Canadian Natural Resources Limited GENERAL PRESSURE VESSEL INFORMATION Job # 05.002122											
District: Fort St J		Skid No.									
Facility: Caribou	Compressor Station		Location (LSD): d-62-C/94-A-16								
Vessel Name Equ	ipment Number: Glycol	Contactor									
Orientation: Vert	ical										
Status: In Se	rvice		Regulatory Inspection								
		PRESSURE VESS	SEL N	AMEPLATE DA	TA						
"A" or "G" or "S" (Sask.) or BC Registration Number. A 3098592				CRN Number <b>M-2316.21</b>							
Vessel serial num		Size: 23 in X 32 ft									
Shell thickness: 2		Shell material: SA 516 70MT									
Head thickness: 3		Head material: SA 516 70MT									
Tube wall thickne Tube diameter:		Tube material:									
Channel thickness		Tube length: Channel material:									
	Shell: 1440 PSI										
MAWP	5101.1440151			Operating pressure		Shell:					
	Tubes:						Tubes:				
Design Tomp	Shell: 130 deg F			Onenetine temp	Shell:						
Design Temp.	Tubes:			Operating temperature			Tubes:				
X-ray: RT-1		Heat treatment: Yes									
Code parameters:		Coated:									
Manufacturer: W		Year built: 1995									
Corrosion allowance: 3.2mm				Manway: No							
	P.	RESSURE SAFETY	VALV	'E NAMEPLATH	E DATA						
PSV Tag #	Manufacture Model #		Serial #		Set Pressure		Capacity	Service			
				(1		Pa) (scfm)		Date			
9264F	Farris	26EA13-120	480467-4-A10		1440 PSI		5501	New			
CRN #	Service By	Block Valve	Location		Size		Code Stamp				
0G8841.5C	Unified Valve	No	Lower Shell		1" X 2"		UV/NB				
	SER	VICE CONDITIONS	S-INDI	CATE ALL THA	AT APPL	Y	IL	<u></u>			
Sweet	Sour X		Oil		Gas X		K	Water X			
Amine LPG		Con	Condensate				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:

External Inspection Items		F	Р	N/A	Comments		
	<u> </u>				NTe for each off and		
Insulation Verify sealed around manways,					No insulation.		
nozzles, no damage present, and there is no				X			
egress of moisture.							
External Condition Assess paint condition,					Paint is in good overall condition – little to no external		
areas peeling, record any corrosion, damage,	Χ				surface corrosion or exposed metal.		
etc (record location, size and depth of							
corrosion or damage)							
Leakage Record any leakage at flanges,	X				No leaking detected.		
threaded joints, weep holes on repads, etc.							
Saddle/skirt Assess condition of paint, fire					Skirt is in good condition – no buckles or distortion.		
protection, and concrete. Look for corrosion,					Paint intact – with little to no corrosion.		
buckling, dents, etc. Look at vessel surface	Х				Vessel grounded at the skid.		
area near supports. Verify no signs of leakage	1						
at attachment to vessel and attachment welds							
are acceptable. Ground wire attached?							
Anchor Bolts Hammer tap to ensure secure.	X				Firmly secured.		
Look for cracking in treads or signs of	Λ				No signs of deformation.		
deformation.							
Concrete foundation Check for cracks,				X	None.		
spalling, etc.							
Ladder / Platform Describe general					None.		
condition, ensure support is secure to vessel,				Х			
and describe any hazards.							
Nozzle Assess paint, look for leakage, and					All threads engaged.		
ensure stud threads are fully engaged. Record	Х				No deflection – no leaks.		
any damage, deflection, etc. Are nozzles					No gussets.		
gusseted?					Painting good overall condition.		
Gauges Ensure gauges are visible, working,					Gauge is visible, working, and suitable for range of		
no leakage, and suitable for range of MAWP/	Х				Temp/MAWP.		
Temp.					Temperature gauge: 0 to 250 deg F / operating @ 90 deg F.		
					Pressure gauge: 0 – 3000 PSI / operating @ 900 PSI.		
External Piping Ensure pipe is well					Well supported – no deflection – all clamps and shoes in		
supported. All clamps, supports, shoes, etc. in					place.		
place. Look for evidence of structural	Х				Piping is painted and is in good overall condition.		
overload, deflection, etc. Paint condition,							
external corrosion?							
Valving Ensure no leaks are visible. Valves					Well supported – no leaks.		
are properly supported and chained if	Х						
necessary.							
<b>PSV</b> Ensure PSV is set at pressure at or below					Located on Lower Shell, set below MAWP.		
that of vessel.	X				Seal intact – No block valve.		
					Outlet piping same size as orifice.		
NDE methods Was UT/ MPI done on vessel					Ultrasonic corrosion survey carried out, no metal thickness		
(MI coordinator to review results)	Х				detected below nominal minus corrosion allowance.		
Other					accessa below nonlinut minds corrosion anowante.		
	1						

(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.

