Canadian Natural Resources Ltd.
GENERAL TANK INFORMATION **Job # 10.110419**

District: **Ft. St. John B.C.**	Skid No.
Facility: **Currant Compressor St.**	Location (LSD): **b-09-C/94-A-16**
Vessel Name Equipment Number: **Knockout Drum**	
Orientation: **Horizontal**	
Status: **In service**	**Regulatory Inspection**

TANK NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. **C35006**		CRN Number: **Non Code**	
Tank serial number:		Size: 30' x 60'	
Shell thickness: 9.5mm		Shell material: SA 36	
Head thickness: 6.4mm		Head material: SA 36	
Deck thickness:		Deck material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: Atmos	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell:	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: Nil		Heat treatment: Nil	
Code parameters: Non Code		Coated:	
Manufacturer: Tornado Flare Systems Inc.		Year built: N/S	
Corrosion allowance:		Manway: Yes	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (PSI)	Capacity (scfm)	Service Date
	Taylor	**T8200-2**	**50141-21**	**15**	**222**	**24/02 2010**
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
OG1326.2C	**Pimm's**	**no**	**Top shell**	**2 x 2**	**UV NB**	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	Oil X	Gas X	Water X
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**_____

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**	No Insulation
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)		**X**			Paint is in good condition. No signs of damage or distortion
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	**X**				No leaks observed.
Base Assess condition of paint, fire protection, concrete. Look for corrosion, buckling, dents, etc. Is tank mounted above ground water level – on pilings?	**X**				Saddles (x2) are firmly welded to shell. No signs of cracking or leaking from welds. Skid mounted on pilings. Skid tack welded to pilings. Ground wire attached to piling.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation. Is tank resting on deck – welded to supports?				**X**	
Concrete foundation There may be a concrete ring under the tank. Check for cracks, spalling, etc.				**X**	None present.
Ladder / Platform Describe general condition, ensure support is secure to vessel, and describe any hazards.				**X**	None present.
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	**X**				Studs are fully engaged. No leaks observed. No damage or deflections. Nozzles are not gusseted
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp. Remember some tanks require fuel gas or other positive protection so a pressure gauge may be installed.	**X**				Liquid Level Gauge intact.
External Piping Ensure pipe is well supported. All clamps, supports, shoes, etc. in place. Look for evidence of structural overload, deflection, etc. Paint condition, insulation condition, any wet insulation	**X**				External piping is in good overall condition. Pipe supports, clamps and shoes are in place. No structural overload or deflection.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	**X**				No leaks are visible at time of inspection. Valves are supported properly
PSV Ensure PSV is set at pressure at or below that of vessel. Some tanks have positive gas protection for cover – this may be a vacuum breaker – have a good look and check serviceability tag.	**X**				Located on top shell. Set pressure at 15 PSI Seal intact. No block valves. Discharge piping is same size as valve outlet.

NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	**X**				Ultrasonic corrosion survey carried out – pipe metal thickness detected below nominal minus corrosion allowance.
Secondary Containment: This may be a double wall tank with a pressure gauge or level gauge indicator.	**X**				Steel C-ring with vinyl liner. No signs of damage or distortion.

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 Summary: Install Data Plate
Summary: This vessel is in good condition, visual external and ultrasonic thickness inspection carried out – pipe metal thickness detected below nominal minus corrosion allowance.
Vessel is fit for service..

Inspected By: Mike Dutcher **Date: August 03, 2011**

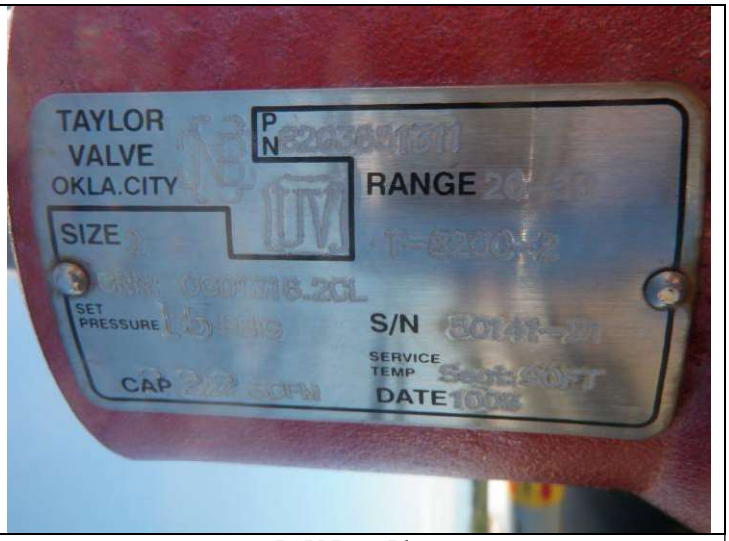
LSD

Overview

C Tag - **No Data Plate**

PSV

PSV Data Tag



PSV Data Plate

Ground Wire

Saddle

Manufacturer

Liquid Level