Canadian Natural Resources Limited GENERAL PRESSURE VESSEL INFORMATION 05.002795												
District: Fort St. Jo	hn BC.	Skid No.										
	orse Compressor Sta	Location (LSD): d-44-A/94-G-10										
Vessel Name Equipment Number: Flare Knock out Drum												
Orientation: Horizontal												
Status: In Serv			Regulatory Inspection									
PRESSURE VESSEL NAMEPLATE DATA												
"A" or "G" o	r "S" (Sask.) or BC R	CRN Number:										
	A 501923	R-2525.213										
Vessel serial number		Size: 8 ft. x 10 ft.										
Shell thickness: 9.5r	nm	Shell material: SA 516 70N										
Head thickness: 8.0r	nm	Head material: SA 516 70N										
Tube wall thickness:				Tube material:								
Tube diameter:		Tube length:										
Channel thickness:				Channel material:								
Design pressure	Shell: 50 PSI	Operating pressure		Shell:								
	Tubes:					Tubes:						
Design Temp.	Shell: 200 Deg F			Operating temperature		Shell:						
	Tubes:											
X7		Tubes:										
X-ray: Nil	G) (E) (HILL D): 4	Heat treatment: Nil										
Code parameters: A		Coated: Not stated										
Manufacturer: Bilton		Year built: 2003										
Corrosion allowance		Manway: Yes										
	P1	RESSURE SAFETY	VALV	E NAMEPLATE	DATA							
PSV Tag #	Manufacture Model #			Serial # Set Pr		essure	Capacity	Service				
			Pa)			(scfm)	Date					
CRN#	Service By	Block Valve		Location	Size		Code Stamp					
					-		1					
	SER	VICE CONDITIONS	-INDI	CATE ALL THA	AT APPL	Y						
Sweet	Sour X Oil					Gas X		Water X				
Amine X	LPG Con-			ndensate X		Air		Glycol				
Other (Describe):												
Inspection IntervalPSV Service Interval												
(Determined by MIC in conjunction with Chief Inspector following guidelines of CNRL Owner-User Inspection Program)												
	,			r	- 6							
Reports reviewed and ac	cepted by:											
Mechanical Integrity CoordinatorDate												

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					Comments		
•	G	F	P	N/A			
Insulation Verify sealed around manways,					Vessel foam applied insulation. No damage present- sealed		
nozzles, no damage present, and there is no	X				around nozzles manway.		
egress of moisture.					No egress of moisture.		
External Condition Assess paint condition,							
areas peeling, record any corrosion, damage,	3 7				Paint in good overall condition – No exposed metal.		
etc (record location, size and depth of	X				•		
corrosion or damage)							
Leakage Record any leakage at flanges,	X				No leaks observed.		
threaded joints, weep holes on repads, etc.	Λ						
Saddle/Skirt Assess condition of paint, fire					Saddle: bolted directly to skid floor.		
protection, concrete. Look for corrosion,					Skid welded to pilings		
buckling, dents, etc. Look at vessel surface					No buckling or dents.		
area near supports. Verify no signs of leakage					No corrosion at attachment welds to vessel.		
at attachment to vessel and attachment welds					Ground wire attached to skid and pilings.		
are acceptable. Ground wire attached?							
Anchor Bolts Hammer tap to ensure secure.					Anchor bolts are securely fastened.		
Look for cracking in treads or signs of	X				No deformation.		
deformation.							
Concrete foundation Check for cracks,				X			
spalling, etc.							
Ladder / Platform Describe general							
condition, ensure support is secure to vessel,				X			
describe any hazards.							
Nozzle Assess paint, look for leakage, and					Stud threads are fully engaged to nuts.		
ensure stud threads are fully engaged. Record	X				No leaks observed.		
any damage, deflection, etc. Are nozzles					No damage or deflections.		
gusseted?					Nozzles are not gusseted.		
Gauges Ensure gauges are visible, working,					No gauges on vessel.		
no leakage, and suitable for range of MAWP/				X			
Temp.							
External Piping Ensure pipe is well					Piping is well supported – all clamps and supports are in		
supported. All clamps, supports, shoes, etc. in					place.		
place. Look for evidence of structural	X				No structural overloads or deflections.		
overload, deflection, etc. Paint condition,					Paint in good condition- no exposed metal.		
external corrosion?							
Valving Ensure no leaks are visible. Valves				•	No valves.		
are properly supported and chained if				X			
necessary.	1				N. DOV.		
PSV Ensure PSV is set at pressure at or below				X	No PSV – vent to flare.		
that of vessel.	1				TTI		
NDE methods Was UT/ MPI done on vessel	T 7				Ultrasonic thickness survey carried out – no metal		
(MI coordinator to review results)	X				thickness detected below nominal minus corrosion		
Other	1				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: January 13, 2009

Photo Table

vessel overview

