

A0459237 - LINE HEATER INSPECTION - JUN 2003

1060-04

Canadian Natural Resources Limited
Production - Facilities Engineering
A0459237 Line Heater External Inspection Report

Content Date Range: 6/24/2003 to 6/24/2003

Vessel Integrity

Inspection Data

Open: 4/20/2007 Close:

CC+2 0P P



00784635

Vital: Yes
Original: Yes
Confidential: No

Vessel Location (LSD):	100/13-27-75-07 W6H.	Disc #:		Photo #:	
Facility Name:	SADDLE HILLS.	Inspector:	J. OLIVER		
Vessel Description:	LINE HEATER.	Date:	JUNE 24/03		
Prov. Reg. Number:	17459237	CRN:	K1977.12.	Page:	1 of 2.

GENERAL INFORMATION

Manufacturer:		Serial Number:	123-85-00.		
RT:		HT:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Internally Coated:	YES <input type="checkbox"/> NO <input type="checkbox"/> NOT KNOWN <input type="checkbox"/>
Insulated:	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>				
Sh. Side MAWP:		Psi / Kpa @	F / C	Tube Side MAWP:	
					Psi / Kpa @ F / C
Sh. Side Op. Pr:		Psi / Kpa @	F / C	Tube Side Op. Pr:	
					Psi / Kpa @ F / C
Hd. Tk:		Mat'l:		C.A.:	
Chan. Hd. Tk:		Mat'l:		C.A.:	
Hd. Tk:		Mat'l:		C.A.:	
Chan Sh. Tk:		Mat'l:		C.A.:	
Sh. Tk:		Mat'l:		C.A.:	
Trans. Tk:		Mat'l:		C.A.:	
Sh. Tk:		Mat'l:		C.A.:	
VESSEL SIZE: (ID / OD X L):		Strapped:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Manway:	YES <input type="checkbox"/> NO <input type="checkbox"/> SIZE :

SERVICE CONDITIONS (CHECK ALL THAT APPLY) OPERATING SHUT IN SURPLUS JUNK

PROCESS Air Lean Amine Rich Amine Sweet Glycol Sweet Gas Sweet Condensate Sweet Oil

LPG Sour Glycol Sour Gas Sour Condensate Sour Oil Carbon Dioxide Nitrogen Steam Sour WATER.

VESSEL EXTERNAL CONDITION

Any Recent Repairs? Yes No

Any Physical Damage? Yes No

Any External Corrosion? (other than minor surface rust) Yes No

Any leaks on the vessel, nozzles or piping? Yes No

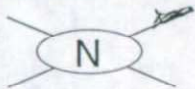
Any recent ultrasonic thickness tests? Yes No JUNE 24/03

No. of times the site is visited & approx. amount of time spent at the site / visit: Concentration H₂S: 10 %

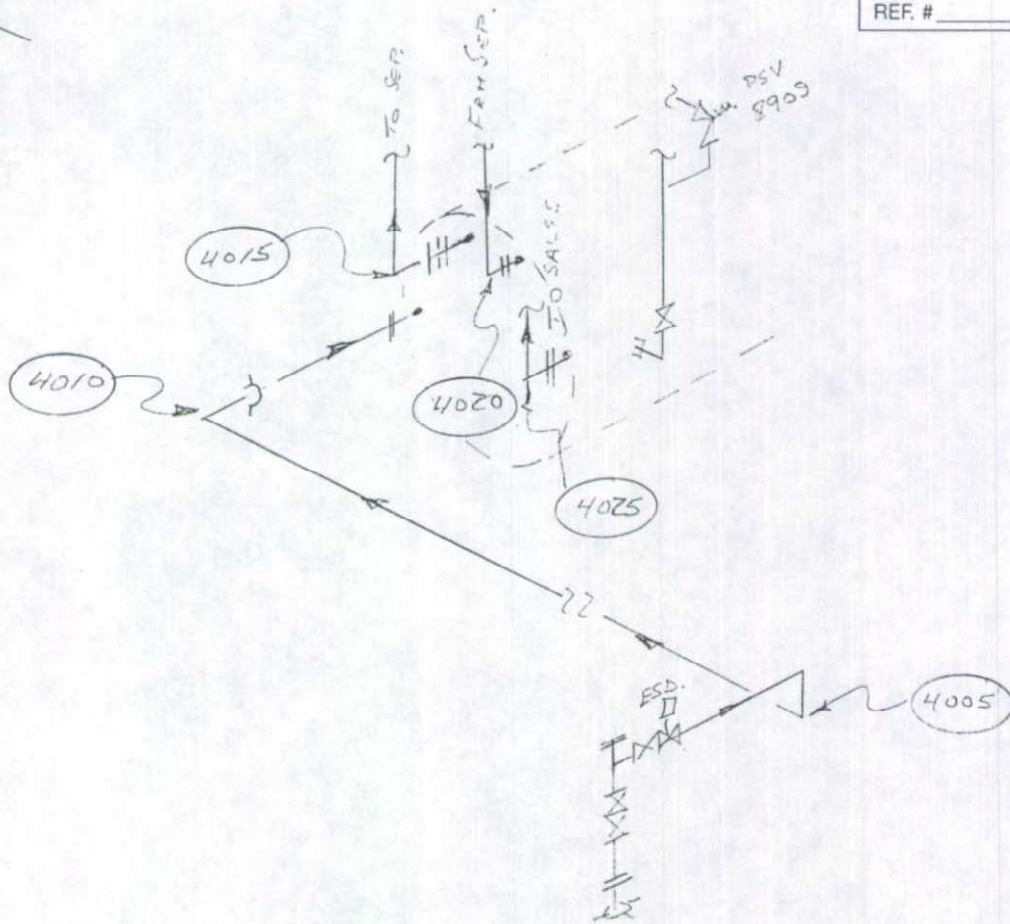
Vessel Comments:

PSV DATA

ANADARKO TAG #:	PSV-8909.	SERVICE COMPANY:	
Manufacturer:		Size:	
Model #:		CRN #:	
Serial #:		Capacity:	
Set Date:		Set Pressure:	
Are there any Isolating valves on either the inlet or outlet of the PSV? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Comments: <u>PSV OFF SH. SIDE OF HTR.</u>			



P&ID. # _____
REF. # _____



VESSEL DATA

Prov. Reg. No. A459237 C.R.N. K1977.12 P.E. No. _____ Serial No. 123.85-00
MFR. HAR-QUINN Code/Div. _____ Para _____ Code Stamp _____
Yr. Bld. 01 Yr. Inst. _____ Size 76.2MM X 12.49M Vol. .065M³ Service Sour 10% PWHT YES

Nominal Thickness & Material

Head: _____ Mat'l: _____ C.A.: _____
Head: _____
Shell: _____ C.A.: _____
Shell: _____
Chan Hd: _____ C.A.: _____
Chan Sh: _____
Gas Boot Hd: _____ C.A.: _____
Gas Boot Sh.: _____
Liq. Boot Hd.: _____ C.A.: _____
Liq. Boot Sh.: _____

Insulated PARTIAL R.T. 100%

Repairs _____
COMMENTS PRE HT COIL 2950 PSI @ -20/200°F
RE HT COIL 2025 PSI @ -20/200°F
CORR. ALL 3.2

INWALKO CANADA CORPORATION
SADDLE HILLS GAS GATHERING
SADDLE HILLS
LSD: 100/13.27-75.07 W GM.
WELL & LINE HEATER PIPING

MAWP Shell Side _____ @ Temp. _____
MAWP Tube Side _____ @ Temp. _____

TECH.:	REV. DATE:	DWG DATE:
CAD:	REVISION:	DRAWING: <u>40</u>

Vessel Location (LSD):	100/13-27-75-06 W6M.	Disc #:		Photo #:	
Facility Name:	SADDLE HILLS.	Inspector:	J. OLIVER		
Vessel Description:	LINE HTR. FUEL GAS SCRUBBER.	Date:	JUNE 24/03		
Prov. Reg. Number:	09592378	CRN:	041531.123	Page:	1 of 2

GENERAL INFORMATION

Manufacturer:		Serial Number:	124.64.00		
RT:		HT:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Internally Coated:	YES <input type="checkbox"/> NO <input type="checkbox"/> NOT KNOWN <input type="checkbox"/>
Insulated:		YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>			
Sh. Side MAWP:		Psi / Kpa @	F / C	Tube Side MAWP:	
					Psi / Kpa @ F / C
Sh. Side Op. Pr:		Psi / Kpa @	F / C	Tube Side Op. Pr:	
					Psi / Kpa @ F / C
Hd. Tk:		Mat'l:		C.A.:	
Hd. Tk:		Mat'l:		C.A.:	
Sh. Tk:		Mat'l:		C.A.:	
Sh. Tk:		Mat'l:		C.A.:	
VESSEL SIZE: (ID / OD X L):		Strapped:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Manway:	YES <input type="checkbox"/> NO <input type="checkbox"/> SIZE:

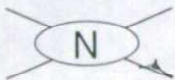
SERVICE CONDITIONS (CHECK ALL THAT APPLY)	OPERATING <input checked="" type="checkbox"/> SHUT IN <input type="checkbox"/> SURPLUS <input type="checkbox"/> JUNK <input type="checkbox"/>
PROCESS	Air <input type="checkbox"/> Lean Amine <input type="checkbox"/> Rich Amine <input type="checkbox"/> Sweet Glycol <input type="checkbox"/> Sweet Gas <input checked="" type="checkbox"/> Sweet Condensate <input type="checkbox"/> Sweet Oil <input type="checkbox"/>
LPG <input type="checkbox"/> Sour Glycol <input type="checkbox"/> Sour Gas <input type="checkbox"/> Sour Condensate <input type="checkbox"/> Sour Oil <input type="checkbox"/> Carbon Dioxide <input type="checkbox"/> Nitrogen <input type="checkbox"/> Steam <input type="checkbox"/>	

VESSEL EXTERNAL CONDITION

Any Recent Repairs? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any Physical Damage? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any External Corrosion? (other than minor surface rust) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any leaks on the vessel, nozzles or piping? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any recent ultrasonic thickness tests? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> June 23 / 03,	
No. of times the site is visited & approx. amount of time spent at the site / visit:	Concentration H ₂ S: 0
Vessel Comments:	

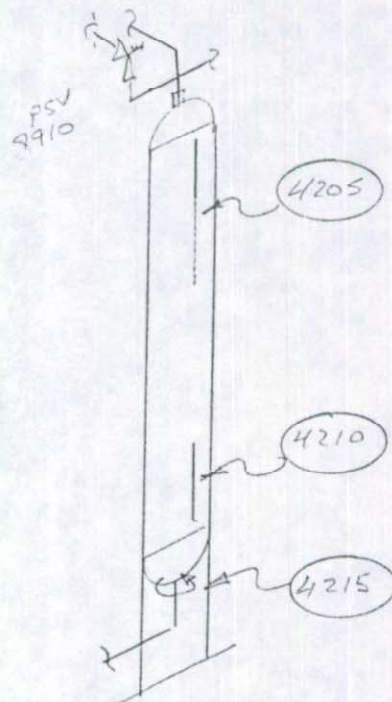
PSV DATA

ANADARKO TAG #:	PSV 8910.	SERVICE COMPANY:	
Manufacturer:		Size:	
Model #:		CRN #:	
Serial #:		Capacity:	
Set Date:		Set Pressure:	
Are there any Isolating valves on either the inlet or outlet of the PSV? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Comments:			



P&ID. # _____

REF. # _____



VESSEL DATA

Prov. Reg. No. _____ C.R.N. 041531.123 P.E. No. _____ Serial No. 124-64-00
 MFR. HKE QUINN Code/Div. _____ Para _____ Code Stamp _____
 Yr. Bld. 00 Yr. Inst. _____ Size 203 X 762MM Vol. 0.031M³ Service SULEF PWHT YES

Nominal Thickness & Material

Head: 3.2 Mat'l: SA 234 WPB C.A.: 3.2
 Head: _____
 Shell: 3.2 SA 106B C.A.: 3.2
 Shell: _____
 Chan Hd: _____ C.A.: _____
 Chan Sh: _____
 Gas Boot Hd: _____ C.A.: _____
 Gas Boot Sh.: _____
 Liq. Boot Hd.: _____ C.A.: _____
 Liq. Boot Sh.: _____

Insulated NO R.T. 1

Repairs _____

COMMENTS _____

ANADARICO CANADA CORPORATION
 SADDLE HILLS GAS GATHERING
 SADDLE HILLS
 LSD; 100/13-27-75-06W6M
 LINE HEATER FUEL GAS SCRUBBER

MAWP Shell Side 250 PSI @ Temp. 20°/100°F
 MAWP Tube Side _____ @ Temp. _____

TECH.:	REV. DATE:	DWG DATE: <u>1/2</u>
CAD:	REVISION:	DRAWING: