

Canadian Natural Resources Limited GENERAL PRESSURE VESSEL INFORMATION							Job # 05.003694
District: Grande Prairie				Skid No.			
Facility: Knopcik Gas Plant				Location (LSD): 09-10 -74-11 W6M			
Vessel Name & Equipment Number: Regeneration Gas Cooler							
Orientation: Vertical							
Status: Operating				Regulatory Inspection			
PRESSURE VESSEL NAMEPLATE DATA							
Registration Number A 127038				CRN Number C 1944.2			
Vessel serial number: 8487				Size: 5.75 in. x 9.5 in x 81.0 in.			
Shell thickness: Not Stated				Shell material: not stated			
Head thickness: Not Stated				Head material: not stated			
Tube wall thickness:				Tube material:			
Tube diameter:				Tube length:			
Channel thickness:				Channel material:			
Design pressure	Shell: 1100 PSI			Operating pressure	Shell:		
	Tube:				Tubes:		
Design Temp.	Shell: 590 deg F			Operating temperature	Shell:		
	Tube:				Tubes:		
X-ray: Nil				Heat treatment: Nil			
Code parameters: ASME VIII / Div 1				Coated: No			
Manufacturer: not stated				Year built: 1975			
Corrosion allowance: Not Stated				Man way: No			
PRESSURE SAFETY VALVE NAMEPLATE DATA							
PSV Tag no.	Manufacture	Model	Serial number	Set Pressure	Capacity	Size	
1837	Farris	27DA33-M20	478865-90-KE	1100 PSI	2463 scfm	1 x 1	
Service By	Date	Block Valve	CRN number	Code Stamp	Location		
IPV	04-05-2005	No	OG0386.9C	UV NB	Inlet piping		
SERVICE CONDITONS-INDICATE ALL THAT APPLY							
Sweet X	Sour		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'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 man ways, nozzles, no damage present, and there is no egress of moisture.				X	This vessel is not insulated.
External Condition: Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)		X			Surface corrosion on header – no pitting.
Leakage: Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaks detected.
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 – This header is mounted directly into a Cooler skid – no loose or missing sections. Paint is in good condition – no exposed metal. Skid Package is grounded.
Anchor Bolts: Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Firmly bolted into skid.
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				All studs fully engaged to nuts on bolted fittings. Threaded fittings – fully engaged. No deflection of nozzles. No gussets.
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				Firmly supported, no deflection, no loose or missing clamps. Paint is in good condition – no exposed metal.
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 inlet piping – set at MAWP of vessel. Seal intact. No block valve. Inlet and discharge piping is same size as orifice.
NDE methods: Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness survey carried out – no pitting detected. Header thickness is not known.
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. Paint exterior surface of header box. Summary: This vessel is in good condition, visual external and ultrasonic corrosion survey carried out – no pitting detected. Vessel is fit for service.					

Inspected By: D. Wiedman

Date: Nov 11 – 2009



LSD



Overview



Data Plate



Upper Louvers



PSV



PSV Data Tag