Canadian Natural Resources Limited GENERAL PRESSURE VESSEL INFORMATION Job # 05.001541													
District: <b>Ft. St. Jo</b>	hn B.C.		Skid No.										
	d Compressor Statio	Location (LSD): a-17-J / 94-B-9											
· ·	•		Location (Lop). <b>a-1/-3</b> / <b>24-p-7</b>										
Vessel Name Equipment Number: Glycol Contactor  Orientation: Vertical													
			<b>D</b> 14 7 2										
Status: In Service Regulatory Inspection PRESSURE VESSEL NAMEPLATE DATA													
"A" or "C" o	r "S" (Sask.) or BC R		CRN Number:										
A of G o	A 491800	L 9722.21											
Vessel serial number		Size: 24 in x 26 ft											
	5.4 mm		Shell material: SA 516 70N										
	7.0 mm	Head material: SA 516 70N											
Tube wall thickness: Tube diameter:	:	Tube material:											
Channel thickness:		Tube length: Channel material:											
Chamier unekness.	Shell: 1410 PSI												
Design pressure		Operating pressure		Shell:									
	Tubes:					Tubes:							
	Shell: 150 deg F	Operating temperature		Shell:									
Design Temp.	Tubes:			Silen.									
		Tubes:											
X-ray: RT-		Heat treatment: HT											
Code parameters:  Manufacturer: Ops	ASME VIII Div 1	Coated: No											
Corrosion allowance	Year built: 2003 Manway: No												
Corrosion anowance		RESSURE SAFETY	VALV		E DATA								
DOLL TO 11	N 6 .	26.11"	C 1 #		C. A. D		G :	G . D .					
PSV Tag #	Manufacture	Model #		Serial #	Set Pressure		Capacity	Set Date					
						(scfm							
8946F	Farris	27FA45 – M20	4	51002-2-KE	9722 Kpa		8819 Scfm	06/05					
CRN#	Service By	Block Valve		Location	Size		Code Stamp						
Not Stated	Unified	No	I	Lower Shell	1.5 x 2		UV						
	CEDY	VICE CONDITIONS	TAIDI	CATE ALL TIL	AT ADDI	<b>X</b> 7							
		VICE CONDITIONS		CATE ALL THA	AT APPL		·	Water V					
Sweet	Sour X Oil					Gas X		Water X					
Amine	LPG Con			ndensate		Air		Glycol X					
Other (Describe):													
Inspection IntervalPSV Service Interval													
(Determined by MIC in conjunction with Chief Inspector following guidelines of CNRL's Owner-User Inspection Program)													
Reports reviewed and ac	cented by												
Mechanical Integrity CoordinatorDate													

<b>External Inspection Items</b>	G	F	P	N/A	Comments
<b>Insulation</b> Verify sealed around manways,					Non insulated vessel.
nozzles, no damage present, and there is no				X	Non misurated vesser.
egress of moisture.					
External Condition Assess paint condition,					Paint in good condition through -out, with no corrosion
areas peeling, record any corrosion, damage,	X				occurring.
etc (record location, size and depth of	21				
corrosion or damage)					
Leakage Record any leakage at flanges,	X				No leakage noted.
threaded joints, weep holes on repads, etc.					Chints No distantian are markenical demand
<b>Skirt:</b> Assess condition of paint, fire protection, concrete. Look for corrosion,					Skirt: No distortion – no mechanical damage.  No corrosion at shell to skirt – no leaks.
buckling, dents, etc. Look at vessel surface					No corrosion at shen to skirt - no leaks.
area near supports. Verify no signs of leakage	X				Skid package is grounded.
at attachment to vessel and attachment welds					Shiu puchuge is grounded.
are acceptable. Ground wire attached?					
Anchor Bolts Hammer tap to ensure secure.	<b>X</b> 7				All bolts tight and secure, no signs of deformation.
Look for cracking in treads or signs of	X				, ,
deformation.					
Concrete foundation Check for cracks,				X	Steel skid.
spalling, etc.				Λ	
Ladder / Platform Describe general					No ladders or platforms required.
condition, ensure support is secure to vessel,				X	
describe any hazards.					
Nozzle Assess paint, look for leakage, and					Studs fully engaged to nuts – no short bolts.
ensure stud threads are fully engaged. Record	X				No deflection – no leaks.
any damage, deflection, etc. Are nozzles gusseted?					No gussets.
Gauges Ensure gauges are visible, working,					Temperature gauge and pressure gauge attached – within
no leakage, and suitable for range of MAWP/	X				range listed on data plate.
Temp.	21				runge instea on data plate.
External Piping Ensure pipe is well					Piping is well supported – no evidence of overload or
supported. All clamps, supports, shoes, etc. in					deflection.
place. Look for evidence of structural	X				Paint is in good condition – no exposed metal.
overload, deflection, etc. Paint condition,					
external corrosion?					
Valving Ensure no leaks are visible. Valves					All valves supported, no leaks noted.
are properly supported and chained if	X				No chains required
necessary.					
<b>PSV</b> Ensure PSV is set at pressure at or below					Located on lower shell – set at MAWP of vessel. Seal intact
that of vessel.	X				– no block valve – discharge piping same size as outlet
NDE methods Was UT/ MPI done on vessel					Orifice.
(MI coordinator to review results)	X				Ultrasonic thickness inspection carried out, bottom head and 4" elbow metal thickness found below nominal minus
(1411 Coordinator to review results)	Λ				corrosion allowance. Calculations carried out to ensure
					sufficient metal exists for safe operation.
	1	l		1	bullion moun cause for but operation.

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)

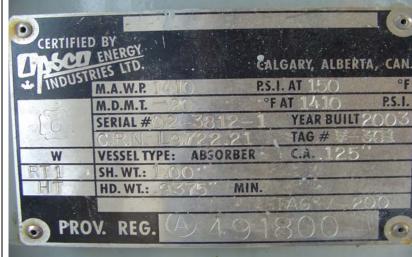
**Recommendations:** No recommendations at this time.

**Summary:** This vessel is in good overall condition, ultrasonic thickness inspection carried out – bottom head and 4 inch 90 deg elbow metal thickness found below nominal minus corrosion allowance. Calculations performed to ensure sufficient metal exits for safe operation.

Vessel is fit for service.

Inspected By: Dellas Wiedman Date: March 21 – 2008





Overview Data Plate