



NON DESTRUCTIVE EXAMINATION AND INSPECTION REPORT

FACILITY	Lady Fern Gas Plant		LSD	c 47 H / 94 H 1		(A) 401435
ITEM:	Glycol Contactor		Visions #	Site No.		
CRN:	K 5940.2	Serial No.	6323 – 20	BC Prov. Reg. No	Not Stated	
FABRICATOR:	Presson		Date Mfg	1999		
Design Pressure	11903	kPa	1725	psi	Inspected By (1)	Len Semanuik
Design Temp. (Max/Min)		°C	192	°F	Inspected By (2)	
Operating Pressure		kPa		psi		
Operating Temp. (Max/Min)		°C		°F		
Material Spec. Shell	SA	516 70 N		Signature (1)		
Material Spec. Heads	SA	516 70 N		Signature (2)		
Min. Thickness Shell	38.1	mm	1.500	ins		
Min. Thickness Heads	36.5	mm	1.437	ins		
Corrosion Allowance:	1.6	mm	.0625	ins		
Dimensions:	42 in. x 15 ft.					
Code Sec'n:	ASME VIII / Div 1		RT	1	PWHT	Nil



NDE Method(s) Used:

UT MT VT AUT LT PT AE RT OTHER

PRD DATA:

PRD I.D. #		Serial #	C00139134	Visions #	
Type	26314G153S/1	Manufacturer	Andersen	Set Pressure	1275 PSI
Capacity	16130 Scfm	Nozzle Size	1.5 in. x 3 in.	Service Date	Aug 2004

OPERATING HISTORY: (add attachments if necessary)

This vessel has been in service since 1999. This is the first internal inspection carried out on this vessel. This inspection was planned due to a problem in maintaining dew point at minus 15. This is the dew point acceptable for processing at the Duke facility in Ft Nelson B.C. Glycol is Selexol and Triethelene mix for hydrocarbon absorption. The dew point drops to minus 10 or lower when pressure drops to 7000 Kpa. When pressure is maintained at 8000 Kpa or above dew point remains constant at minus 15. The top of the contactor operates at upper limit of temp for this contactor and is not easily lowered.

Note: No soiled trays or plugged chimneys were detected – the demister was clean and clear. A refrigeration package seems to be the logical solution to this problem.

THIS INSPECTION: (attach extra sheets if required)

Date: Nov 3 – 2005

Visual External

Paint: Good condition, no loose or flaking paint.
 Data Plate: Intact, attached and legible.
 Ground: The skid package is grounded.
 Skirt / Bolting: Good, the vessel is firmly mounted to skid shack floor.
 Piping: Firmly supported – no deflection.
 Gages: Appear functional – within range for operation.
 Valves: No leaking detected.
 Sight Glasses: Unobstructed

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THIS INSPECTION (CONTD)

Internal:

Note: Visual inspection carried out through .750 inch inspection / drain weld o lets and a 2 inch weld o let at the top of the vessel and at the bottom of the vessel.

Bottom head: Good condition, light gray scaling – no build up or pitting.

Lower Shell: Good condition, light gray scaling – no build up or pitting.

Strainer Caps: Good condition, slots are open – no soil built up and chimney is open.

Bubble Caps: No build up – caps have free movement.

Chimneys: Good condition, plugged chutes.

Demister: Good condition, intact and attached, not plugged.

Thermal Probe: Intact and firmly attached.

Nozzles: Unobstructed.

NDE Inspections:

No NDE Inspections carried out at this time.

Repairs and/or Recommendations

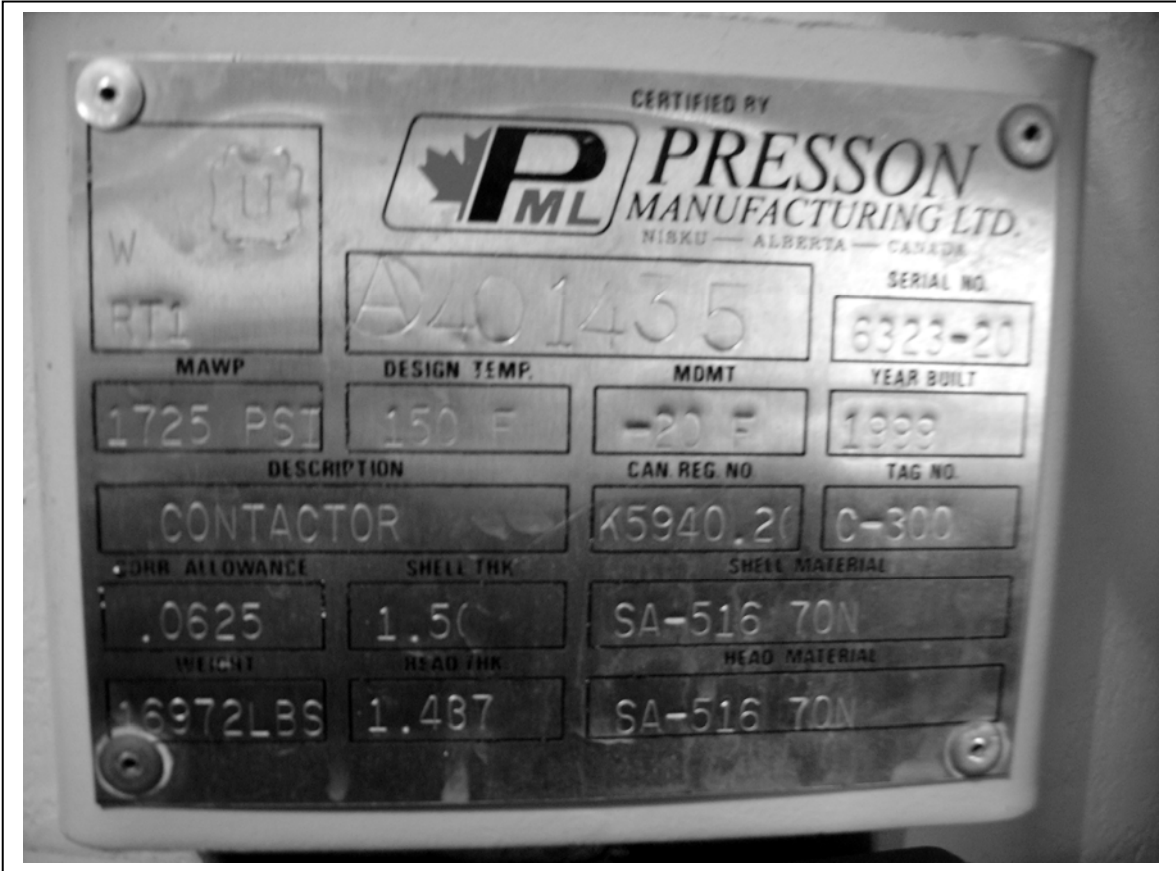
1. Installation of refrigeration package to maintain dew point.

Additional notes or sketch

This equipment is considered suitable for a further _____ years operation under present operating conditions

Corrosion rate - general:	mpy
Corrosion rate - pitting:	mpy
Time to C.A. depletion:	years

Next inspection due:



Ladyfern Glycol Contactor A401435.doc

Screen caps and glycol coil 1st tray



Inlet diffuser



Glycol coil in lower shell – attachment to shell.



Inlet nozzle



Inlet diffuser and coil in lower shell.



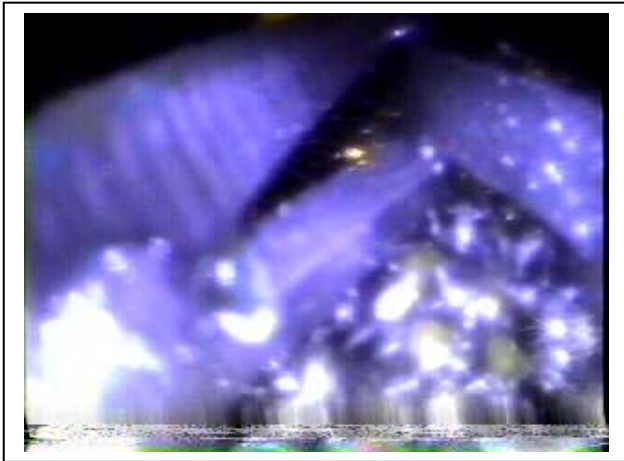
Diffuser



Demister on top outlet.



Close up of demister – not soiled.



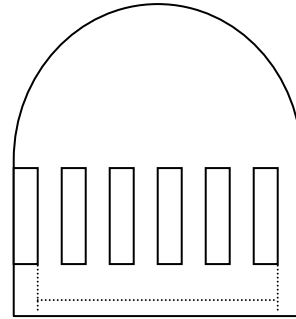
Glycol nozzle – lower shell



Over view of screen caps – middle tray.



Close up of slots in screen caps – residual glycol surrounds cap



The strainer cap sits inside a outer closure – so the liquid level is maintained about .250 inches above the tray level – the glycol drains down the chute and the gas rises through the slots in the cap – the slots are open in this contactor.

