Canadian Natural Resources Ltd.
GENERAL PRESSURE VESSEL INFORMATION **Job# 105.01192**

District: **Fort St John, BC**	Skid No. **Inlet Separator Building**
Facility: **East Buick Creek Compressor Station**	Location (LSD): **d-17-D / 94-A-15**
Vessel Name Equipment Number: **Inlet Separator**	
Orientation: **Vertical**	
Status: **In service**	**Regulatory Inspection**

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. A0408218		CRN Number: M-2318.21	
Vessel serial number: 96-8374-0		Size: 36" X 10 ft	
Shell thickness: 22.2 mm		Shell material: SA-516-70	
Head thickness: 23.8 mm		Head material: SA-516-70	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 4964 Kpa	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: 38 deg C	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: RT-2		Heat treatment: Yes	
Code parameters: ASME VIII, Div 1		Coated: No	
Manufacturer: Wells-Hall Fab Ltd.		Year built: 1996	
Corrosion allowance: N/S		Manway: No	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
3546F	**Consolidated**	**1910GC**	**80C2100**	**4516**	**5379**	**08/2006**
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
O1832.568312	**Unified**	**None**	**Discharge piping**	**1.5" X 2.5"**	**UV/NB**	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour X	Oil	Gas X	Water X
Amine	LPG	Condensate X	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. <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

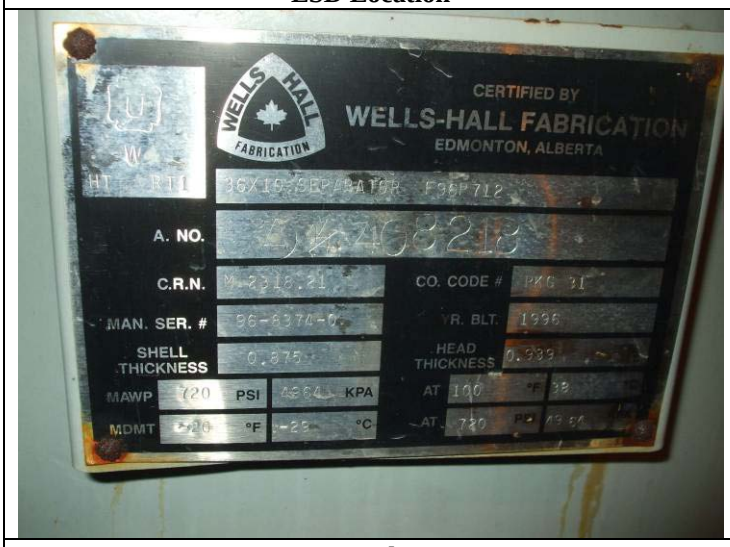
External Inspection Items	G	F	P	N/A	Comments
Insulation Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.				**X**	**No insulation.**
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)		**X**			**Paint is in fair overall condition – Exposed metal to approx 5% to the shell, pitting to less than 0.005" deep.**
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	**X**				**No leaking detected.**
Saddle 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 vessel Skirt is in good condition, no signs of damage or leakage to attachment welds.** **Ground firmly secured to skid unit.**
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	**X**				**Anchor bolts are secured to skid deck.** **No signs of deformation.**
Concrete foundation Check for cracks, spalling, etc.				**X**	**None**
Ladder / Platform Describe general condition, ensure support is secure to vessel.				**X**	**None**
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	**X**				**Stud threads are fully engaged to nuts.** **No damage or deflections observed – no leaks.** **Paint in good condition.** **Nozzles are not gusseted.**
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	**X**				**Gauges are visible, working and suitable for MAWP/ Temp** **Pressure gauge: 0 to 1000 PSI / 100 PSI @ gauge.** **Temp gauge: -40 to 120 deg F / 40 deg F @ gauge.**
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**				**Piping is well supported; all clamps, supports, and shoes are in place.** **No structural overloads or deflections noted.** **Paint in good condition – no corrosion.**
Valving Ensure no leaks are visible. Valves are properly supported and chained if	**X**				**No leaks are visible.** **Valves are properly supported.**
PSV Ensure PSV is set at pressure at or below that of vessel.	**X**				**Located on Outlet piping – set at MAWP of vessel.** **Discharge piping is same size as outlet of valve.** **PSV seal in place.** **No block valve.** **PSV is properly supported. PSC vents to flare.**
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	**X**				**Ultrasonic thickness survey carried out – no metal thickness was detected below nominal.**

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. No recommendations at this time.
Summary: This vessel is in good over all condition, visual external and ultrasonic thickness survey carried out-no metal thickness detected below nominal.
Long term corrosion rate based on greatest thickness loss –no corrosion rate to assess.
Vessel is fit for service.

Inspected By: Joseph Holdstock **Date: Oct 30, 2010.**

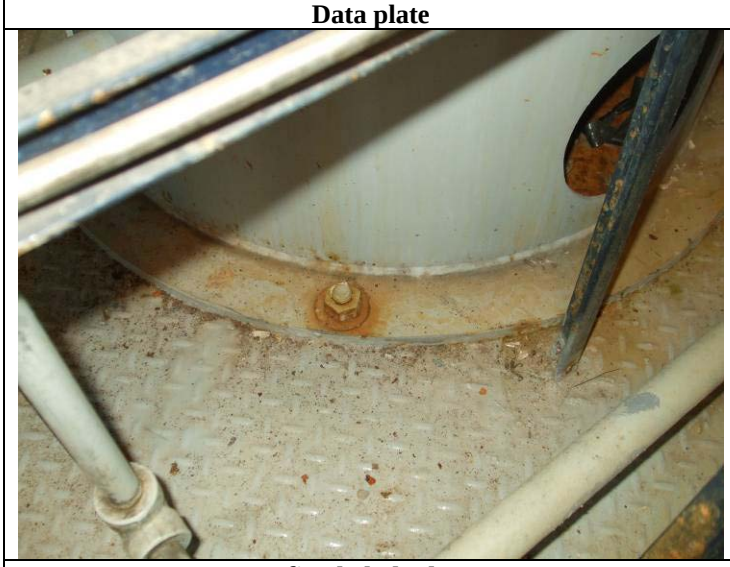
LSD Location

Site overview

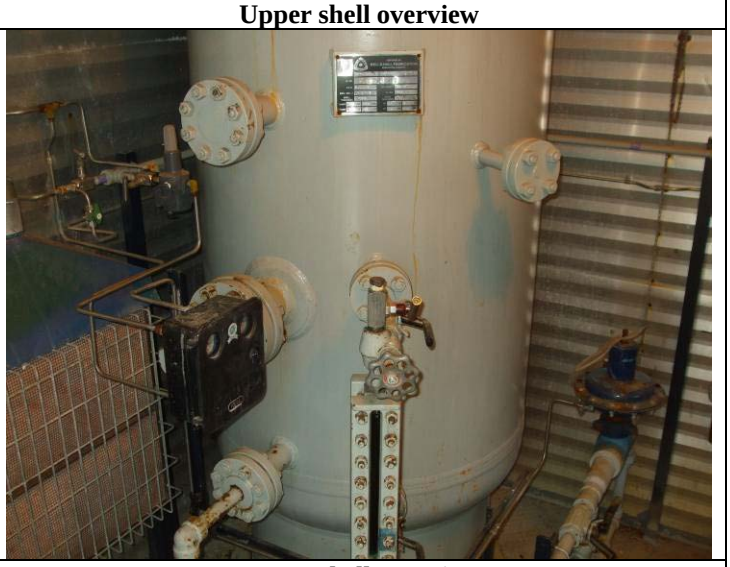


Data plate

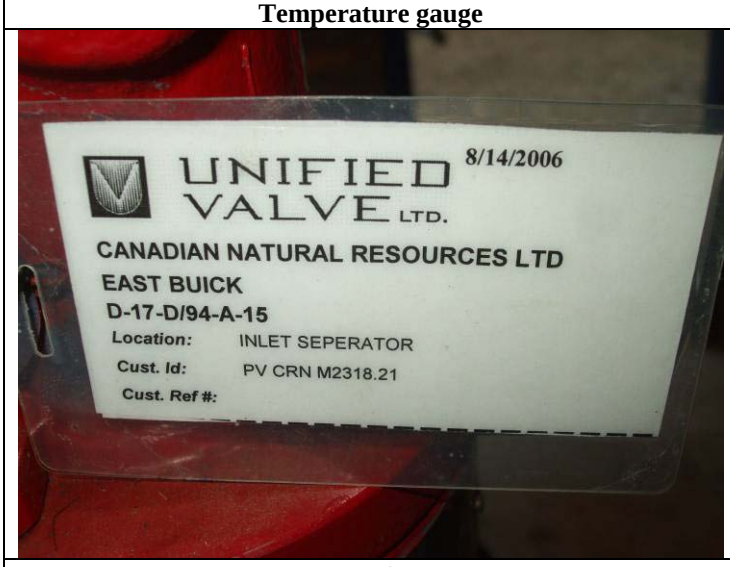
Upper shell overview



Base firmly bolted secure



Lower shell overview

	
Temperature gauge	**PSV Data plate**
	
PSV service tag	**PSV service tag**