

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

Job # 05.00

District: Grande Prairie AB.	Skid No.
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Facility: Karr Creek Gas Field	Location (LSD): 02-34-63-02W6M
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Vessel Name Equipment Number: Inlet Separator

Orientation: Vertical

Status: In Service	Regulatory Inspection
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PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. <p align="center">A0465726</p>	CRN Number: <p align="center">P4996.213</p>
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Vessel serial number: 2001-6694-01B	Size: 36in. X 10 ft.
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Shell thickness: 22.2mm	Shell material: SA 516-70N
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Head thickness: 20.3mm	Head material: SA 516-70N
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Tube wall thickness:	Tube material:
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Tube diameter:	Tube length:
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Channel thickness:	Channel material:
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Design pressure	Shell: 720 PSI	Operating pressure	Shell: 0 – 1000 PSI
	Tubes:		Tubes:

Design Temp.	Shell: 126Deg F.	Operating temperature	Shell: -40 – 120 Deg F
	Tubes:		Tubes:

X-ray: RT 1	Heat treatment: HT
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Code parameters: ASME VIII, Div 1	Coated: no
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Manufacturer: Alco Gas & Oil	Year built: 2001
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Corrosion allowance: 3.2mm	Manway: No
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PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
21369G	Farris	26HA12-120	SE14783-2	720 PSI	11076	02/06
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
Not stated	Unified valve	No	Outlet piping	2"x 3"	UV/NB	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	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 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	Vessel not insulated.
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, 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				Skirt: Bolted directly to skid floor. No buckling or dents. No corrosion at attachment welds to vessel. Ground wire attached to skid.
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, describe any hazards.				X	
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. Pressure gauge 0 – 1000 PSI/Temperature gauge -40 – 120 DegF.
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. Piping insulated- no damage present- no egress of moisture.
Valve: 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				Located on outlet piping from vessel. – PSV seal in place. Set at MAWP of vessel. Discharge piping is same size as valve outlet. No block valve between vessel and 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: No recommendations at this time. Summary: Vessel is in overall good condition, visual external inspection and ultrasonic corrosion survey performed – no metal thickness detected below nominal minus corrosion allowance. Vessel is fit for service.					

Inspected By: Gerry Avery

Date: April 23, 2010

Photo Table



LSD

Vessel data plate



Vessel temperature gauge

Vessel pressure gauge



PSV data tag

Vessel PSV



Vessel overview