

1060-04

Canadian Natural Resources Limited
Production - Facilities Engineering
A0475216 Line Heater External Inspection Report

Content Date Range: 6/22/2003 to 6/22/2003

Vessel Integrity

Inspection Data

Open: 4/19/2007 Close:

Vital: Yes
Original: Yes
Confidential: No

CC+2 0P P



00784581

A0475216 - LINE HEATER INSPECTION - JUN 2003

Vessel Location (LSD):	100/15-34-75-07W6M	Disc #:		Photo #:	
Facility Name:	SADDLE HILLS GAS GATHERING.	Inspector:	J. OLIVER		
Vessel Description:	"B" LINE HEATER.	Date:	JUNE 22/03		
Prov. Reg. Number:	A475216	CRN:	K1977.12	Page:	1 of 2

GENERAL INFORMATION

Manufacturer:	STAR-QUINN		Serial Number:	126-91-01-C	
RT: / HT:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Internally Coated:	YES <input type="checkbox"/> NO <input checked="" 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.:	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):	76.2MM X 12.49M.		Strapped:	YES <input type="checkbox"/> NO <input type="checkbox"/>	Manway: YES <input type="checkbox"/> NO <input type="checkbox"/> SIZE:

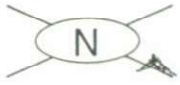
SERVICE CONDITIONS (CHECK ALL THAT APPLY)	OPERATING <input checked="" type="checkbox"/> SHUT IN <input type="checkbox"/> SURPLUS <input type="checkbox"/> JUNK <input type="checkbox"/>
PROCESS	Air <input type="checkbox"/> Lean Amine <input type="checkbox"/> Rich Amine <input type="checkbox"/> Sweet Glycol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

VESSEL EXTERNAL CONDITION

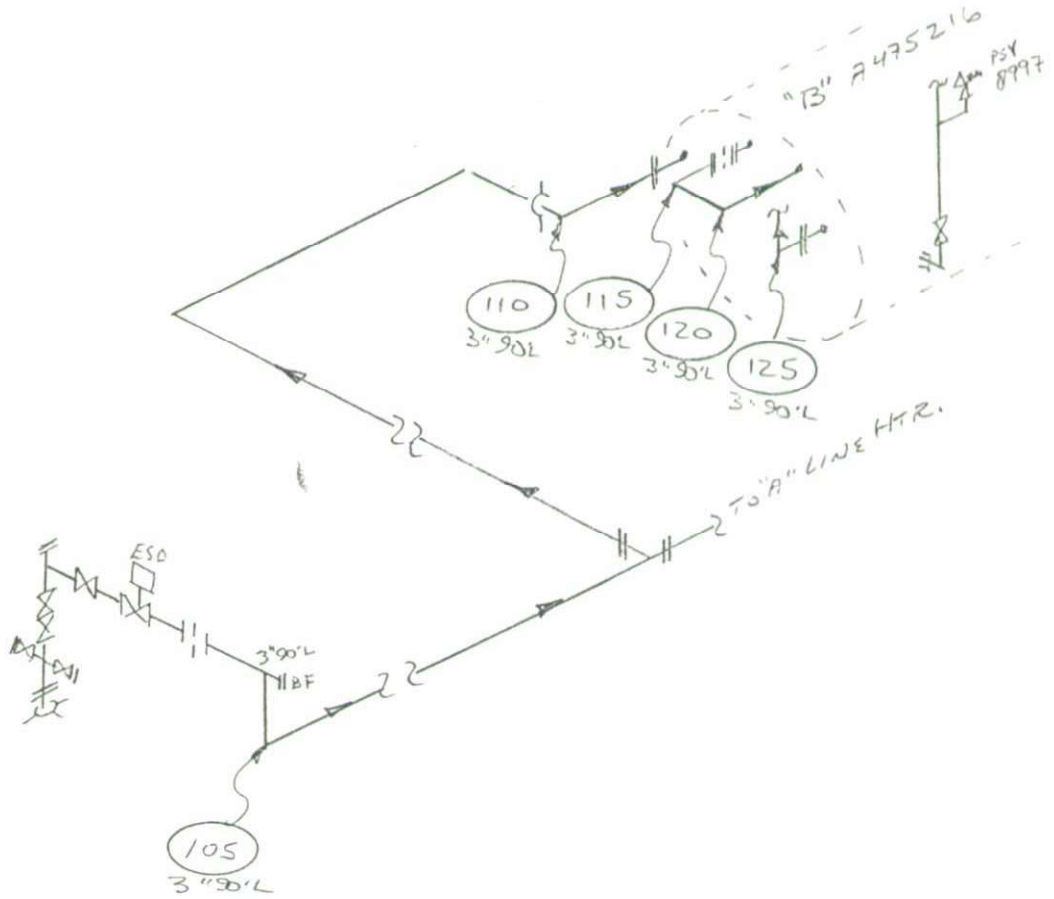
Any Recent Repairs? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any Physical Damage? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Any External Corrosion? (other than minor surface rust) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
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 22/03	
No. of times the site is visited & approx. amount of time spent at the site / visit:	Concentration H ₂ S: 150 PPM,
Vessel Comments: PRE HEAT. TUBE SIDE 2950 PSI @ -20' / 200' F RE HEAT. TUBE SIDE 2025 PSI @ -20' / 200' F	

PSV DATA

ANADARKO TAG #:	PSV 8997	SERVICE COMPANY:	
Manufacture:	FARRIS	Size:	1" X 1
Model #:	27DA33-M20	CRN #:	06 0386.9C.
Serial #:	443974-9-KE8E20534.4	Capacity:	
Set Date:	10/02	Set Pressure:	
Are there any Isolating valves on either the inlet or outlet of the PSV? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> U/S			
Comments:		PSV IS OFF SH. SIDE OF HTR. SERVICE TAG - DISC STAMPED. BLACK GOLD G 12/89 10/02	



P&ID. # _____
REF. # _____



VESSEL DATA

Prov. Reg. No. A475216 C.R.N. K1977.12 P.E. No. _____ Serial No. 126-91-01-C
MFR. MAR-QUINN Code/Div. _____ Para _____ Code Stamp _____
Yr. Bld. 01 Yr. Inst. _____ Size 76.2MM X 12.49M Vol. 1.065 M³ Service SOUR. 150FFM PWHT

Nominal Thickness & Material

Head: _____ Mat'l: _____ C.A.: 3.2
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. 1
Repairs _____
COMMENTS _____

ANADARKO (CANADA) CORPORATION
SADDLE HILLS GAS GATHERING
SADDLE HILLS
LSD; 100/15-34-75-07 W6M.
WELL # "B" LINE HEATER PIPING

FRONT FLANGE
MAWP Shell Side 2950 PSI @ Temp. -20'/200°F
REAR FLANGE
MAWP Tube Side 2025 PSI @ Temp. -20'/200°F

TECH.:	REV. DATE:	DWG DATE:
CAD:	REVISION:	DRAWING:

Vessel Location (LSD):	100/15-34-75-07 W6M.	Disc #:		Photo #:	
Facility Name:	SADDLE HILLS GAS GATHERING.	Inspector:	J. OLIVER		
Vessel Description:	8" Ø FUEL GAS SCRUBBER.	Date:	JUNE 22/03		
Prov. Reg. Number:	- 0475216B	CRN:	0H1531.123	Page:	1 of 2

GENERAL INFORMATION

Manufacturer:	MAR-QUINN.	BLT: 2001	Serial Number:	127-62-01							
RT:) HT:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Internally Coated:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NOT KNOWN <input type="checkbox"/>	Insulated:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> PARTIAL <input type="checkbox"/>						
Sh. Side MAWP:	250 (Psi) Kpa @ -20'/100' (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:	6.4	Mat'l:	SA 234 WPB	C.A.:	3.2	Chan. Hd. Tk:		Mat'l:		C.A.:	
Hd. Tk:		Mat'l:		C.A.:		Chan Sh. Tk:		Mat'l:		C.A.:	
Sh. Tk:	8.2	Mat'l:	SA 106 B	C.A.:	3.2	Trans. Tk:		Mat'l:		C.A.:	
Sh. Tk:		Mat'l:		C.A.:							
VESSEL SIZE: (ID / OD X L):	203MM X 762MM.		Strapped:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Manway:	YES <input type="checkbox"/> NO <input type="checkbox"/> SIZE N/A					

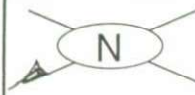
SERVICE CONDITIONS (CHECK ALL THAT APPLY)	OPERATING <input checked="" type="checkbox"/> SHUT IN <input type="checkbox"/> SURPLUS <input type="checkbox"/> JUNK <input type="checkbox"/>
PROCESS	Air <input type="checkbox"/> Lean Amine <input type="checkbox"/> Rich Amine <input type="checkbox"/> Sweet Glycol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

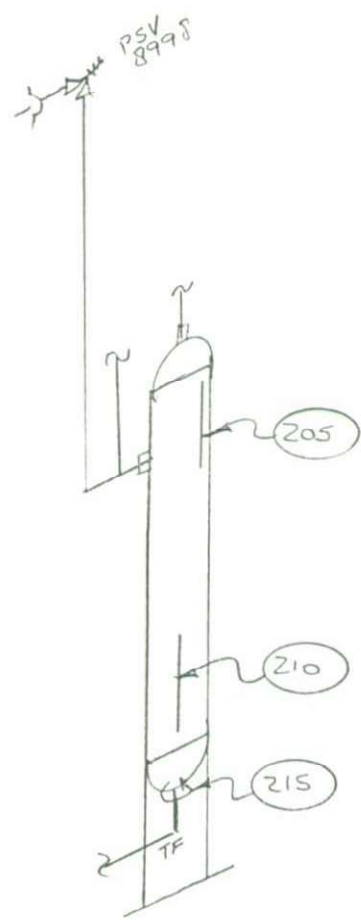
Any Recent Repairs?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Any Physical Damage?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Any External Corrosion? (other than minor surface rust)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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"/> JUN 22/03.
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-8998.	SERVICE COMPANY:	BLACK GOLD.
Manufacturer:	FARRIS.	Size:	1" X 1"
Model #:	27DA33-M20.	CRN #:	090386.92
Serial #:	SE-11983-1	Capacity:	361 SCFM.
Set Date:	OCT 18 / 02.	Set Pressure:	150 PSI
Are there any Isolating valves on either the inlet or outlet of the PSV? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Comments:			



P&ID. # _____
REF. # _____



VESSEL DATA

Prov. Reg. No. C.R.N. 0H1531.123 P.E. No. Serial No. 127-62-01
 MFR. MARQUINN. Code/Div. Para Code Stamp
 Yr. Bld. 01 Yr. Inst. Size 203 x 762 MM Vol. .031 M³ Service SWEET PWHT YES

Nominal Thickness & Material

Head: <u>6.4</u>	Mat'l: <u>SA 234 WPB</u>	C.A.: <u>3.2</u>	Insulated <u>No</u>	R.T. <u>1</u>
Head: <u> </u>	<u> </u>	<u> </u>	Repairs <u> </u>	COMMENTS <u> </u>
Shell: <u>8.2</u>	<u>SA 106B</u>	C.A.: <u>3.2</u>		
Shell: <u> </u>	<u> </u>	<u> </u>		
Chan Hd: <u> </u>	<u> </u>	C.A.: <u> </u>		
Chan Sh: <u> </u>	<u> </u>	<u> </u>		
Gas Boot Hd: <u> </u>	<u> </u>	C.A.: <u> </u>		
Gas Boot Sh: <u> </u>	<u> </u>	<u> </u>		
Liq. Boot Hd: <u> </u>	<u> </u>	C.A.: <u> </u>		
Liq. Boot Sh: <u> </u>	<u> </u>	<u> </u>		

ANADARKO CANADA CORPORATION,
 SADDLE HILLS GAS GATHERING,
 SADDLE HILLS
 I.S.D: 100/15-34-75-07W6M.
 8" Ø FUEL GAS SCRUBBER.

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

TECH.:	REV. DATE:	DWG DATE:
CAD:	REVISION:	DRAWING: