Canadian Natural Resources Limited
GENERAL PRESSURE VESSEL INFORMATION Job # 05.001539

District: **Ft. St. John B.C.**	Skid No.
Facility: **Halfway Battery**	Location (LSD): **05-12-87-25-W6M.**
Vessel Name Equipment Number: **Test Separator (oil)**	
Orientation: **Vertical**	
Status: **In Service**	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. **A# 439360**	CRN Number: **N 4676.21**
Vessel serial number: **01-2993-1**	Size: **32 in OD X 94 in. S/S**
Shell thickness: **34.9 mm**	Shell material: **SA 516 70 N**
Head thickness: **33.2 mm**	Head material: **SA 516 70 N**
Tube wall thickness:	Tube material:
Tube diameter:	Tube length:
Channel thickness:	Channel material:

Design pressure	Shell: **1395 psi**	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: **150 deg. F**	Operating temperature	Shell:
	Tubes:		Tubes:

X-ray: **RT-1**	Heat treatment: **Yes**
Code parameters: **ASME VIII Div. 1**	Coated: **No**
Manufacturer: **Opsco**	Year built: **1998**
Corrosion allowance: **3.2 mm**	Manway: **Yes**

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure	Capacity (scfm)	Set Date
8246F	**Farris**	**27DA23-1720/S7**	**CE-403772-16-KE**	**1345 psi**	**3000**	**06/24/05**
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
OGO386.9C	**UFL**	**No**	**Shell**	**3/4 in X 1 in**	**UV**	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	Sour	Oil	Gas	Water
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:

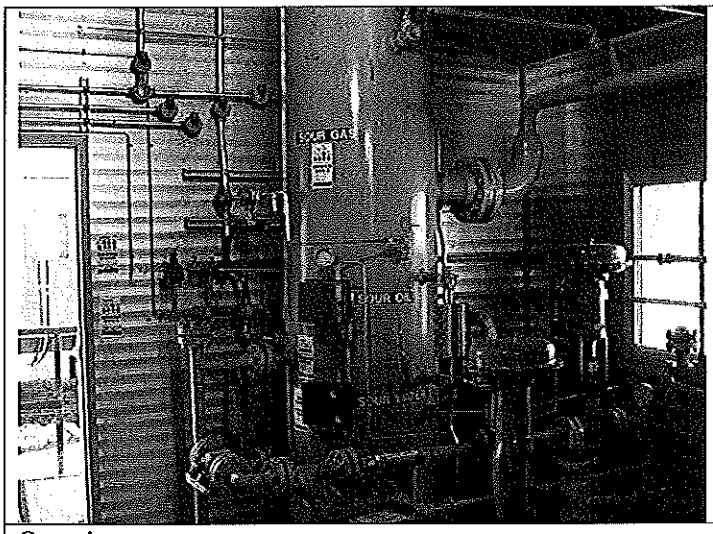
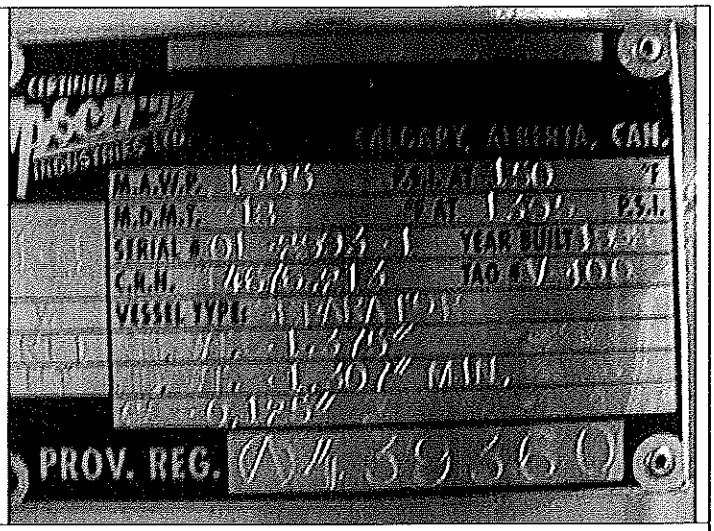
Mechanical Integrity Coordinator _____ **Date** _____

Fill out all forms as completely as possible. All information 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	**- Non insulated vessel.**
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				**Paint in good condition through – no exposed metal.**
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				**- No leakage noted.**
Skirt 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 is in good condition – no distortion – no Mechanical damage noted.** **Slight surface corrosion occurring at the floor to skirt interface.** **No corrosion at shell to skirt welds – no leaks.** **Skid package is grounded.**
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				**- All bolts tight and secure, no signs of deformation.**
Concrete foundation Check for cracks, spalling, etc.				X	**Steel skid.**
Ladder / Platform Describe general condition, ensure support is secure to vessel, describe any hazards.				X	**- No ladders or platforms required.**
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				**Slight surface corrosion occurring at the nozzle bolts and flange area.** **No damage or deflection noted, no gussets.** **No leakage noted.**
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				**Pressure and temp gauge attached – within range for service.**
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, no evidence of overload or deflection, all clamps in place.** **Paint is fair with slight surface corrosion occurring at the clamp areas on the inlet piping – no pitting.**
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				**- All valves supported, no leaks noted.** **- No chains required**
PSV Ensure PSV is set at pressure at or below that of vessel.	X				**Located at mid shell – set at MAWP of vessel. Seal intact – no block valve – discharge piping same size as outlet orifice.**
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				**Ultrasonic thickness survey carried out, piping metal thickness detected below nominal minus corrosion allowance – Calculations carried out to ensure sufficient metal exists for safe 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 survey carried out, piping metal thickness detected below nominal minus corrosion allowance – Calculations carried out to ensure sufficient metal exists for safe operation.
Vessel is fit for service.

Inspected By: Dellas Wiedman **Date: March 12 - 2008**

	
Overview	**Data Plate**