

Lawrence's Welding (1987) Ltd.

Box 685 • High Level, Alberta • T0H 1Z0
Telephone: (780) 683-2392 -- Zama
Fax (780) 683-2363

FAX TRANSMISSION

Date Sept 14 2011

Faxed to Number 403-729-3879

Total Pages including this Page 13

If you do not receive complete fax, please contact _____

TO: Rob Schultz c/o Apache.

FROM Lawrence HwaTriuk.

Re: H Repaired Fire Tubes Two from 7-34
Two from 7-28

Message Faxed Fire Tube Data Repair and signed
Copies off AB 40 for Repaired Tubes.

9-28-117-4-w6 Job 08-07-2011 A 3 sheets

9-28-117-4-w6 Job 08-07-2011 B 3 sheets

7-34-114-6-w6 Job 08-06-2011 A 3 sheets

7-34-114-6-w6 Job 08-06-2011 B 3 sheets

Any questions call me

AT 780 915 4944 Cell

Thanks
Lawrence HwaTriuk.

Lawrence's Welding (1987) Ltd.

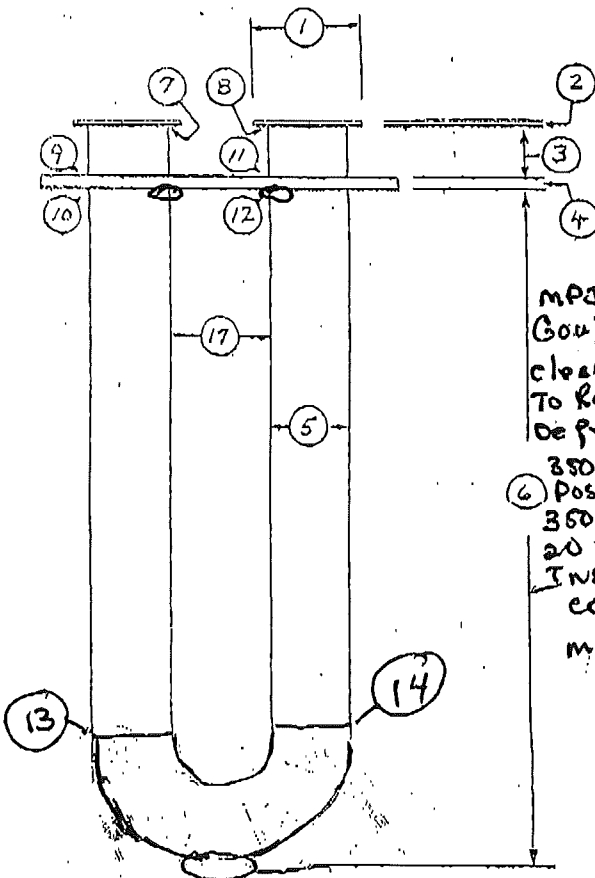
Box 685

High Level, Alberta

TOH 120

Telephone: (780) 683-2392 — Zama

FIRE TUBE REPAIR DATA

COMPANY Apache CanadaLEASE No. 9-28-117-4-W6DATE Aug 7/11MPI HUNT InspectionUT Hunt Inspection.

MPI POLARTE
Gauge + Blind
clean in P.I.
To Remove
De posits Protect

350-450°F
⑥ Post heat
350-450 hold
20 min
Insulate
cool down
MPI Final

No.	DIMENSION	WELD OR MATEL SPEC.	WELD- STAMP NO.	O.C. SIGN.
①	existing			✓
②	"			✓
③	"			✓
④	"			✓
⑤	18"			✓
⑥	20'			✓
⑦	existing			✓
⑧	"			✓
⑨	"			✓
⑩	gauge + grind clean.	← A ←	H	✓
⑪	existing			✓
⑫	gauge + grind clean	← A ←	D	✓
⑬	existing			✓
⑭	"			
⑮				
⑯				
⑰				
	TUBE SHEET	existing		✓
	MATEL SPEC.	"		✓
	PIPE			✓
	MATEL SPEC.			✓
	JOB No.	08-07-2011A		✓
	SERIAL No.	L-8-340		✓
	CRN	A278/543 K6455.2		✓

welder LAWRENCE HUNTink
welder DAVE Kelland
Hunt Inspection
Paul Blake

W1959
W14709
9627

O.C.M. James Hunt.

08/17/2011 07:58

780-437-7787

Aug. 09 2011 02:59PM

PAGE 1 OF 3

FROM : LAURENCES WELDING LTD

15 April 1996

FAX NO. :
EXHIBIT NO. 21.5

BOILERS AND PRESSURE VESSELS REPAIR AND ALTERATION REPORT

(A) # A 2781543OWNER EQUIP NO.: 9-28-117-4 18"
Twin TubesPartial ☐ Final ☒REPAIR ☐ and/or ALTERATION ☐

1. Name and Address of Organization doing Repair/Alteration Lawrence's Welding 1987 LTD
Box 685 High Level Alberta AQP No. & Expiry Date 2278 Aug 31 2011
 Location of Installation 9-28-117-4 -WB

2. Name of Owner Apache Canada
 Address 24 Ave Alberta Also Calgary Alta

3. Boiler/Pressure Vessel Description Twin Fire Tubes CRN K6455.3
 Manufacturer's Name NATCO 18" X 20' Twin Fire Tubes Serial No. L 8-340

4. Design Conditions:
 a) Vessel/Shellside/Boiler: Max Allowable Working Press. 7.5 PSI Min/Max Design Temp 250°F
 b) Jacket/Tubeside: Max Allowable Working Press. 1 Min/Max Design Temp 1

5. Description of defects (location and types of deterioration that resulted in the repair/alteration).
Tube A had crack on inside Tube sheet - Top & Bottom.

6. ASME Code Edition and Addenda used for work: ASME Sect. VIII Year 2007 Addenda 2008A
Noted on File Report

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 Alberta Boilers Safety Association SCO prior to start of work.

Both Tubes Sand Blasted. Thickness Reading Taken on Pipe & Tubesheets
MPT all welds defect gauged on ground clean mpt to remove
all defects. Preheat 350-450°F Repair Post heat 350-450°F
hold for 20 minutes. Insulate After cool Down Final
MPT.

Identified as Job # LWH. 08-07 2011

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/Crown				Heads/Ends			
Tubesheets				Tubes			
Nozzles				Plugs/Fittings		Class	

9. Welding Procedure - Alberta Registration Number WP. 12067 WPS Numbers used: LW-1 Rev 3
 10. Heat Treatment: Bake Out (Temp/Time) 350°F 1450°F Preheat Temp: 350-450°F Post Weld HT (Temp/Time) 350-450°F 20 min
 11. Non Destructive Examination (Specify type and extent).

Thickness Readings Taken.
MPT all welds plus all Repairs.

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in our Charter Discipline.

FROM : LAWRENCES WELDING LTD

FAX NO. :

Aug. 09 2011 03:00PM P7

(A) #: A2781543

OWNER EQUIP. NO. 9428-117-4-106

1. Pressure Test

CRN 20455.2
Vessel/Boiler/Shellside

Turboside/Jacket

a) Hydrostatic

b) Other Test

Tickness Reading MPI All welds

13. Welded Replacement Parts: Attached are Manufacturer's Partial Data Report 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 Procedures:

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: Tickness and MPI conducted by Hunt Inspection

Apache Inspector

Mark Harris

780-683-8021

Job File Identified as Job LWL 08-07-2011

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:

Lawrence's Welding LTD

(Repair/Alteration Organization Name)

2278 Aug 31 2011

(AQP Number & Expiry Date)

Lawrence's Welding LTD

(Signature & Date)

Lawrence's Welding LTD

(Print Name)

b) For items identified in 14 only:

(Owner/Client Organization Name)

(AQP Number & Expiry Date)

(Signature & Date)

(Print Name)

17. DATE WORK WAS COMPLETED: Aug 7 2011

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.

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/Client AQP & Expiry Date)

(Owner-User Inspection Signature & Date)

(Owner/Client Inspection Signature & Date)

(Owner-User Inspection Signature & Date)

Walter Smith Aug 16/11

ABSA SCO Registered Only

Walter Smith

(Print Name)

Report Received by ABSA SCO

Date

Lawrence's Welding (1987) Ltd.

Box 685 • High Level, Alberta • T0H 1Z0
Telephone: (780) 683-2392 — Zama

FIRE TUBE REPAIR DATA

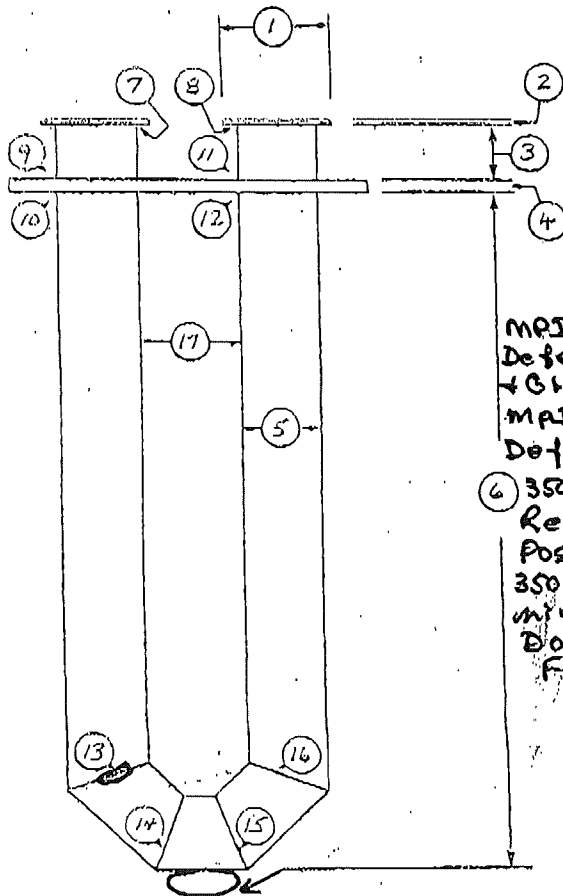
COMPANY Apache Canada

LENS# No. 9-28 -117-4-w6

DATE Aug 7/2011

MPI Hunt Inspection

UT Hunt Inspection.



MPi TO locate
Defect. gouge
& Grind clean
MPi TO Remove
Defects Preheat

⑥ 350-450f
Repair
Post heat
350-450°F 20
min. Cool
Down MPI
Final.

No.	DIMENSION	WELD OR MATEL SPEC.	WELD- STAMP NO.	Q.C. SIGN.
①	existing			✓
②	"			✓
③	"			✓
④	"			✓
⑤	18" OD			✓
⑥	20'			✓
⑦	existing			✓
⑧	"			✓
⑨	"			✓
⑩	"			✓
⑪	"			✓
⑫	"			✓
⑬	gouge + Grind	✓	H	✓
⑭	existing			✓
⑮	"			✓
⑯	"			✓
⑰	"			✓
	TUBE SHEET MATEL SPEC.	existing		✓
	PIPE MATEL SPEC.	"		✓
	JOB No.	08-07-2011B		✓
	SERIAL No.	478-340		✓
	CRN A	2781543 K6455.2		✓

Welder Lawrence Hwatuik W1959
Hunt Inspection 9627
Paul Blake

Q.C.M.



BOILERS AND PRESSURE VESSELS REPAIR AND ALTERATION REPORT

 (A) #: A2781543
928-117-4-06
Boiler Tube

OWNER EQUIP NO.:

REPAIR ☐

and/or

ALTERATION ☐Partial ☐Final ☒
 1. Name and Address of Organization doing Repair/Alteration LAWRENCE'S Welding 1987 LTD
Box 685 High Level Alberta AQP No. & Expiry Date 2278 Aug 31 2011
 Location of Installation 9-28-117-4-06

 2. Name of Owner Apache Canada
 Address 2Ama Alberta Also Calgary Alta

 3. Boiler/Pressure Vessel Description Two Fine Tubes CRN K6455.2
 Manufacturer's Name Alto 18" x 20' Twin Fine Tubes Serial No. 28340

 4. Design Conditions:
 a) Vessel/Shellside/Boiler Max Allowable Working Press. 75 PSI Min/Max Design Temp 250°F
 b) Jacket/Tubeside: Max Allowable Working Press. Min/Max Design Temp 1

 5. Description of defects (location and types of deterioration that resulted in the repair/alteration).
Tube B had on first mitre on top side.
Noted on File Report.

 6. ASME Code Edition and Addenda used for work: ASME Sect. III Year 2007 Addenda 2008A

 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 Alberta Boilers Safety Association SCO prior to start of work.

Both Tubes Sand Blasted Thickness Reading Taking on Pipe + Tubesides
 MPI all welds Defect gauged on ground Clean MPI to Remove
 all defects. Preheat 350-450°F Repair Post heat 350-450°F
 hold for 20 minutes. Insulate After cool down Final
 MPI.

Indentified as Job # L.W.L. 08-07-2018

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

Item	Mat'l Spec.	Thick/Sec	Diam	Item	Mat'l Spec.	Thick/Sec	Diam
Shell/Drum				Head/Ends			
Tubesheet				Tubes			
Nozzles				Flanges/Fittings		Class	

 9. Welding Procedure Alberta Registration Number WP- 12067 WPS Numbers used: L22-1 Rev B

 10. Heat Treatment: Bake Out (Temp./Time) 350°F 1450°F Preheat Temp 350-450°F Post Weld HT (Temp./Time) 350-450°F Hold 20 min

11. Non Destructive Examination (Specify type and extent).

Thickness Readings Taken
 MPI all welds plus all Repairs.

(A) #: A-2781543 OWNER EQUIP. NO. 9-28-1174-W6
CRN 1564532 Thermal Engineering
1. Pressure Test: Vessel/Boiler/Shellside Tubeside/Jacket
a) Hydrostatic
b) Other Test: Field wess Reading MPi 11 welds
12. 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: Field wess and mps conducted by Hunt Inspection
Apache Inspector Mark Harris 780-683-8021
Job File Number 7-8-11 as Job # LWH 08-07-2011R

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:
Lawrence's Welding 1987 LTD
2228 Aug 31 2011
Lawrence's Welding Aug 7 2011
Lawrence's Welding
b) For items identified in 14 only:
Lawrence's Welding 1987 LTD
2228 Aug 31 2011
Lawrence's Welding Aug 7 2011
Lawrence's Welding

17. DATE WORK WAS COMPLETED: Aug 7 2011

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.

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 Signature & Expiry Date
Owner-User Signature & Expiry Date
Owner-User Signature & Expiry Date
Owner-User Signature & Expiry Date

ABSA Safety Codes Officer Signature & Date
ABSA Safety Codes Officer Signature & Date
ABSA Safety Codes Officer Signature & Date

Report Received by ABSA SCO

Date