

A# 2861535

15

**Pressure Vessel External Visual Inspection Report**

Organization: Husky

Inspection Date: 09/02/2010 12:00:00AM

Plant: East Central

Equipment ID: 66046993

Asset No: 66046993

System: 00001 Conn Lake Comp Stn 10-31-063-07W4

Operating Unit: EC-NO-005 Conn Lake

**Background**

Description:	Separator Inlet
Asset Type:	

**Inspection**

Inspector:	Elmer Mancelita	Company:	Husky Energy	Insulated:	N
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**External Location Categories**

Barrier Penetrations:		Damaged Insulation:		Vessel Supports:		Insulation Rings:	
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**Inspection Comments**

ID	Description	Condition	Location	NCR	Comments
V1	External visual + UT survey.	Good			

**Inspection Summary**

An external and UT inspection was performed to verify vessel integrity. No significant findings, vessel is considered acceptable for continued service.

- The vessel is painted with no evidence of corrosion or notable paint damage. The nameplate is legible and secure. Static data verified.
- The inlet, outlet and drain line piping are properly supported with no short bolting, mechanical damage. No sign of leaks
- The vessel is protected with a PSV that is attached to its piping and is due to servicing (last serviced Feb 2005). The gauges are clear and in good condition. The vessel is secure and level. - Instrumentation appears to be in good working condition with no leaks or damage evident.
- No process leaks noted on threaded bull plug/connections and flange connections. - Electrical ground is through the piling. The overall condition of the vessel is good.
- UT inspection was performed by Elmer Mancelita. All UT values were found to be acceptable.  
Top Head - 23.40 - 23.41mm (Tnom - 21.9mm), Bottom Head - 23.39 - 23.40mm., Upper Shell - 22.60 - 22.61mm (Tnom - 22.2mm), Mid Shell - 22.68 - 22.70mm., Lower Shell - 22.70 - 22.71mm.

Recommendation: 1) Service PSV at the earliest opportunity (S/N CE 109706-1A10). Update SEIM/SAP on PSV test report, link PSV to the superior equipment of the Scrubber. (SAP 66068195)

Equipment in sweet service, next inspection due in 09/02/2015.

## Pressure Vessel External Visual Inspection Report

### Inspection Planning

Date of Inspection: 09/02/2010 Date of last Inspection: \_\_\_\_\_ Date of Next Inspection: 09/02/2015

The signature below certify that the above is a true report of the inspection / test of the equipment specified and consider fit for service until the date of next inspection.

Competent Inspector: \_\_\_\_\_

TSY

Report Generation Date: \_\_\_\_\_

### **Reviewed and Accepted by:**

Next Inspection Date: \_\_\_\_\_

09/02/2015

### **Approved by:**

Signature: \_\_\_\_\_

TSY

Date: \_\_\_\_\_

12/01/2011

Signature: \_\_\_\_\_

Date: \_\_\_\_\_





# PRESSURE VESSEL INSPECTION REPORT

PAGE : 1 of 2

FACILITY	Conn Lake	DATE	July 21, 2004	REPORT #	IR040721GENg
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## VESSEL STATIC DATA

Prov. Insp. #	A-2861535	CRN	K-8706.2	Equip Tag #	
Equipment Location (LSD)	10-31-063-07W4	Serial #	1095 V100	Vessel Class	
Equipment Description	INLET SEPARATOR	Year Built	1993	MDMT	-20 °F
Manufacturer	PLAINS OIL LTD.	MAWP	720 psig @ 100 °F	PWHT :	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
CODE : UM <input type="checkbox"/> U <input checked="" type="checkbox"/> U2 <input type="checkbox"/>	RT : 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	Diameter	36 IN	Length	96 IN (S/S) OAL in
Shell Mat'l	SA-516-70N	Thickness	0.874 in	Corr Allowance	0.063 in
Head Mat'l	SA-516-70N	Thickness	0.862 in	Corr Allowance	0.063 in
Nozzle Mat'l		Thickness	in	Corr Allowance	in
Internal Coating : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Internal Clad : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Capacity	FT <sup>3</sup>	Manway :	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Inspection Port : YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Skirt <input checked="" type="checkbox"/> Legs <input type="checkbox"/> Saddle <input type="checkbox"/>	Nozzle Rating	300 lb ANSI	Painted :	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Insulated :	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				

## PROCESS DATA

Product Description	SWEET GAS	Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/> PPM:	
Operating Pressure	KPag / psig	Operating Temperature	°C / °F

## PSV STATIC DATA

Serial No.	Location	Size	Set	Capacity	Manufacturer	Model / Type	Service Date
CE-10976-1-A10	TOP OF OUTLET PIPING	Inlet 1.5" Outlet 2.5"	Pressure 655	SCFM 6453	FARRIS	26GA12-120/S6	06/1998

## INSPECTION HISTORY

RBI Category	A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>	Last Inspection Date	W.O. #
Inspection Task List #	Inspection Type	VE, UT	Inspection Reason
Inspection Techniques Required	Next Inspection Type	VE, UT	Due Date
VE <input type="checkbox"/> VI <input type="checkbox"/> RT <input type="checkbox"/> UT <input type="checkbox"/> MT <input type="checkbox"/> PT <input type="checkbox"/> TT <input type="checkbox"/>	Outstanding Repairs		

## INSPECTION SUMMARY

-A complete inspection to verify the Vessel's integrity was done by UT and VE inspections. No notable defects were observed, this vessel is recommended fit for service.

## RECOMMENDATIONS

-There are no recommendations at this time.

## REPAIRS COMPLETED

Object Name	Cause	Damage	Repair Activity

## VESSEL STATUS

Integrity Status	<input checked="" type="checkbox"/> Suitable for Continued Service	<input type="checkbox"/> Immediate Repairs Required	<input type="checkbox"/> Replace
Inventory Status	<input checked="" type="checkbox"/> In service Fully Utilized	<input type="checkbox"/> Future Repairs Required	<input type="checkbox"/> Scrap
This IR completes a thorough inspection. Reschedule as indicated		<input checked="" type="checkbox"/> Partial IR only. Do not reschedule	<input type="checkbox"/>



**PRESSURE VESSEL INSPECTION REPORT**

PAGE : 2 of 2

<b>FACILITY</b> Conn Lake	<b>DATE</b> July 21, 2004	<b>REPORT #</b> IR040721GENg
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**INSPECTION OBSERVATIONS****NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED**

- The PSV is past due for servicing and has a broken seal.
- See NCR040721GENd.

**EXTERNAL VISUAL INSPECTION**

- The nameplate, instrumentation, piping and piping attachments are in fair condition.
- The vessel's ground connection is through the skid's ground wire.
- The vessel is painted with no notable defects.
- The skid package piping is painted with no notable defects.
- The bolting grade on this vessel is B7 and 2H.
- There are no apparent leaks in the system.
- The vessel is protected by a PSV that is past due for service.
- The piping is painted with no notable defects.

**EXTERNAL NDE EXAMINATION**

- UT inspections were performed by Silvertip Inspection Services Ltd.
- Some of the UT values recorded are below nominal; however, they are still within corrosion allowance limits.
- See the attached UT reports for more detailed information.

**INTERNAL VISUAL INSPECTION**

- There was no internal visual inspection performed at this time.

**INTERNAL NDE EXAMINATION**


- There was no internal NDE performed at this time.

**PRESSURE TEST**

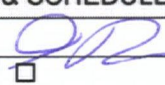
Test Completed	<input type="checkbox"/> Yes <input type="checkbox"/> No	Test Acceptable	<input type="checkbox"/> Yes <input type="checkbox"/> No	Test Report #
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**INSPECTOR CERTIFICATION**

*I, the undersigned certify that the above equipment has been inspected in accordance with the assigned task list and that statements within this report are correct and represent inspection findings*

Inspectors Name	Guy Normand	Inspector's Signature	
Inspection Company	Silvertip Inspection Services Ltd.	Date	July 21, 2004

**LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION**

Lead Inspector	<u>Jim Rice</u>	Signature		Date	<u>Sept 9, 04</u>
Vessel Inspection Interval	5 Years	Leave "as-is"	<input type="checkbox"/>	Change to	
PSV Inspection Interval	5 Years	Leave "as-is"	<input type="checkbox"/>	Change to	

Office Use Only      Report Entered to SEQA Database by  
Static Data Verified by

Date  
Date

<b>A-2861535</b>	PNT1	PNT2	PNT3	NOMINAL	BAND TYPE	LOCATION OF MINIMUM READING FROM START OF BAND	
LOC005	0.879	0.928	0.879	0.862	V	AT 0.00 " SOB	
LOC010	0.891	0.892	0.887	0.874	V	AT 6.25 " SOB	
LOC015	0.895	0.895	0.895	0.874	V	AT 16.00 " SOB	
LOC020	0.898	0.889	0.889	0.874	V	AT 16.00 " SOB	
LOC025	0.956	0.870	0.870	0.862	V	AT 21.00 " SOB	
LOC030	0.885	0.869		0.862	C	ON WEST SIDE	
LOC035	0.235	0.240	0.234	0.250	V	AT 1.50 " SOB	0.016 BELOW NOMINAL

**NOTE:**

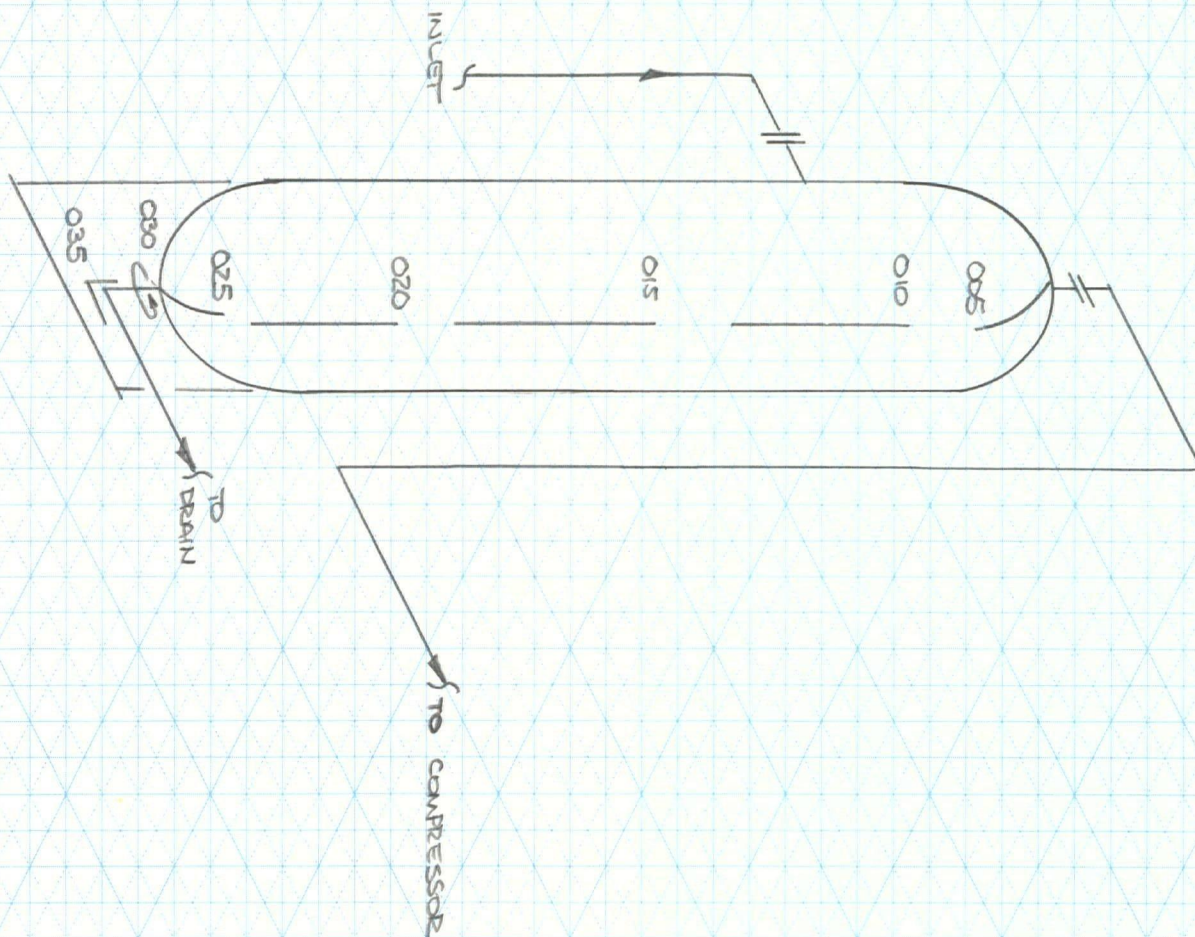
ALL VALUES ARE IN IMPERIAL UNITS

BAND TYPE: V = VERTICAL, H = HORIZONTAL AND C = CIRCULAR.

**PNT 1** = START OF BAND, **PNT 2** = END OF BAND, **PNT 3** = MINIMUM READING

FOR BOTTOM HEAD SCAN **PNT 1** = AVERAGE **PNT 2** = MINIMUM





CLIENT: HUSKY FACILITY: CONN LAKE LSD: 10-31-063-07W4

P & ID: - DRAWN BY: GUY DATE: JUL 21/04 DRAWING NO. -

**VESSEL INFORMATION:**

Pro. Reg. No. (A) 2861535 C.R.N. K-8706.7 Tag No. - Serial No. 1095 V100

Equip. Type: INLET SEPARATOR Manufacturer: PLAINS OIL LTD Yr. Blt. 1993 Size 36" ID / OD x 96"

HEAD: Top Nom. 0.862" Bottom Nom. 0.862" Shell Nom. 0.874" C.A. 0.063" Service SWEET GAS





## PRESSURE EQUIPMENT INSPECTION REPORT

FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_

ABSA Inspector Notified \_\_\_\_\_

Name

Date

Location / Office

ABSA Inspection Required (Based on Above Notification)

YES ☐ NO ☐

Equipment Is New YES ☐ NO ☒ Recommissioned From This Facility YES ☐ NO ☐ Moved From Other Site: \_\_\_\_\_  
Manufacturers Data Report is Available at Site YES ☐ NO ☒ If available attach copy to IR and forward to Facility Lead Inspector  
Photo Taken of Vessel: YES ☒ NO ☐ Photo Taken of Nameplate: YES ☒ NO ☐

### 1.0 STATIC DATA

Prov. Reg. # A 2861535 CRN: K 8706-2 Serial # 1095 V100

Equipment Location (LSD): 10-31-63-07 W4M Equipment ID #: \_\_\_\_\_

Equipment Description: Inlet Separator

Manufacturer: Plains Year Built: 1993

MAWP SS 4960 kPag kPag / psi @ 38 °C °C / F MDMT: -29 °C °C / F Capacity: \_\_\_\_\_ m3

MAWP TS \_\_\_\_\_ kPag / psi @ \_\_\_\_\_ °C / F MDMT: \_\_\_\_\_ °C / F Capacity: \_\_\_\_\_ m3

Code of Construction:

RT 2

PWHT: YES ☐ NO ☒

Vessel Material(s): \_\_\_\_\_ Internal Clad/Coating: YES ☐ NO ☐ Type if known: \_\_\_\_\_

Vessel Dia: 36" Lgth: 10' Thickness: \_\_\_\_\_ Shell: 22.2 Heads: 21.9 Other: 1.59 CA

Material: \_\_\_\_\_ Shell: SA 516 70 N Heads: SA 516 70 N Other: \_\_\_\_\_

Tubes QTY \_\_\_\_\_ Diameter \_\_\_\_\_ Thickness \_\_\_\_\_ Material \_\_\_\_\_ U / Straight \_\_\_\_\_

Manway: YES ☐ NO ☒ Inspection Port: YES ☐ NO ☒ Skirt: YES ☒ NO ☐

Insulated: YES ☐ NO ☒ Painted: YES ☒ NO ☐ Internal Coating: YES ☐ NO ☐

### 2.0 SAFETY RELIEF DEVICES

Safety Relief Device Installed: YES ☒ NO ☐ Manufacturer: Farris

ID #	LOCATION	SIZE		SET PRESS	CAPACITY	MODEL	NEXT SERVICE
		IN	OUT	kPag	GM / SCFM / PPH		
PSV 100	Vessel Outlet	1.5	2.5	4516		26GA12	

### PROCESS DATA

Shell Side:	Service:	Gas Well Effluents	Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/>	PPM
Tube Side:	Service:		Sweet <input type="checkbox"/> Sour <input type="checkbox"/>	PPM
Comments:				

### 3.0 INSPECTION SUMMARY

Inspection Date:	December 4, 2001	Inspection Type : External <input checked="" type="checkbox"/> Internal <input type="checkbox"/>	Next Inspection
Comments:			
Vessel and attachments are in good condition with no visible defects or deterioration that could cause imminent failure of the vessel or attachments.			
Wall thickness at UT inspection points indicated nominal thickness with no significant deterioration.			

Inspection Techniques Used: VT ☒ RT ☐ UT ☒ MT ☐ PT ☐ HT ☐ LT ☐ TT ☐



## PRESSURE EQUIPMENT INSPECTION REPORT

FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_

### 4.0 NONCOMPLIANCES INSPECTION DEFICIENCIES ISSUED

YES ☐ NO ☒ # (S) \_\_\_\_\_

### 5.0 RECOMMENDATIONS

Ensure PSV next service date is suitable for the safe and reliable operation of the valve.

### 6.0 EQUIPMENT STATUS

EQUIPMENT IS SUITABLE FOR SERVICE

YES ☒ NO ☐

REPAIRS REQUIRED

YES ☐ NO ☒

REPAIRS COMPLETED {R/A JOB # \_\_\_\_\_}

YES ☐ NO ☐

### 7.0 INSPECTION OBSERVATIONS

{Additional Reports / Records Attached : YES ☒ NO ☐ }

ULTRASONIC THICKNESS TESTS PERFORMED :

YES ☒ NO ☐

Coating is in good condition.

Vessel is adequately supported.

There is no apparent misalignment or strain in the attachments or to vessel nozzle.

UT inspection indicated no significant deterioration at UT inspection points on bottom head and shell.  
Top head not assessable for UT.

PSV last serviced June 9, 1998.

### 8.0 PRESSURE TEST

YES ☐ NO ☒

REPORT #:

Quality Inspector Name: Ken Tovell, API 510

Date: December 4, 2001

Signature: 

Company: RTD Quality Services Inc.

Lead Inspector Review and Schedule Confirmation:

Signed: 

Inspection Interval Left as is: ☒

Changed To: 6

Date: Dec 19/01

PSV Interval Left as is: ☒

Changed To: 6

### Office Use Only:

Entered to Electronic Database By: \_\_\_\_\_

Date: \_\_\_\_\_

Static Data Verified By: \_\_\_\_\_

Date: \_\_\_\_\_



**PRESSURE EQUIPMENT INSPECTION REPORT**FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_**Inspection Report Back Side  
Standard Inspection Check Sheet  
External Inspection**

(Attach To Inspection Report)

ITEM OBSERVED	OK	EXTENT		
		MIN	MOD	SEV
<b>Concrete Foundation</b>	N/A Bolted to metal floor of skid			
• Deterioration				
• Anchor Bolt				
<b>Steel Supports</b>				
• Deterioration	✓			
• Paint	✓			
• Fireproofing	N/A			
<b>Grounding Connections</b>	None evident, snow covering skid supports			
• Loose or Corroded				
<b>Vessel Surface</b>				
• Pitting / Corrosion	✓			
• Scaling	✓			
• Blisters & Bulges	✓			
• Hot Spots	✓			
• Mechanical Damage	✓			
• Paint	✓			
• Insulation	N/A			
<b>Nozzles &amp; Piping</b>				
• External Corrosion	✓			
• Supports	✓			
• Insulation	✓			
• Leaks Present	✓			
<b>Ladders &amp; Platforms</b>	N/A			
• Paint				
• Corrosion				
• Attachments				
<b>Special Equipment (PSV's, Rupture Disks, Level Gauges Etc.)</b>				
• PSV	✓			
• Level Gauge	✓			
• Sensing Devices	✓			

Checked By: Ken Tovell

Date: December 4, 2001

**PRESSURE EQUIPMENT INSPECTION REPORT**

**FACILITY:** Conn Lake CS **DATE:** December 4, 2001 **REPORT #:** \_\_\_\_\_

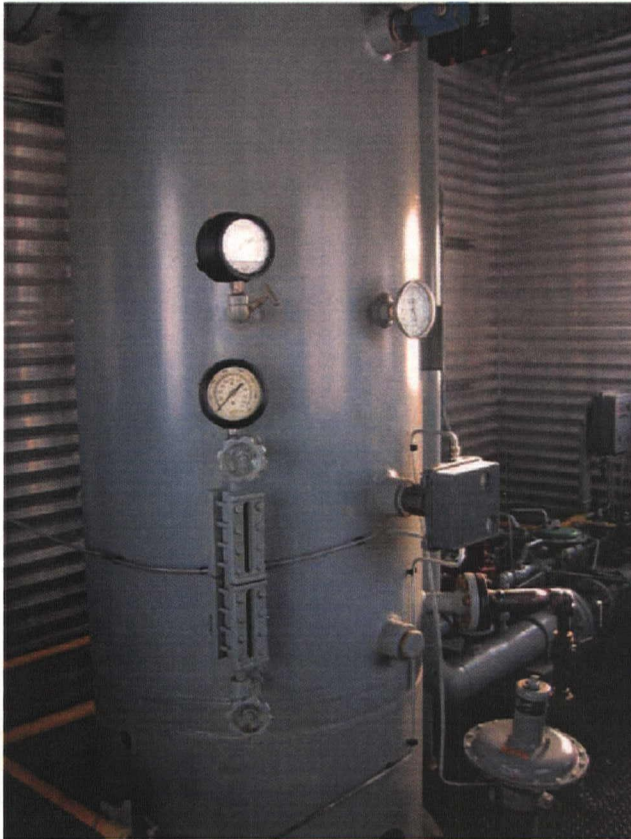


Figure 1: Inlet Separator

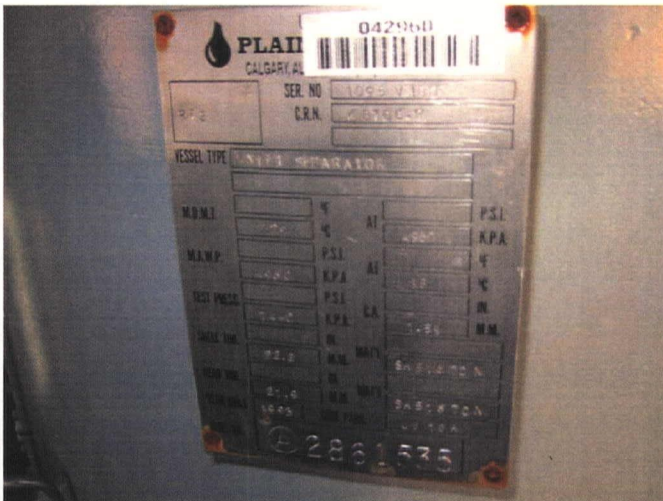


Figure 2: Nameplate





Renaissance Energy Ltd.

## VESSEL / TANK INSPECTION REPORT - Exhibit #300, Page 1 of 2

Facility CONN LAKE C.S.  
LSD 10-31-63-7 W4  
Inspector MANLEY YUEN

AFE # \_\_\_\_\_  
Date NOV. 28, 2000

Date of Last  
Inspection \_\_\_\_\_

## Equipment Details

☒ Vessel☐ TankVERTICAL  $\approx$  36"  $\phi$  x 10'-0"

Type INLET SEPARATOR  
Manufacturer PLAINS OIL LTD.  
Year Built 1993

Service SWEET  
MAWP 4960 kPa  
Serial # 1095 V100

A # 2861535  
at Design Temp 38°C  
Corr. Allowance 1.59 mm

## Coating Integrity

Coating Type \_\_\_\_\_  
Blistering: ☐ Yes ☐ No  
Holidays: ☐ Yes ☐ No  
Mech. Dam: ☐ Yes ☐ No  
Coupons: ☐ Yes ☐ No

Average Thickness \_\_\_\_\_  
Location(s) \_\_\_\_\_  
Location(s) \_\_\_\_\_  
Location(s) \_\_\_\_\_  
Comments \_\_\_\_\_

Date Coated \_\_\_\_\_

Comments \_\_\_\_\_

## Internal Equipment Assessment

Head/Shell ☐ Visual ☐ UT ☐ MPI ☐ Dye Pen  
Firetubes ☐ Visual ☐ UT ☐ MPI ☐ Dye Pen  
Pitting ☐ Yes ☐ No Pit Depth \_\_\_\_\_  
Anodes: Material \_\_\_\_\_  
Comments \_\_\_\_\_

Comments \_\_\_\_\_  
Comments \_\_\_\_\_  
Comments \_\_\_\_\_  
Date Installed \_\_\_\_\_ % Consumed \_\_\_\_\_

## External Equipment Assessment

Ladders / Stairs / Platforms ☐ Inspection Performed Comments \_\_\_\_\_  
Foundations / Skirts ☒ Inspection Performed Comments OK  
Elect./ Instrum./ Grounding ☒ Inspection Performed Comments OK  
Pressure / Temp Gauges ☒ Inspection Performed Comments OK  
External Insulation ☐ Inspection Performed Comments N/A

A # 2861535

## PSV Data

Serial # PSV IS INTACT  
CE 109706-1A10  
Manufacturer FARRIS  
Last Service Date JUNE 9/98

PSV Tag #  
Set Pressure  
Service Comp.

PSV-100 CRN # ~~655~~ F  
655 PSI Capacity 6453 SCFM  
H & R VALVE LTD

## Picture ID

Picture 1 \_\_\_\_\_ Picture 2 \_\_\_\_\_ Picture 3 \_\_\_\_\_ Picture 4 \_\_\_\_\_  
Picture 5 \_\_\_\_\_ Picture 6 \_\_\_\_\_ Picture 7 \_\_\_\_\_ Picture 8 \_\_\_\_\_

## General Comments and Recommendations

Vessel is in good condition  
No sign of external corrosion

## Equipment Status

Suitable for Further Service

☒ Yes☐ No

Repairs Required

☐ Yes☒ No

Repairs Completed

☐ Yes☐ No

Repairs Completed By:

Repair Company AQP#

Repair Date

Facility Inspector

Manley

Date

NOV. 28. 2000

QA Coordinator

Date





## PRESSURE EQUIPMENT INSPECTION REPORT

FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_

ABSA Inspector Notified \_\_\_\_\_

Name

Date

Location / Office

ABSA Inspection Required (Based on Above Notification)

YES ☐ NO ☐

Equipment Is New YES ☐ NO ☒ Recommissioned From This Facility YES ☐ NO ☐ Moved From Other Site: \_\_\_\_\_

Manufacturers Data Report is Available at Site YES ☐ NO ☒ If available attach copy to IR and forward to Facility Lead Inspector

Photo Taken of Vessel: YES ☒ NO ☐ Photo Taken of Nameplate: YES ☒ NO ☐

### 1.0 STATIC DATA

Prov. Reg. # A 2861535 CRN: K 8706-2 Serial # 1095 V100

Equipment Location (LSD): 10-31-63-07 W4M Equipment ID #: \_\_\_\_\_

Equipment Description: Inlet Separator

Manufacturer: Plains Year Built: 1993

MAWP SS 4960 kPag kPag / psi @ 38 °C °C / F MDMT: -29 °C °C / F Capacity: \_\_\_\_\_ m3

MAWP TS \_\_\_\_\_ kPag / psi @ \_\_\_\_\_ °C / F MDMT: \_\_\_\_\_ °C / F Capacity: \_\_\_\_\_ m3

Code of Construction: RT 2 PWHT: YES ☐ NO ☒

Vessel Material(s): \_\_\_\_\_ Internal Clad/Coating :YES ☐ NO ☐ Type if known: \_\_\_\_\_

Vessel Dia: 36" Lgth: 10' Thickness: \_\_\_\_\_ Shell: 22.2 Heads: 21.9 Other: 1.59 CA

Material: \_\_\_\_\_ Shell: SA 516 70 N Heads: SA 516 70 N Other: \_\_\_\_\_

Tubes QTY \_\_\_\_\_ Diameter \_\_\_\_\_ Thickness \_\_\_\_\_ Material \_\_\_\_\_ U / Straight \_\_\_\_\_

Manway: YES ☐ NO ☒ Inspection Port: YES ☐ NO ☒ Skirt: YES ☒ NO ☐

Insulated: YES ☐ NO ☒ Painted: YES ☒ NO ☐ Internal Coating: YES ☐ NO ☐

### 2.0 SAFETY RELIEF DEVICES

Safety Relief Device Installed: YES ☒ NO ☐ Manufacturer: Farris

		SIZE		SET PRESS	CAPACITY	MODEL	NEXT SERVICE
ID #	LOCATION	IN	OUT	kPag	GM / SCFM / PPH		
PSV 100	Vessel Outlet	1.5	2.5	4516		26GA12	

### PROCESS DATA

Shell Side:	Service:	Gas Well Effluents	Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/>	PPM
Tube Side:	Service:		Sweet <input type="checkbox"/> Sour <input type="checkbox"/>	PPM
Comments:				

### 3.0 INSPECTION SUMMARY

Inspection Date:	December 4, 2001	Inspection Type : External <input checked="" type="checkbox"/> Internal <input type="checkbox"/>	Next Inspection
Comments:			
Vessel and attachments are in good condition with no visible defects or deterioration that could cause imminent failure of the vessel or attachments.			
Wall thickness at UT inspection points indicated nominal thickness with no significant deterioration.			

Inspection Techniques Used: VT ☒ RT ☐ UT ☒ MT ☐ PT ☐ HT ☐ LT ☐ TT ☐



## PRESSURE EQUIPMENT INSPECTION REPORT

FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_

### 4.0 NONCOMPLIANCES INSPECTION DEFICIENCIES ISSUED

YES ☐ NO ☒ # (s) \_\_\_\_\_

### 5.0 RECOMMENDATIONS

Ensure PSV next service date is suitable for the safe and reliable operation of the valve.

### 6.0 EQUIPMENT STATUS

EQUIPMENT IS SUITABLE FOR SERVICE

YES ☒ NO ☐

REPAIRS REQUIRED

YES ☐ NO ☒

REPAIRS COMPLETED {R/A JOB # \_\_\_\_\_}

YES ☐ NO ☐

### 7.0 INSPECTION OBSERVATIONS

{Additional Reports / Records Attached : YES ☒ NO ☐ }

ULTRASONIC THICKNESS TESTS PERFORMED : YES ☒ NO ☐

Coating is in good condition.

Vessel is adequately supported.

There is no apparent misalignment or strain in the attachments or to vessel nozzle.

UT inspection indicated no significant deterioration at UT inspection points on bottom head and shell.

Top head not assessable for UT.

PSV last serviced June 9, 1998.

### 8.0 PRESSURE TEST

YES ☐ NO ☒

REPORT #:

Quality Inspector Name:	Ken Tovell, API 510	Date:	December 4, 2001
Signature:		Company:	RTD Quality Services Inc.

### Lead Inspector Review and Schedule Confirmation:

Signed:		Inspection Interval Left as is:	<input type="checkbox"/>	Changed To:	
Date:		PSV Interval Left as is:	<input type="checkbox"/>	Changed To:	

### Office Use Only:

Entered to Electronic Database By: \_\_\_\_\_ Date: \_\_\_\_\_  
Static Data Verified By: \_\_\_\_\_ Date: \_\_\_\_\_



**PRESSURE EQUIPMENT INSPECTION REPORT**FACILITY: Conn Lake CS DATE: December 4, 2001 REPORT #: \_\_\_\_\_**Inspection Report Back Side  
Standard Inspection Check Sheet  
External Inspection**

(Attach To Inspection Report)

ITEM OBSERVED	EXTENT			
	OK	MIN	MOD	SEV
<b>Concrete Foundation</b>	N/A Bolted to metal floor of skid			
<ul style="list-style-type: none"><li>• Deterioration</li><li>• Anchor Bolt</li></ul>				
<b>Steel Supports</b>				
<ul style="list-style-type: none"><li>• Deterioration</li><li>• Paint</li><li>• Fireproofing</li></ul>	✓ ✓ N/A			
<b>Grounding Connections</b>	None evident, snow covering skid supports			
<ul style="list-style-type: none"><li>• Loose or Corroded</li></ul>				
<b>Vessel Surface</b>				
<ul style="list-style-type: none"><li>• Pitting / Corrosion</li><li>• Scaling</li><li>• Blisters &amp; Bulges</li><li>• Hot Spots</li><li>• Mechanical Damage</li><li>• Paint</li><li>• Insulation</li></ul>	✓ ✓ ✓ ✓ ✓ ✓ N/A			
<b>Nozzles &amp; Piping</b>				
<ul style="list-style-type: none"><li>• External Corrosion</li><li>• Supports</li><li>• Insulation</li><li>• Leaks Present</li></ul>	✓ ✓ ✓ ✓			
<b>Ladders &amp; Platforms</b>	N/A			
<ul style="list-style-type: none"><li>• Paint</li><li>• Corrosion</li><li>• Attachments</li></ul>				
<b>Special Equipment (PSV's, Rupture Disks, Level Gauges Etc.)</b>				
<ul style="list-style-type: none"><li>• PSV</li><li>• Level Gauge</li><li>• Sensing Devices</li></ul>	✓ ✓ ✓			

Checked By: Ken Tovell

Date: December 4, 2001

**PRESSURE EQUIPMENT INSPECTION REPORT**

FACILITY: Conn Lake CS      DATE: December 4, 2001      REPORT #: \_\_\_\_\_

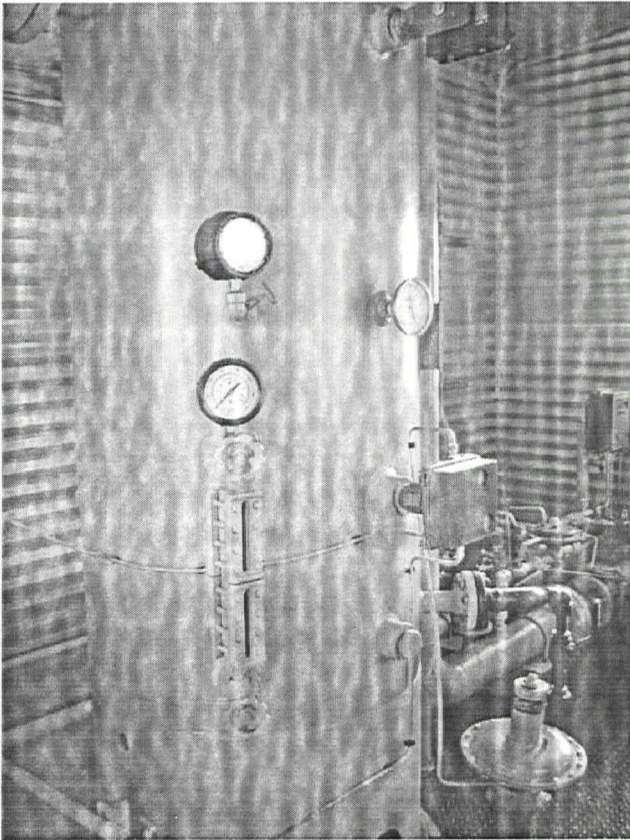


Figure 1: Inlet Separator

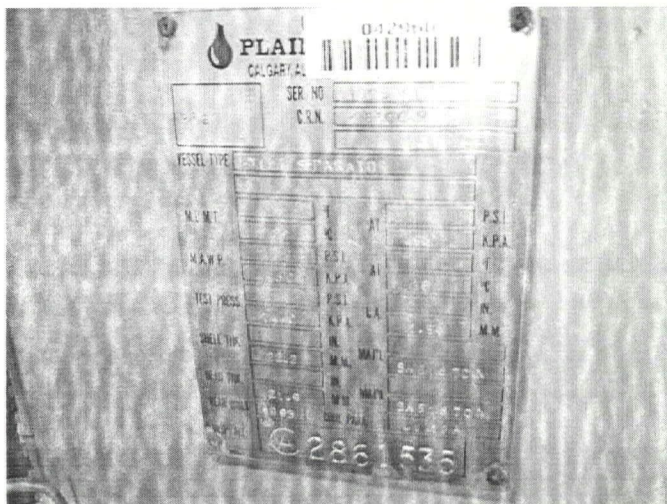


Figure 2: Nameplate

POOR QUALITY



# Husky Energy

## PRESSURE VESSEL INSPECTION REPORT

PAGE : 1 of 2

FACILITY	Conn Lake	DATE	February 22, 2005	REPORT #	IR050222GENa
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VESSEL STATIC DATA					
Prov. Insp. #	A-2861535		CRN	K-8706.2	
Equipment Location (LSD)	10-31-063-07W4			Equip Tag #	
Equipment Description	INLET SEPARATOR			Serial #	1095 V100
Manufacturer	PLAINS OIL LTD.			Vessel Class	
MAWP	720	psig	@ 100	°F	
CODE : UM	<input type="checkbox"/>	U	<input checked="" type="checkbox"/>	U2	<input type="checkbox"/>
RT : 1	<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	3	<input type="checkbox"/>
4	<input type="checkbox"/>			PWHT : YES	<input type="checkbox"/>
Diameter	36 IN	Length	96 IN (S/S)	OAL in	
Shell Mat'l	SA-516-70N	Thickness	0.874	in	Corr Allowance 0.063 in
Head Mat'l	SA-516-70N	Thickness	0.862	in	Corr Allowance 0.063 in
Nozzle Mat'l		Thickness		in	Corr Allowance in
Internal Coating : YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	Internal Clad : YES	<input type="checkbox"/>
NO	<input checked="" type="checkbox"/>	Capacity	FT <sup>3</sup>		
Manway : YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	Inspection Port : YES	<input checked="" type="checkbox"/>
NO	<input checked="" type="checkbox"/>	Skirt	<input checked="" type="checkbox"/>	Legs	<input type="checkbox"/>
Nozzle Rating	300	lb ANSI	Painted : YES	<input checked="" type="checkbox"/>	NO
			YES	<input checked="" type="checkbox"/>	NO
			NO	<input type="checkbox"/>	NO

PROCESS DATA					
Product Description	SWEET GAS		Sweet	<input checked="" type="checkbox"/>	Sour
Operating Pressure	KPag / psig		Operating Temperature	°C / °F	
PSV STATIC DATA					
PSV-100 Serial No.	Location	Size Inlet	Size Outlet	Set Pressure	Capacity SCFM
CE-10976-1-A10	TOP OF OUTLET PIPING	1.5"	2.5"	4514 kPa	6453

INSPECTION HISTORY					
RBI Category	A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>		Last Inspection Date	W.O. #	6041531
Inspection Task List #			Inspection Type	VE, UT	Inspection Reason
Inspection Techniques Required			Next Inspection Type	VE, UT	Due Date
VE	VI	RT	UT	MT	PT
PT	TT	Outstanding Repairs			

INSPECTION SUMMARY	
<p>-A complete inspection to verify the Vessel's integrity was done by UT and VE inspections. No notable defects were observed, this vessel is recommended fit for service.</p>	

RECOMMENDATIONS	
<p>-There are no recommendations at this time.</p>	

REPAIRS COMPLETED			
Object Name	Cause	Damage	Repair Activity

VESSEL STATUS			
Integrity Status	<input checked="" type="checkbox"/> Suitable for Continued Service	<input type="checkbox"/> Immediate Repairs Required	<input type="checkbox"/> Replace
Inventory Status	<input checked="" type="checkbox"/> In service Fully Utilized	<input type="checkbox"/> Future Repairs Required	<input type="checkbox"/> Scrap
This IR completes a thorough inspection. Reschedule as indicated		<input checked="" type="checkbox"/>	Partial IR only. Do not reschedule
		<input type="checkbox"/>	



# Husky Energy

## PRESSURE VESSEL INSPECTION REPORT

PAGE : 2 of 2

FACILITY	Conn Lake	DATE	February 22, 2005	REPORT #	IR050222GENa
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### INSPECTION OBSERVATIONS

#### NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED

NCR 04072160ND from Guy's earlier inspection - N# 6022853  
- Signoff

### EXTERNAL VISUAL INSPECTION

- The nameplate, instrumentation, piping and piping attachments are in fair condition.
- The vessel's ground connection is through the skid's ground wire.
- The vessel is painted with no notable defects.
- The skid package piping is painted with no notable defects.
- The bolting grade on this vessel is B7 and 2H.
- There are no apparent leaks in the system.
- The vessel is protected by a PSV that was recently serviced.
- The piping is painted with no notable defects.

### EXTERNAL NDE EXAMINATION

- UT inspections were performed by Silvertip Inspection Services Ltd.
- Some of the UT values recorded are below nominal; however, they are still within corrosion allowance limits.
- See the attached UT reports for more detailed information.

### INTERNAL VISUAL INSPECTION

- There was no internal visual inspection performed at this time.

### INTERNAL NDE EXAMINATION

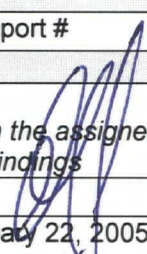
- There was no internal NDE performed at this time.

### PRESSURE TEST


Test Completed ☐ Yes ☐ No      Test Acceptable ☐ Yes ☐ No      Test Report #

### INSPECTOR CERTIFICATION

I, the undersigned certify that the above equipment has been inspected in accordance with the assigned task list and that statements within this report are correct and represent inspection findings

Inspectors Name	Guy Normand C.E.T.	Inspector's Signature	
Inspection Company	Silvertip Inspection Services Ltd.	Date	February 22, 2005

### LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION

Lead Inspector	Jim Rice	Signature		Date	Mar 14, 05
Vessel Inspection Interval	5 Years	Leave "as-is" <input type="checkbox"/>	Change to		
PSV Inspection Interval	5 Years	Leave "as-is" <input type="checkbox"/>	Change to		

Office Use Only      Report Entered to SEQA Database by  
Static Data Verified by

Date  
Date

<b>A-2861535</b>	PNT1	PNT2	PNT3	NOMINAL	BAND TYPE	LOCATION OF MINIMUM READING FROM START OF BAND	
LOC005	0.879	0.928	0.879	0.862	V	AT 0.00 " SOB	
LOC010	0.891	0.892	0.887	0.874	V	AT 6.25 " SOB	
LOC015	0.895	0.895	0.895	0.874	V	AT 16.00 " SOB	
LOC020	0.898	0.889	0.889	0.874	V	AT 16.00 " SOB	
LOC025	0.956	0.870	0.870	0.862	V	AT 21.00 " SOB	
LOC030	0.885	0.869		0.862	C	ON WEST SIDE	
LOC035	0.235	0.240	0.234	0.250	V	AT 1.50 " SOB	0.016 BELOW NOMINAL

**NOTE:**

ALL VALUES ARE IN IMPERIAL UNITS

BAND TYPE: V = VERTICAL, H = HORIZONTAL AND C = CIRCULAR.

**PNT 1** = START OF BAND, **PNT 2** = END OF BAND, **PNT 3** = MINIMUM READING

FOR BOTTOM HEAD SCAN **PNT 1** = AVERAGE **PNT 2** = MINIMUM