18, 2014

	
LSD	Overview – Skid
	
Line heater removed from service	Data plate