



A0490198\_Name plate\_17April2013



## Field Inspection Report

Client	CNRL		Date of Inspection	April 17, 2013			
Prov. Reg.#	A0490198		Inspection Type	VE, UT			
Equipment	Vertical Separator		Location	Badger Compressor Station			
Tag/Equip. #			LSD	01-31-015-16W4M			
Vessel Status	In Service		Comp./Unit #				
Manufacturer	Rushton Gas & Oil Equipment Ltd.		MAWP / Temp	9928 KPA @ 54 C			
Serial #	C1496B.C	CRN #	L 8949.2	MDMT@ Pressure	-29 C @ 9928 KPA		
Corrosion Allowance		Shell Material		Shell Thickness			
Year Built	2002	Head Material		Head Thickness			
Diameter	30" OD	Length		Height	RT	RT-2	HT
Service		Next Inspection		Next Insp. Type			
ASME Stamp	No	Next Inspection		Next Insp. Type			
PSV Tag #		CRN#	OG 1316.2C	Set Pressure			
Manufacturer	Taylor Valve			NB#		ASME Stamp	
Type/Model		Serial	41924-35	Inlet Size	2"		
Capacity	10871 SCFM	Service Company		Outlet Size	2"		
Service Date		Next Service Date					
Valve Location	<input type="checkbox"/> On Vessel <input type="checkbox"/> On Piping <input type="checkbox"/> Vents to Flare <input type="checkbox"/> Vents to Atmosphere	Valve Connection	<input type="checkbox"/> Threaded <input type="checkbox"/> Flanged <input type="checkbox"/> Welded	ABSA CODE TYPE			
				Plant		Process	
				Vessel		Special	
PSV Tag #		CRN#		Set Pressure			
Manufacturer		NB#		NB#		ASME Stamp	
Type/Model		Serial #		Inlet Size			
Capacity		Service Company		Outlet Size			
Service Date		Next Service Date					
Valve Location	<input type="checkbox"/> On Vessel <input type="checkbox"/> On Piping <input type="checkbox"/> Vents to Flare <input type="checkbox"/> Vents to Atmosphere	Valve Connection	<input type="checkbox"/> Threaded <input type="checkbox"/> Flanged <input type="checkbox"/> Welded				

**Manway:** No.

**Background:**

**PSV:** Yes, Located on the vessel shell. Service tag is missing so service date and set pressure need to be verified at earliest opportunity. Service date stamped on the PSV data plate is dated 07/2008.



# Field Inspection Report

## **Ladders, Stairs, Platforms & Walkways**

Corroded or Broken Parts-  
Condition of Coating-  
Wear of Ladder Rungs & Stair Treads-  
Handrails Secure-  
Condition of Flooring on Walkways-  
Check Tightness of Bolts-  
Check for Corrosion-  
Additional comments:

## **Concrete Supports and Foundations**

Steel Supports (Skirts, Bracing)  
Check for Corrosion-  
Check for Buckling & deflection-  
Check Vessel Supports for Tightness-  
Check Insulation for Deterioration-  
Additional Comments:

## **Nozzles**

Check for Distortion-  
If Found; Check Surrounding Shell and Seams for cracks-  
Check Condition of Connected Piping and Supports-  
Check Condition of Weep Holes in re-pads-  
Additional comments:

## **Electrical, Instrumentation & Grounding Equipment**

Sept./06 Check General Condition of Associated Electrical Equipment-  
Check General Condition of Associated Instrumentation-  
Check Grounding Connections-  
Additional comments:

## **Auxiliary Equipment**

Check Gauges and Sensor connections for Defects, Damage, Cracks & Vibration-  
Check Sight Glasses for defects, Damage, Cracks & Vibration-  
Check Condition and Operation of Associated Valves-  
Additional comments:

## **Metal Surfaces**

Check for Corroded Areas-  
Check for Cracks at Weld Seams and Nozzles-  
Check for Blistering at and below liquid Level-

## **Internals**

Inspection conducted -  
Check bubble or step trays for condition  
Check vane packing for plugging or mechanical damage  
Check down-comers, overflow lines.  
Check weirs, baffles, mist pads and coils-  
Additional Comments:



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## Protective: Coatings / Insulation / Cathodic

Check for External Coating Failure-

Check for internal coating –

**General Comment's:** Vertical Separator was found to be in good general condition.

### External Inspection:

- Name plate was attached and readable.
- External paint was in good condition with no signs of external corrosion noted.
- Vessel is supported on a skirt, bottom head to skirt weld was in good shape.
- Skirt is bolted securely to floor.
- All external nozzles were in good condition, no leaking flanges, gaskets, or threaded connections.
- All bolting hardware was intact and secure.
- Associated piping was in good shape.
- Fisher level controller was in good working condition.
- Liquid level sight glass was intact with no cracks or leaks.
- Temperature and pressure gauges were intact and in good working order.
- No deflection or deformation of the shell, heads or nozzles.
- Shell to roof interface seal was in good shape with no signs of corrosion or leaks.
- Vessel is grounded to the building and ground cable was in good shape.
- PSV was located without restrictions, service date and set pressure need to be verified.
- UT survey was carried out, no areas of concern were found; see attached UT Report.

### Internal inspection:

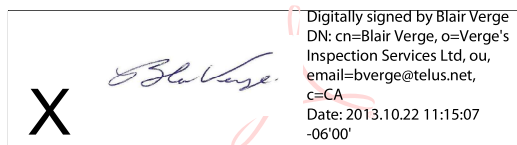
- No internal inspection was carried out at this time.

### Recommendations:

Verify PSV service date and set pressure as service tag is missing. If needed send PSV for calibration as date stamped on the data plate is from 2008.

Continue to carry out visual inspections and UT Corrosion surveys at the required inspection frequency.

**Vertical Separator is fit for continued service.**



Blair Verge  
Verge's Inspection Services Ltd.

**Inspector(s) Blair Verge API 510 Certification #24212**

# Field Inspection Report



A0490198\_Name plate\_17April2013



A0490198\_Lower shell side view\_17April2013



A0490198\_Upper shell\_17April2013