

CERTIFIED BY PLAINS OIL LTD. CALGARY, ALBERTA (403) 269-1870	and the second second
W RI-1007. HT CAPACITY C.S.A. CU. M.	
 HEATER TYPE LINE REATER SHELL DIM. PRESS. RAT. P.S.I. PRE AND K.P.A. 93 °C	
PRESS RAT. P.S.I. T POST 12500 K.P.A. 93 °C TEST PRESS P.S.I. MAT'L PRE 31586 K.P.A.	
TEST PRESS P.S.I. POST 18750 K.P.A. POST SA 106 #COILS PRE 6 FIREBOX RAT. #COILS POST 8 ORY WEIGHT 165.9 YLAR BUILT 199.8 CORR. ALLOW N NSP. NO. 4	

A0438939_Name plate_28Mar2012



Client	CNRL		Date of Inspection	March 28, 2012			
Prov. Reg.#	A0438939		Inspection Type	VE & UT			
Equipment	Line Heater		Location	5-21			
Tag/Equip. #			LSD	05-21-012-14W4M			
Vessel Status	In Service		Comp./Unit #				
Manufacturer	Plains Oil Ltd.		MAWP / Temp				
Serial #	2133CB3	CRN # N 9595.21	3 MDMT@ Pressure				
Corrosion Allowance	1.6mm	Shell Material	SA106B	Shell Thick	ness		
Year Built	1998 Head Material		SA106B	Head Thickness			
Diameter	60" OD / 30" OD	Length	Height	RT R	۲ - 1	HT	Yes
Service	Sour	Next Inspection		Next Insp.	Туре		
ASME Stamp	No Next Inspection			Next Insp.	Туре		
PSV Tag #	CRN#			Set Pressu	re		
Manufacturer				NB#		ASME Stamp	Τ
Type/Model	Serial			Inlet Size			
Capacity		Service Company		Outlet Size			
Service Date			Next Service Date				
Valve Location	On Vessel	Valve Connection	Threaded	ABSA CODE TYPE			
	On Piping Vents to Flare		Flanged Welded	Plant		Process	Τ
	Vents to Atmosphere			Vessel		Special	
PSV Tag #		CRN#		Set Pressure		I	
Manufacturer		NB#		NB#		ASME Stamp	Т
Type/Model		Serial #		Inlet Size			
Capacity	Service Company			Outlet Size	1		
Service Date		1	Next Service Date			1	
Valve Location	On Vessel On Piping Vents to Flare Vents to Atmosphere	Valve Connection	Threaded Flanged Welded				

Manway: Firetube manway covers.

Background:

PSV: Vessel vents to atmosphere.



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:



Protective: Coatings / Insulation / Cathodic Check for External Coating Failure-Check for internal coating –

General Comment's: Line Heater was found to be in good general condition.

External Inspection:

- Name plate was attached and readable.
- External paint was in fair condition with slight external corrosion present at TML 50.
- Slight surface corrosion in form of rusting.
- External insulation was in good shape.
- Shell to wall interface seal was in good shape with no signs of corrosion.
- Vessel is supported on saddles, shell to saddle welds were in good shape.
- Saddles were bolted securely to the floor and skid.
- All external nozzles were in good condition.
- Leaking gasket on Stack side flange.
- Flame arrestor and stack were intact and in good shape.
- Firetube manway covers were in place and secure.
- All bolting hardware was intact.
- Temperature and Pressure gauges were in good working order.
- Liquid level sight glass was in good shape with no cracks or leaks.
- No deflection or deformation of the shell, end plates or nozzles.
- 50/50 top reservoir tank was in good shape.
- Reservoir tank thief hatch was in good working order.
- All associated piping was intact and secure.
- Vessel is grounded to the building; ground cable was in good shape.
- UT survey found no areas of concern, see attached UT Report.

Internal inspection:

• No internal inspection was carried out at this time.

Recommendations:

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

Line Heater is fit for continued service.

Blair Verge Verge's Inspection Services Ltd.

Inspector(s) Blair Verge API 510 Certification #24212





A0438939_Inlet and Outlet piping_28Mar2012



A0438939_Name plate_28Mar2012



A0438939_Burner and Stack assembly_28Mar2012



A0438939_West End view_28Mar2012

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A0438939_Surface rusting_28Mar2012



A0438939_50,50 Resevoir tank_28Mar2012



A0438939_Ground cable secure_28Mar2012



A0438939_Gasket leak on Stack_28Mar2012

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