

BOILERS AND PRESSURE VESSELS REPAIR AND ALTERATION REPORT

(A) #: **2706762**

OWNER EQUIP NO.: _____

REPAIR ☒

and/or

ALTERATION ☐

Partial ☐ Final ☒

1. **Name and Address of Organization** doing Repair/Alteration Natco Canada
11236-91 AVE Grande Prairie, AB T8V 6K6 AQP No. & Expiry Date 1416 / November 6, 2009
Location of Installation 14-01-98-08W6 FireBird
2. **Name of Owner** Conoco Phillips Canada
Address 401-9th Avenue S.W, Calgary, AB T2P 2H7
3. **Boiler/Pressure Vessel Description** Horizontal Free Water Knock Out CRN K-5656.2
Manufacturer's Name Wells Hall Fabrication Serial No. 91-6066-0
4. **Design Conditions:**
a) Vessel/Shellside/Boiler: Max Allowable Working Press. 75 PSI Min/Max Design Temp -20F/100F
b) Jacket/Tubeside: Max Allowable Working Press. _____ Min/Max Design Temp _____ / _____
5. **Description of defects** (location and types of deterioration that resulted in the repair/alteration).
Isolated Pitting on lower shell from internal coating defects
Corrosion of 3" 90 deg elbow on drain line
6. **ASME Code Edition and Addenda** used for work: ASME Sect. VIII D1 Year 2007 Addenda _____
7. **Repair/Alter. Description of Work.** Step by step description of repair/alteration method, attach additional sheets as needed.

Note 1: Repair/Alteration Procedure to be accepted by ABSA SCO prior to start of work.

Weld Build up of wasted areas on shell using Natco's Reg'd Temper Bead Procedure 1SMP1TBAWN-50

Remove corroded Elbow & Flange From 3" Drain nozzle, elbow will be eliminated and replaced with new Flange

See section 11 and 15 for additional information.

Chief Inspector

Todd Loran Reviewed _____

JUL 30 2008

IBPVI #000085 Approved ☒

Signature Todd Loran

8. **Material** - List any material used in repair/alteration and any base material welded on:

Item	Mat'l Spec.	Thick/Sch	Diam	Item	Mat'l Spec.	Thick/Sch	Diam
Shell/Drum	SA516-70N	.375"	96"OD	Heads/ Ends	SA516-70N	.345"	96"
Tubeshe				Tubes			
Nozzles	SA 106B	sch 160	3"	Flanges/Fitting	SA105N Sched 160	Class 150	3"

9. **Welding Procedure** – Alberta Registration Number WP- 327.2 WPS Numbers used: 1SMP1TBAWN-50
10. **Heat Treatment:** Bake Out (Temp./Time) _____ / _____ hr Preheat Temp 93C Post Weld HT (Temp./Time) _____ / _____
11. **Non Destructive Examination** (Specify type and extent).

MPI prior to weld build up, and 24 hours after completion. MPI bevel prep on 3" drain nozzle prior to welding.

MPI and RT - Full on 3" butt weld after cooldown

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12. **Pressure Test** Vessel/Boiler/Shellside Tubeside/Jacket
- a) Hydrostatic In Service Leak Test _____
- b) Other Test _____

13. **Welded Replacement Parts:** Attached are Manufacturer's Partial Data Reports or Repair/Alteration Reports properly identified and signed by Authorized Inspectors for the following items of this report: (Welded parts supplied by others).

14. **Responsibility Owner/Client.** Identify below items that the owner/client has assumed responsibility for. **Note (2)**

- a) Design Submission _____ b) Repair/Alteration Procedure: _____ c) Material Control _____
- d) Welding Control _____ e) NDE ☒ f) Heat Treatment _____ g) Pressure Test _____

Note 2: Owner/client must have a valid Alberta Quality Program (AQP), for the scope of work, to assume responsibility for function c, d, e, f, or g.

- 15 **REMARKS:** Vessel is PWHT'd, repair welds will not be PWHT'd however a temper bead procedure will be used. An in-service leak test will be used in lieu of hydro test. MPI and RT will be performed on nozzle to flange weld, with MPI and internal VI on weld build up. Build up areas will be internally coated with Devco253

16. **CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this Report are correct and that all design, material, construction and workmanship on this repair/alteration conform to the requirements of the Alberta Safety Codes Act and Regulations.

a) For all items except for items identified in 14:

NATCO CANADA

(Repair/Alteration Organization Name)

1416 NOV. 09 2009

(AQP Number & Expiry Date)

(Signature & Date)

Jim D Kotronis

(Print Name)

b) For items identified in 14 only:

ConocoPhillips

(Owner/Client Organization Name)

8042 Nov 25, 2009

(AQP Number & Expiry Date)

(Signature & Date)

(Print Name)

17. DATE WORK WAS COMPLETED: _____

18. **CERTIFICATE OF INSPECTION**

I have inspected the repairs and/or alterations described in this report. To the best of my knowledge, this work has been done in accordance with the Safety Codes Act and Regulations and the requirements established in AB-513.

- a) Owner-User Inspection Certification (Field Only)**
(Required when Owner-User Inspects the work under their ABSA Authorized Owner-User Quality Program).

- b) ABSA Safety Codes Officer Certification**
(when work is inspected by ABSA).

Owner-User AQP# & Expiry Date

Owner User In-Service Inspector Signature & Date

Owner-User In-Service Inspector Name (Please Print)

Owner-User In-Service Inspector Alberta Cert #

ABSA SCO Signature & Date

Print Name

Report Received by ABSA SCO

Date