

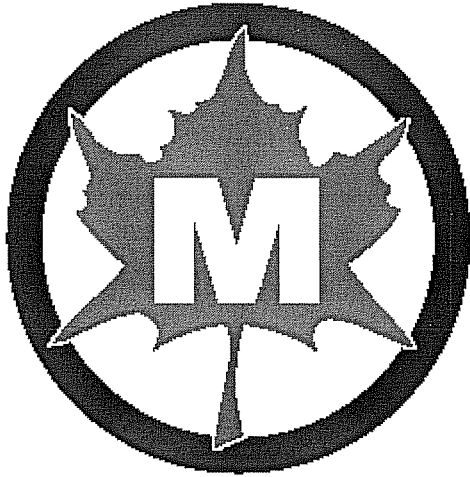


MaXfield Inc.

TO WHOM IT MAY CONCERN:

In order for you to get the best result from using this electronic version of the data book, I would suggest that you click on the BOOKMARK tab on the left hand side of the screen.

Once you have done this, a Table of Contents should appear. If you click on any one of these bookmarks, it should bring up the page that is associated with this bookmark on the right hand side of the screen.



MaXfield Inc.

RETROFIT 20 INCH MANWAY ON SHELL

FOR

XXL ENGINEERING

C/O COMPTON PETROLEUM CORP.

P.O. # 11572-034R1

S/N # : 12212A

CRN # : C4936.2

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BOILERS AND PRESSURE VESSELS REPAIR AND ALTERATION REPORT

AB-40 (Side A) 2005/01

(A) #: **126332**OWNER EQUIP NO.: **31-1310**REPAIR ☐

and/or

ALTERATION ☒Partial ☐ Final ☐

1. **Name and Address of Organization** doing Repair/Alteration Maxfield Inc.
Box 830 1026 Western Drive Crossfield, AB T0M 0S0 AQP No. & Expiry Date 1062-S July 24, 2008
Location of Installation 4-15-22-27-W of 4M Dalemead Compressor Station
2. **Name of Owner** XXL Engineering c/o Compton Petroleum Corp.
Address Suite 3300, 425- 1st St. SW Calgary, AB T2P 3L8
3. **Boiler/Pressure Vessel Description** 25.3 Cu.M Skidded Bulk Storage Vessel CRN C4936.2
Manufacturer's Name Western Rock Bit Company Ltd. Serial No. 12212A
4. **Design Conditions:**
a) Vessel/Shellside/Boiler: Max Allowable Working Press. 225 Min/Max Design Temp -20/150°F
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).
Added 20" Manway
6. **ASME Code Edition and Addenda** used for work: ASME Sect. VIII Year 2004 Addenda No
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.

Performed UT thickness check Performed WFMPi on Internal welds

Removed Internal clips from nozzles B,F,L,E,A,M . Added 20" Manway to Shell using WPS S-170

Performed External and Internal Visual Perform WFMPi on areas of removed internal clips

Hydro test at 375 psi Vessel re-rated to 225 psi

Perform WFMPi on new manway after Hydro Test

Attach alteration Nameplate

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	SA516-70	.7781"	108"	Heads/ Ends			
Tubeside	Repad SA516-70	0.750"		Tubes		Sch 80	20"
Nozzles	SA333 Gr. 6			Flanges/Fitting	SA350-LF2	Class 150	20"

9. **Welding Procedure** – Alberta Registration Number WP- 609.2 WPS Numbers used: S-170

10. **Heat Treatment:** Bake Out (Temp./Time) 530 °F / 4hr Preheat Temp Post Weld HT (Temp./Time) /

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

WFMPi all internal welds before alteration. WFMPi area after new manway added.WFMPi areas of clips removed.

Performed UT. Spot RT performed on new Manway. WFMPi manway after Hydro Test.

(A) #: 126332

OWNER EQUIP. NO. 31-1310

12. Pressure Test

Vessel/Boiler/Shellside

Tubeside/Jacket

a) Hydrostatic 375 psi

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:

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:
MaXfield Inc.

b) For items identified in 14 only:

(Repair/Alteration Organization Name)

AQP-1062(S)

July 24, 2008

(AQP Number & Expiry Date)

DALE WRIGLEY Sept 27/05

(Signature & Date)

DALE WRIGLEY

(Print Name)

(Owner/Client Organization Name)

(AQP Number & Expiry Date)

(Signature & Date)

(Print Name)

17. DATE WORK WAS COMPLETED: Sept. 28, 2005

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-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

ALTERED BY MAXFIELD INC.

JOB NO. 31-1310

SEPT. 2005

A NO. 126332 CRN: C4936.2

SERIAL NO. 12212A

MDMT -20°F

MAWP 225 PSI AT 150°F

ADDED 20" MANWAY

Alberta

LABOUR
General Safety Services Division
Boilers Branch

AFFIDAVIT OF MANUFACTURER
COVERING BOILER OR PRESSURE VESSEL

PURCHASE ORDER No. 11-1178

As Approved by the Boiler & Pressure Vessel Committee of the C.S.A.

Upon shipment of Boiler or Pressure Vessel this form fully and correctly filled in and attested to must be mailed to the office of the Chief Inspector in the province of installation in accordance with the regulations under the Act governing the construction and installation of boilers and pressure vessels, otherwise the use of same may be prohibited or the working pressure severely penalized.

1. Manufactured by Western Rock Bit Company Limited, 510-77th Ave. S.E., Calgary, Alberta
Manufactured for Imperial Oil Limited, 10025 Jasper Avenue, Edmonton, Alberta
Ultimate owner Imperial Oil Limited
Location of installation Rimbey, Alberta
2. Type of boiler or pressure vessel Skidded Bulk Storage Mfg. Serial No. 12212A
Provincial Registration No. C-4936.2 3 Drwg. No. 7607-3D
To be used for: (Air, Co₂, Propane, Ammonia, Steam, Hot Water, etc.) Ammonia
3. Dia. 108" I.D. Overall length 54'-10" Cu. ft. capacity 3382 Heating surface sq. ft.
4. Were test reports checked on all plates used in the fabrication of this boiler or pressure vessel? Yes
Does all material meet A.S.M.E. Code requirements? Yes
A.S.M.E., A.S.T.M. or other material specification No. A-516-70 Tensile strength 70,000
5. Fabrication to A.S.M.E. Code, Para. No. UW12(a)1974 Preheat 70 °F Postheat °F Long. 100%
Are the following records on mfg's files? X-ray films Yes Postweld heat procedure (Yes or No) X.R. Circ. Partial
Were X-ray films examined and found to meet Code requirements? Yes
6. Welders employed upon boiler or pressure vessel.

Name of welders and Province or State in which qualified	Identifying Symbol	Date of last weld test	Qualified for welding under Code Para.	Name of Inspector supervising tests	National Board No.
<u>R. HERRMANN</u>	<u>1</u>	<u>9/75</u>		<u>MANN</u>	
<u>C. HERRMANN</u>	<u>Q</u>	<u>9/75</u>		<u>"</u>	
<u>I. CLARK</u>	<u>V</u>	<u>11/75</u>		<u>"</u>	
<u>E. HILDEBRANDT</u>	<u>F</u>	<u>8/76</u>		<u>"</u>	

Does all welding on this vessel and the testing of coupons where required meet A.S.M.E. Code requirements? Yes

7. Hydrostatic tests

NAME OF PART	Temperature of Testing Medium	First test psi.	Maximum working pressure psi.	Maximum operating temperature - degress F.
<u>Entire Vessel</u>	<u>60</u>	<u>375</u>	<u>250</u>	<u>150</u>

Did the hydrostatic tests fully conform to Code requirements? Yes

8. Boiler rating, max-steam capacity (rated B.T.U./hr. output for hotwater boilers)

9. SAFETY VALVES:

No. of valves	Maker's Name, Trade Mark or Type No.	Provincial Registration No.	Inlet Diameter	Seat Diameter	Set to relieve at psi.	Free discharge area	Capacity lbs. per hour

Does safety valve stamping, blow-down adjustment, etc., meet A.S.M.E. requirements? Yes

A126332

10. Actual minimum stamping of the boiler or pressure vessel shall conform to the following: shall be reproduced here: BOILERS (on attached plate for cast iron)

Canadian Registration number _____
National Board number (if manufactured in U.S.A.) _____
Manufacturer and manufacturer's serial number _____
Plate mfg's initials, spec. No. and tensile strength (Steelco, SA 285 etc.) _____
Maximum working pressure _____ (for S and W if both)
Effective heating surface and year built (1967 etc.) _____
Initials of authorized shop inspector _____

C.R.N. _____
Nat. Bd. _____
Sr. No. _____
T.S. _____
Max. W.P. _____ P.S.I. Temp. _____ °F.
H.S. _____ Sq. Ft. 19 _____

PRESSURE VESSEL -

Canadian Registration number _____
National Board number (if manufactured in U.S.A.) _____
Manufacturer and manufacturer's serial number _____
Plate mfg's initials, spec. No. and tensile strength (Steelco, SA 285 etc.) _____
Maximum working pressure and temperature _____
Thickness of shell and heads _____
Code paragraph number and year built (1967 etc.) _____
Initials of Authorized Shop Inspector _____

C.R.N. C-4436.23
Nat. Bd. _____
Sr. No. 12212A
A-516-Gr. 70 T.S. 70,000
Max. W.P. 250 P.S.I. Temp. 150 °F.
T.Shell 0.7781 T.Heads 0.7725
U.W. 12(a) 19 76

11. I HEREBY DECLARE that the foregoing statements, having reference to boiler or pressure Vessel bearing manufacturer's Serial No. 12212A built by Western Rock Bit Company Limited of Calgary, Alberta and completed on the 22 day of December 1976 are in all respects correct and true, and that the said boiler or pressure Vessel has been built in accordance with Provincial registered design No. C-4936.23 and that it complies fully with the A.S.M.E. Code and regulations of the Province of Installation under the Act governing the construction of boilers and pressure vessels.

Sworn before me at Calgary
In the Province (or State) of Alberta
this 22 day of December 1976
A Commissioner for Oaths, J.P. or N.P.
My commission expires March 27 1977
Signed J.A. Wilson Shop Foreman
For Western Rock Bit Company Limited
510-77th Ave. S.E., Calgary, Alberta
Firm Name and Address

12.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, a duly authorized Inspector of Boilers and Pressure Vessels employed by Government of Alberta do hereby certify that the foregoing statements are correct and that the material, construction and workmanship are in accordance with the A.S.M.E. Code.

Date 12/1/77 Signed [Signature] Provincial or National Board Inspector. No. _____

8. SAFETY VALVES:

No. of valves	Maker's Name, Trade Mark or Type No.	Provincial Registration No.	Inlet Diameter	Seat Diameter	Set to relieve at psi.	Free discharge area	Capacity lbs. per hour

Does safety valve stamping, blow-down adjustment, etc., meet A.S.M.E. requirements? Yes



the pressure equipment safety authority

#200, 4208 - 97 Street
Edmonton, Alberta, Canada T6E 5Z9
Tel: (780) 437-9100 / Fax: (780) 437-7787

September 13, 2005

Attention: Daryl Bast
MAXFIELD INC
PO BOX 830
1026 WESTERN DRIVE
CROSSFIELD, AB T0M 0S0

Re: Design registration

The design submission, tracking number 2005-06689, originally received on August 22, 2005 was surveyed and accepted for registration as follows:

CRN : C4936.2

Accepted on: September 13, 2005

Reg Type: Alteration

Drawing No. : 2005-0823C Rev D

A #: 0126332

Design registered in the name of: WESTERN ROCK BIT CO LTD

The registration is conditional on your compliance with the following notes:

MAWP = 225 psig @ 150 deg. F

An acceptance letter and a copy of the stamped drawing will be sent to you.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 332 or fax (780) 437-8797 or e-mail Desai@absa.ca.

Sincerely,

DESAI, B.C., P. Eng.
Design Survey Engineer

Reviewed by A.I. Alan AUG 25 2005

* Denotes A.I. Check Points

Date _____

** Denotes A.I. Hold Points

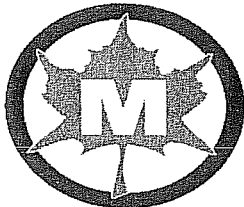
Job. No 31-1310 Job Description: Change service to Sour Water Storage & change Manway size

Serial No. 12212A

A#: 126332

NB#:

	ITEM	COMMENTS	DATE	QAI	A.I.	*OR**
1	Repair Procedure Accepted by A.I.	OK	Aug 25	JP	Bl.	AUG 25 2005
2	Weld Procedure No. S-170	OK	Aug 25	JP		
3	Crack Ma. Particle/Dye Check After Removal	N/A				
4	Material Check Against Drawing	OK	Sept. 26	JP	Bl. *	SEP 28 2005
5	Material Checked Against Correct SA/SE Specification / MTR'S	OK	Sept 26	JP	Bl. *	SEP 28 2005
6	Heat Number Recorded P1645179C 13474 53397	OK	Sept 26	KH	Bl. *	SEP 28 2005
7	Welder ID Checked "H"	OK				
8	Impact Results Checked	N/A				
9	Shell Course Fit-up	N/A				
10	Flush Patch Fit-up	N/A				
11	Heads Fit-up	NA				
12	Nozzle & Fittings Fit-up		Sept. 27	JP	Bl. *	SEP 28 2005
13	Radiography Examination SPOT.		Sept. 27	JP	Bl. *	SEP 28 2005
14	Ultrasonic Examination UT Thickness	OK	Sept 9	CS	Bl. *	SEP 28 2005
15	Internal Visual of Welds	OK	Sept 22	JP	Bl. *	SEP 22 2005
16	External Visual of Welds		Sept. 27	JP	Bl. *	SEP 28 2005
17	PWHT Chart Checked	Bake out	Sept. 27	JP		
18	WFMPI before hydro	OK	Sept 9.	CS		
19	Hardness Test	N/A				
20	Hydrostatic Test 375 PSI	OK	Sept 26	JP	Bl. *	SEP 26 2005
21	Mag Particle/Dye Check AFTER HYDRO.	OK	Sept 27	CS	Bl. *	SEP 28 2005
22	Alternative Test (air test)	N/A				
23	Repair Form AB40 Completed	OK	KH Sept 27	KD	Bl. *	SEP 28 2005
24	Name Plate Attached Alteration.				Bl. *	SEP 28 2005
25	Cargo Transport Inspection Report	N/A				
26	Final external & Cleanliness check					



Repair and Alteration Procedure Revision B

Vessel Description	Sour Water Storage Tank S/N 12212A A#0126332 CRN: C4936.28
Job Number:	31-1310
Customer:	XXL Engineering c/o Compton petroleum Corp.
Date:	September 13/05

Reason for Repair and Alteration	20" Manway Retrofit in the 25.3 M3 USWG-NH3 Vessel. This Skidded Bulk Storage built in 1976 is to be modified by the addition of 20" size RFWN 150# Manway at 3 O' clock position in the Shell course # 1 and need to be removed the internal risers and syphon drains connected with the Nozzles B,F,L,E and A,M and the internal clips connected with these internal pipes.
NDE Before Repair and Alteration	Inspect vessel by Visual and Perform MPI and UT to confirm overall service condition.
Repair and Alteration Procedure (Include description of cutting, gouging, adding new material, weld prep, weld procedure)	1):- Identify new location of 20" size Manway MH2.
	2):- Mark the area and perform the UT of that area for thickness measurement.
	3):- Localized pre-weld hydrogen bake performed by Cooperheat.
	4):- Cut the new hole and weld the new 20" size Manway as per the drawings # 2005-0823C Revision 0
	5):- Use WPS S-170 for welding of Manway Nozzle and pad to the vessel.
	6):- Cut and Remove the Internal Risers from Nozzles B,F,L,E and A,M
	7):- Cut and remove the internal Clips attached to the vessel for supporting these risers and
	8):- Plug all the Extra Couplings
	9):- Following completion of all inspection, an AB-40 shall be done and presented to the A1
NDE After Repair and Alteration	100% RT the new manway areas. Repair defects and Re-do RT. New nozzle weld to have NDE as per drawing. Perform the WMPI of the Internal Clips removal areas.
PWHT (Time @ temp, band location and size if local)	N/A
NDE After PWHT	N/A
Hydro Pressure	375 338 psig @ 70°F (Revised in Rev B)

Engineering Sign Off

20 5/80 GR 1 + 6

P1645



INSPECTION CERTIFICATE
(UNI EN 10204 3.1.B)

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Page 1

CUSTOMER'S ORDER SHOI 6269/97
MILL ORDER / ITEM 1903255/001
EXP REFERENCE 5/15733

PO 46034
20" 580 ST-333-6
WT 980075

NECK
PIPE

PRODUCT SEAMLESS STEEL PIPES HOT FINISHED FOR LOW TEMPERATURE SERVICES
ACC. TO ASTM A 333 (94 ED) ASME SA 333 (92 ED) - SECTION II -
SPEC. U030994 REV. 0, STEEL GRADE 1 ASTM A 333 AND STEEL GR. 6
ASTM / ASME A/SA 333, WITH C.O. 2% MAX - NORMALIZED - BLACK INSIDE
OILED OUTSIDE - BEVELLED ACC. TO ANSI B 16.25

DIMENSIONS: SCH 80 LG. 7500 LG. TO O.D. 15000 O.D. 608,000 20" W.T. 28,130 W.T. 1,031

SHIPPING NOTE E1200813 DATE 03/03/1998
QUANTITY: N° 8 WT 75,68 KG 23545 PL 251" 7" TDA 52128,2

TEST N. M4557 HEAT N. 980075

TENSION TEST + 20,0°C
TEST SPEC. : LONGITUDINAL
YIELD POINT 0,5% (KSI) : requir min 35 max 60 result 44,6
TENSILE STRENGTH (KSI) : requir min 60 result 68,0
ELONGATION : CALIBRATED ON 2" 50,0 mm result 38,0
IMPACT TEST - 50,0°F REMARKS OR SPEC. : KCV LONG - 050 FT/LB
TEST SPECIMEN : LONGIT. 10 x 10,00 MM requir min 12,0 max 15,0
result 152,0 167,0 25,0
HARDNESS HRC requir. max 22,0 result 0,0
HARDNESS HB requir. max 179,0 result 129,0
TECHNOLOGICAL TESTS PERFORMED WITH SATISFACTORY RESULTS:
FLATTENING TEST : TEST PERFORMED AT ONE END OF 5 % OF THE PIPES

TEST N. M4558 HEAT N. 980075

TENSION TEST + 20,0°C
TEST SPEC. : LONGITUDINAL
YIELD POINT 0,5% (KSI) : requir min 35 max 60 result 44,9
TENSILE STRENGTH (KSI) : requir min 60 result 68,3
ELONGATION : CALIBRATED ON 2" 50,0 mm result 37,0
HARDNESS HRC requir. max 22,0 result 0,0
HARDNESS HB requir. max 179,0 result 140,0
TECHNOLOGICAL TESTS PERFORMED WITH SATISFACTORY RESULTS:
FLATTENING TEST : TEST PERFORMED AT ONE END OF 5 % OF THE PIPES

TEST N. M4559 HEAT N. 980077

TENSION TEST + 20,0°C
TEST SPEC. : LONGITUDINAL
M.T.R. meets requirements of A.S.M.E. SECTION II PART A
A.S.M.E. SECTION II PART A
2004 Edition Addenda 04.20.01
DATE 03/03/1998
PRODUCT G.A.I
CONTROL MANAGER Marco BELLOLI
QUALITY SERVICE MANAGER Ambrogio COLOMBO
Date Sept 26/05

Follows



PLANT:
DALMINE

INSPECTION CERTIFICATE

(UNI EN 10204 3.1.B)

N. 98/05059

Page 2

YIELD POINT 0,5% (KSI) : requir min 35 max 60 result 46,4
TENSILE STRENGTH (KSI) : requir min 60 result 68,6
ELONGATION : CALIBRATED ON 2" 50,0 mm
(A) : requir min 28,0 result 36,0
IMPACT TEST - 60,0°F REMARKS OR SPEC, : LONG - D60 P FT/LB
TEST SPECIMEN : LONGIT. 10 X 10,00 MM requir FT/LB min 12,0 max 15,0
result 121,0 207,0 206,0

HARDNESS HRC requir max 22,0 result 0,0
HARDNESS HB requir max 179,0 result 142,0

TECHNOLOGICAL TESTS PERFORMED WITH SATISFACTORY RESULTS:

FLATTENING TEST : TEST PERFORMED AT ONE END OF 5' OF THE PIPES

TEST N. M4560 HEAT N. 980077

TENSION TEST : 10,0°C
TEST SPEC. : LONGITUDINAL
DIAM. 12,50 SECTION 124,7 mm2
YIELD POINT 0,5% (KSI) : requir min 35 max 60 result 46,7
TENSILE STRENGTH (KSI) : requir min 60 result 68,9
ELONGATION : CALIBRATED ON 2" 50,0 mm
(A) : requir min 28,0 result 36,0

HARDNESS HRC requir max 22,0 result 0,0
HARDNESS HB requir max 179,0 result 141,0

TECHNOLOGICAL TESTS PERFORMED WITH SATISFACTORY RESULTS:

FLATTENING TEST : TEST PERFORMED AT ONE END OF 5' OF THE PIPES

HEAT N. 980075

HEAT ANALYSIS %
C 0,13 Mn 0,95 Si 0,35 P 0,007 S 0,004 Cu 0,10
Ni 0,06 Cr 0,07 Mo 0,03 V 0,010
(Cu+Ni+Cr+Mo+V) = 0,26
CARBON EQUIVALENT : L.F. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,30

PRODUCT ANALYSIS %
C 0,14 Mn 0,99 Si 0,36 P 0,007 S 0,003 Cu 0,11
Ni 0,06 Cr 0,06 Mo 0,03 V 0,006
(Cu+Ni+Cr+Mo+V) = 0,266
CARBON EQUIVALENT : L.F. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,34

PRODUCT ANALYSIS %
C 0,13 Mn 0,99 Si 0,36 P 0,007 S 0,003 Cu 0,11
Ni 0,06 Cr 0,07 Mo 0,03 V 0,006
(Cu+Ni+Cr+Mo+V) = 0,276
CARBON EQUIVALENT : L.F. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,33

M.T.R. meets requirements of
A.S.M.E. SECTION II PART A
98 Edition 99 Addenda
Date 04.20.01
Q.A.I.

DATE

03/03/1998

PRODUCT
CONTROL MANAGER
Marco BELLOLI

QUALITY
SERVICE MANAGER
Ambrogio COLOMBO

Follows



Dalmine

PIANT.
DALMINE

INSPECTION CERTIFICATE
(UNI EN 10204 3.1.B)

N. 98/05059
Page 3

EAT N. 980077

HEAT ANALYSIS %

C 0,10 Mn 1,00 Si 0,40 P 0,009 S 0,004 Cu 0,16
Ni 0,06 Cr 0,10 Mo 0,04 V 0,005

(Cu+Ni+Cr+Mo+V) = 0,365
CARBON EQUIVALENT : L.P. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,31

PRODUCT ANALYSIS %

TEST N. M4559

C 0,13 Mn 0,99 Si 0,35 P 0,007 S 0,003 Cu 0,11
Ni 0,05 Cr 0,07 Mo 0,03 V 0,005

(Cu+Ni+Cr+Mo+V) = 0,275
CARBON EQUIVALENT : L.P. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,33

PRODUCT ANALYSIS %

TEST N. M4560

C 0,13 Mn 0,99 Si 0,35 P 0,007 S 0,004 Cu 0,11
Ni 0,06 Cr 0,07 Mo 0,03 V 0,005

(Cu+Ni+Cr+Mo+V) = 0,275
CARBON EQUIVALENT : L.P. (C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15) 0,33

LEAK-TIGHTNESS TEST PERFORMED WITH SATISFACTORY RESULTS BY:

HYDRAULIC TEST PRESSURE 3200,0 PSI FOR 5 Sec

VISUAL AND DIMENSIONAL CONTROL OF THE TUBES HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT

STEEL IS FULLY KILLED AND PRODUCED BY ELECTRIC FURNACE

REMARKS:

WE HEREBY DECLARE THE TUBES ARE ACCORDING TO ASTM/94 ASME/95 A/SA 333 A530/A530M/92 IN STEEL CR. 1/6.

" AT NO TIME DURING THE MANUFACTURE OF THIS REFERENCED PIPE WERE ANY WELDING PROCEDURES PERFORMED "

HARDNESS DOES NOT EXCEED HRC 22, ACCORDING TO RACE MR-01-75 Ed.95.

" MATERIALS MERCURY FREE "

WE CERTIFY THAT OUR MATERIALS ARE FREE FROM OZONE

DEPLETING CHEMICALS AND FULLY COMPLY IN ALL RESPECTS TO THE PACKAGE REQUIREMENTS FOR HEAVY METALS OF THE CONEG MODEL LEGISLATION.

TUBES HAVE BEEN NORMALIZED AT 920 °C FOR 26' TO A FINE GRAIN PRACTICE

O.D. TOLERANCES + / - 1%

* CERTIFIED FACTORY UNI EN ISO 9001: I.G.Q. Nr. 8603 *

M.T.R. meets requirements of
A.S.M.E. SECTION II PART A

98 Edition 00 Addenda
04/20/01
Q.A.I. Date

DATE

PRODUCT
CONTROL MANAGER
Marco BELLOLI

QUALITY
SERVICE MANAGER
Ambrogio COLOMBO

03/03/1998

Abnahmeprüfzeugnis Nr.

Inspection Certificate No.
Certificate de Réception No.

143795 vom 17.05.04 EN 10 204 - 3.1B

Zeichen des Herstellerwerkes
Manufacturer's mark/Poinçon d'usine
Zeichen des Werksachverständigen
Inspector's stamp/Poinçon de l'expert



FED 97/23/EC An.I Kap.4.3
(RWTUV-0044)
AD2000-W0 / TRD100

Wilhelm Geldbach Industrie

Wilhelm Geldbach Industrie GmbH
Ziegelstraße 17
D - 45886 Gelsenkirchen
Telefon: +49 209 15803 22
Telefax: +49 209 15803 499
Email: Q-Sew-G.DE

Wilhelm Geldbach Industrie GmbH Ziegelstraße 17 45886 Gelsenkirchen

W.F.F. FITTINGS&FLANGES
(CANADA) LTD.
7004K - 5TH STREET S.E.

FLANGE

M.T.R. meets requirements of
A.S.M.E. SECTION II PART A

2004 Edition Addenda

CS.
Q.A.I.

Aug 24/05
Date

CNDN CALGARY, ALBERTA T2H 2G9

Komm.-Nr./Pos Works-No. Rapport-No. 227299/210	Rechnungs-Nr./Pos Invoice-No. Facture-No. 50535/190	Ihre Auftrags-Nr Your order-No. Votre Commande-No. EO4133DD	Lieferdatum Delivery date Date de livraison 14.05.04
Lieferplan/Pos Delivery Note Bon de livraison 92594/031	Menge Quantity Quantité 3	Bezeichnung des Gegenstandes Designation of article Désignation du produit WN 150LB B16.5 20 RF SCH 80	
Werkstoff: Material / Matière	LF2 CL.1, ASTM A350		

Zugversuch

Tensile test / Traction

Probe-Nr. Richtung
Test-No. Direction
No d'essai Direction

Streckgrenze (Re)
Yield strength
Limite élastique

Rp 11 N/mm2 ReH/Rp 0.2% N/mm2

Zugfestigkeit(Rm)
Tensile strength
Résistance à la traction

N/mm2

Dehnung(A)
Elongation
Allongement

2in. 28
2in. 26

Einschnürung(Z)
Reduction of area
Striction

%
58
56

Kerbschlagbiegeversuch

Impact test/Essai de flexion par choc

Form Temp. Schlagarbeit KV
Type Temp. Energie of impact
Type Temp. Energie de rupture

ISO-V -50	042 042 040
ISO-V -50	057 058 055

2881 T
881B T

T
T

318
332

501
512

2in. 28
2in. 26

58
56

ISO-V -50 042 042 040
ISO-V -50 057 058 055

Härteprüfung / Hardness / Dureté: HBW 2.5/187.5 = 150 - 160

Schmelze

Heat-No./No. de coulée
Code-No./Code de coulée
12474

Erschmelzungsart

Melting proc./Procédé d'élaboration
E

Steelmaker: C.S. RESITA

Schmelzanalyse

Heat analysis / Analyse sur coulée

C	Si	Mn	P	S	Cr	Mo	Ni	Al	Ti	N	Cu	V	Nb	B	Ceq
,21	,21	1,09	,014	,009	,07	,02	,09	,023			,15	,008	,002		,43

Anforderungen - Lieferzustand

Requirements / Spécifications - Delivery condition / Etat de livraison

NACE MR0175-2003 / HARDNESS <=22HRC / NI <1%

NORMALIZED 910 DEGR. C/AIR

IN ACC. TO ASME IIA SA350-02

ASTM A350-02 / ASME IIA SA350-02, ZUGELASSEN NACH VDTÜV 488

ASTM A350, SA350

Besichtigung und Maßkontrolle: o.B. / Visual and dimensional check: w.o. / Contrôle visual et dimensionnel: satisfaisant.
Die gestellten Anforderungen sind erfüllt. / The requirements are fulfilled. / Les conditions imposées sont satisfaites.

Der Werksachverständige / Work inspector / L'expert de l'usine
Brücherseifer / Bungard / Scheideler

20" RFWN CLISO SCH 80
HT 12474.
PO 58378
SA 350-LF2.

EDV - Zeugnis / EDI Test Certificate

M.T.R. meets requirements of
A.S.M.E. SECTION II PART A

1995 Edition

DW
Q.A.I.

Addenda
Sept 26/05
Date

CUSTOMER PURCHASE ORDER NUMBER

EP-2171

ENTRY DATE

2004/02/09

SHIP DATE

2004/04/20

TALLY NUMBER

273198

SHIPPERS NUMBER

02-

CARRIER

WC

17836

-39504

527.

CHARGE TO CUSTOMER NAME & ADDRESS

A C LESLIE INC
5435 ROYALMOUNT AVENUE
MONTREAL QUEBEC
H4P 1J4

SHIP TO CUSTOMER NAME & ADDRESS

A C LESLIE INC.,
5435 ROYALMOUNT AVE.,
MONTREAL, QUEBEC
WEST YARD

CUSTOMER SPECIFICATION

HR MULTIPLE CERTIFIED PLATE - HSLA - ASTM A516 GR 70/ASTM A572 GR50 TP3/ASME
SA516 GR70 (03) (03) (01) - CVNL 15 FT LBS AT -50 F - NORMALIZED 1650F NOM FOR
5 MIN/INCH MIN. - PVQ - NORMALIZED - FLATNESS TOLERANCE TO 1/2 A-6

SUPPLEMENTARY INSTRUCTIONS

FAX SM AND TR TO EDDY HAKIM AT 514-342-5583 AND MAIL

INSP T/R

TEST REPORTS REQUIRED

CUST USE

RESALE

MEETS EN 10204 3.1.B AND DIN 50049 3.1.B

MEETS ISO 9001:2000 REGISTERED

ALL HEATS FULLY KILLED

HEATS INDICATED WITH (*) FINE GRAINED

***** PRODUCT SHIPPED *****

CUSTOMER ITEM 8 OUR ITEM 008 DIMENSIONS .750 X 96 X 480 "

PLATE NUMBER

HEAT

NO. PIECES

WEIGHT

PLATE NUMBER

HEAT

NO. PIECES

WEIGHT

53396

1779C-05

1

9801

53397

1779C-05

1

9801

53398

1779C-05

1

9801

53399

1779C-05

1

9801

53400

1779C-06

1

9801

53401

1779C-06

1

9801

53402

1779C-06

1

9801

53403

1779C-06

1

9801

54082

0945C-56

1

9801

***** MECHANICAL PROPERTIES *****

TENSILE TESTS:

HEAT

PLATE NUMBER

SAMPLE

SRCE

GAUGE

COND

TEST METH

DIR

YIELD KSI

TENSILE KSI

% ELONG

0945C

54082

166"

166"

.7500

N

.2

TT

56.0

80.5

27(8")

1779C

53396

166"

166"

.7500

N

.2

TT

56.0

80.5

26(8")

1779C

53397

166"

166"

.7500

N

.2

TT

56.0

80.5

26(8")

1779C

53398

166"

166"

.7500

N

.2

TT

56.0

78.0

27(8")

1779C

53399

166"

166"

.7500

N

.2

TT

57.0

80.0

27(8")

1779C

53400

166"

166"

.7500

N

.2

TT

57.0

79.5

27(8")

1779C

53401

166"

166"

.7500

N

.2

TT

56.5

79.5

24(8")

***** WARNING *****

PAGE 6 OF 7

THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

M.T.R. meets requirements

A.S.M.E. SECTION II PART 2

2004 Edition

CS

Q.A.I.

Aug 5/04

Date

H. Haldenby

MANAGING METALLURGIST

THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ALGOMA STEEL INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-2624 COLLECT FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT.

1779C 53396

SA516-70N-50

96x.75x480 MT LTV

CODE MARKINGS

AST TP3MT

1779C 53401

SA516-70N-50

96x.75x480 MT LTV

CODE MARKINGS

AST 1779C 53400

1779C 53402

SA516-70N-50

96x.75x480 MT LTV

CODE MARKINGS

AST 1779C 53401

1779C 53403

SA516-70N-50

96x.75x480 MT LTV

CODE MARKINGS

AST 1779C 53402

ALGOMA STEEL INCORP. 105 West St., Sault Ste. Marie, Ontario, Canada, P6A 7B4

CUSTOMER PURCHASE ORDER NUMBER EP-2171	ENTRY DATE 2004/02/09	SHIP DATE 2004/04/20	TALLY NUMBER 273198	SHIPPERS NUMBER 02-	CARRIER WC	-39504	527
---	--------------------------	-------------------------	------------------------	------------------------	---------------	--------	-----

CHARGE TO CUSTOMER NAME & ADDRESS A C LESLIE INC 5435 ROYALMOUNT AVENUE MONTREAL QUEBEC H4P 1J4	SHIP TO CUSTOMER NAME & ADDRESS A C LESLIE INC., 5435 ROYALMOUNT AVE., MONTREAL, QUEBEC WEST YARD
---	---

MILL TEST REPORTS

ALGOMA STEEL INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN HEREIN AS CONTAINED IN THE COMPANY RECORDS AND WITHIN THE SCOPE OF ACCREDITATION OF ISO/IEC GUIDE 25-1994 AS CONTAINED IN THE COMPANY RECORDS

H. Haldenby
MANAGING METALLURGIST

THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ALGOMA STEEL INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-2624 COLLECT FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT.

CUSTOMER SPECIFICATION
HR MULTIPLE CERTIFIED PLATE - HSLA - ASTM A516 GR 70/ASTM A572 GR50 TP3/ASME
SA516 GR70 (03) (03) (01) - CVNL 15 FT LBS AT +50 F - NORMALIZED 1650F NOM FOR
5 MIN/INCH MIN. - PVQ - NORMALIZED - FLATNESS TOLERANCE TO 1/2 A-6

SUPPLEMENTARY INSTRUCTIONS

FAX SM AND TR TO EDDY HAKIM AT 514-342-5583 AND MAIL

INSP T/R
TEST REPORTS REQUIRED
CUST
USE
RESALE

M E C H A N I C A L P R O P E R T I E S

HEAT	PLATE NUMBER	* SAMPLE * SRCE	* GAUGE	* * TEST * * COND METH DIR	YIELD KSI	TENSILE KSI	% ELONG
1779C	53402	166"	.7500	N .2 T	56.5	80.5	26 (8")
1779C	53403	166"	.7500	N .2 T	56.5	80.0	29 (8")

IMPACT TESTS:

HEAT	PLATE NUMBER	SRCE	GAUGE	* * * * TEST * * * *	* * * *	FULLSIZE	ENERGY
0945C	54082	166"	.7500	COND METH DIR	SIZE TEMP	* FTLB	* AVG
1779C	53396	166"	.7500	N CVN L	FULL -50F	77 100	103 93
1779C	53397	166"	.7500	N CVN L	FULL -50F	106 96	104 102
1779C	53398	166"	.7500	N CVN L	FULL -50F	98 96	100 98
1779C	53399	166"	.7500	N CVN L	FULL -50F	93 105	83 94
1779C	53400	166"	.7500	N CVN L	FULL -50F	88 101	92 94
1779C	53401	166"	.7500	N CVN L	FULL -50F	100 82	93 92
1779C	53402	166"	.7500	N CVN L	FULL -50F	90 107	95 98
1779C	53403	166"	.7500	N CVN L	FULL -50F	106 106	95 102
						94 89	94 92

M.T.R. meets requirements of
A.S.M.E. SECTION II PART A
2001 Edition 03 Addenda
Date Mar 15/05
Q.A.I.

C H E M I C A L P R O P E R T I E S

HEAT	C	MN	P	S	SI	CR	NI	CU	MO	ALT	ALS	CB	V	B	TI	SN	N
0945C	.20	1.08	.009	.004	.32	.19	.13	.02	.01	.050	.043	.015	.026		<.008		
1779C	.19	1.13	.010	.004	.32	.19	.14	.02	.01	.035	.029	.016	.028		<.008		

WARNING THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE STEEL.

**WESTERN INSPECTION LTD.**

2231 - 58th AVENUE, S.E., CALGARY

ALBERTA T2C 0B4

TEL: (403) 279-4540

FAX: (403) 236-3043

Maxfield Inc.
1026 Western Drive
Crossfield, AB T0M 0S0
Tel: (403) 946-5678 Fax: (403) 946-4358

Job Number: 31-1310RT
PO Number:

Date of Exam: Monday, Sep 19 2005
Job Location: Customer's Shop
Technicians: Trevor Lee Mitchell CGSB Lev. II, SNT Lev. II
Jason Jacobsen Qualified Operator
Acc Codes: ASME VIII DIV. I UW-51
Inspected: Pre Heat Treat
Material: Carbon Steel
Isotope: IR 192
Focal Spot: 2x3 mm
Curies: 75
Degree: Full
Processing: Automatic
Units: in

Legend:

* (Loading) S = Single
D = Double
T = Triple
(Result) ACC = Accept
REJ = Reject
@ (Degree) RETEST = Retest
1 = Acceptable
2 = Slight
3 = Reject

Note: SFD Does not include reinforcement

Test Information												Result Information			
Comp#	Test#	Tech	IQI	Wldr	Dia	Thk	Len	Sch	SFD	*	Films	Type	#	@ Discontinuity	From - To
1	M1	RT3	1B	H	20	1.031		80	10.0	S	5	D4-GEV- I	ACC	1 Porosity	
													ACC	1 Slag	

RT 3: T.291 g) S.O.D., half of the pipe I.D. less 1/2 of max. allowable reinforcement. T.291 h) S.S.O.F.D., nominal wall thickness plus reinforcement.

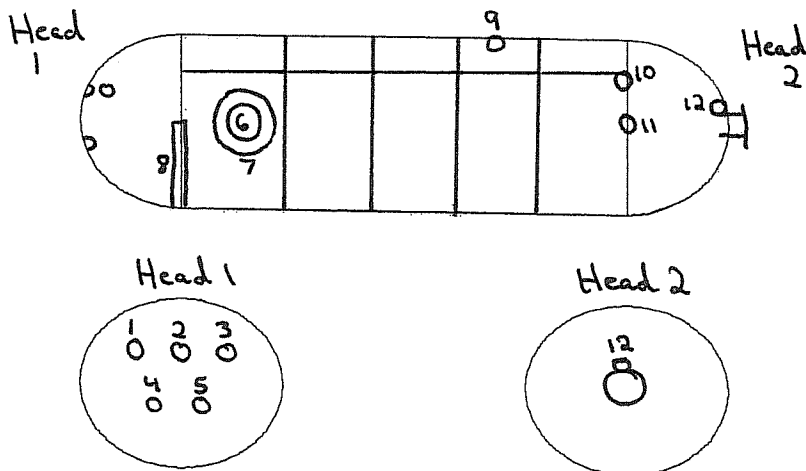
Units:
Qty Code
1 20/80/00

Sign Here:

Trevor Lee Mitchell CGSB Lev. II, SNT Lev. II

Sign Here:

Customer Representative:



MaXfield Inc. REPORT NUMBER 992013

Date Sept 28/05
 Job Number 31-1310
 Serial # 12212A

Page 1 of 1
 Inspected by: C.S.

Vessel Information
☒ Storage
☐ Portable
☐ UHT
 Shell Mat'l
 Head Mat'l
 Shell Min Thickness
 Head Min Thickness

MPI-Rev
☐ 1. Dry Visible
☐ 2. Wet Visible
☒ 3. WFMPI
☐ UT
Type of Inspection and Equipment
☐ Contrast
☒ AC Yoke
☐ DC Yoke
☒ Black Light
☐ Prepared Bath
☐ Contrast Paint
☐ Visual
☐ UT Survey
☐ Acceptance Standard ASME SEC VIII App 6
☐ Acceptance Standard ASME SEC VIII App 8

Time of Inspection
☐ Prelim. Insp.
☐ Before Hydro
☒ After Hydro
☐ Before PWHT
☐ After PWHT

Procedure Used
☐ Pre WFMPI
☐ TB2 WFMPI
☐ UT Survey
☐ Visible
Light Equipment
☐ 2 (300) Halogen
☐ 1 (300) I
☐ 3 "D" Flashlight
☐ 3 "C" Flashlight
☐ Rechargeable Flashlight
☐ Light Meter

Scope
☐ All Internal Welds (Pads, Nozzles, Circs, Longs)
☐ All External Welds (Pads, Nozzles, Circs, Longs)
☐ 100% Interior surface of heads
☐ 100% Exterior surface of heads
☐ External welds visibly discernable in interior
☐ Back gouging / Bevelled Edges Long seams
☐ Back gouging / Bevelled Edges Circ Seam
☐ Back gouging Nozzles Listed
☐ Back gouging Cat "D" nozzles Listed
☐ Completed Cat "D" Nozzles Listed

OTHER: Manway + manway repad inside/
outside. Area's where internal
clips were removed. Area's of
previous repair (internal).

Spot # (or) Area # (or)	1	2	3	4	5	6
I Nozzle Mark # (or) Shell #						
N Crack						
D Gouge						
I Arc Strike						
C Thickness in Area						
A Undercut						
T Other						
I						
O Defect Ground Out						
N Acceptable						
S Reject						
A Minor Repairs Req'd <50%						
C Major Repairs Req'd >50%						
T Fill & Grind						
I Blend						
O Area Marked in Vessel						
N Hydro / Rehydro						
S AI Approval Required						
NCR #						

Comments: Indications on areas 6 and 2. Both removed
with light grinding. No other relevant
indications found.

COPIES TO: ☐ File ☐ Supervisor ☐ Plant Office ☐ Recorded In Log Book

MaXfield Inc. REPORT NUMBER 992002

Date Sept 9/05

Page 1 of 1

Job Number 31-1310

Inspected by: C.S.

Serial # 12212A

Vessel Information

Shell Mat'l A-516-70 Nom Thk: .7781

☒ Storage

Head Mat'l A-516-70 Nom Thk: .7725

☐ Portable

Shell Min Thickness

☐ UHT

Head Min Thickness

MPI- Rev

Type of Inspection and Equipment

☐ 1. Dry Visible

☐ Contrast

☐ Prepared Bath

☐ 2. Wet Visible

☒ AC Yoke

☐ Contrast Paint

☒ 3. WFMPI

☐ DC Yoke

☐ Visual

☐ UT

☒ Black Light

☐ UT Survey

☒ Acceptance Standard ASME SEC VIII App 6

☐ Acceptance Standard ASME SEC VIII App 8

Time of Inspection

☒ Prelim. Insp.

☐ Before PWHT

☐ Before Hydro

☐ After PWHT

☐ After Hydro

☐

Procedure Used

Light Equipment

☐ Pre WFMPI

☐ 2 (300) Halogen

☒ TB2 WFMPI

☐ 1 (300) I

☐ UT Survey

☐ 3 "D" Flashlight

☐ Visible

☐ 3 "C" Flashlight

☐ Rechargeable Flashlight

☐ Light Meter

Scope

☒ All Internal Welds (Pads, Nozzles, Circs, Longs)

☐ All External Welds (Pads, Nozzles, Circs, Longs)

☐ 100% Interior surface of heads

☐ 100% Exterior surface of heads

☐ External welds visibly discernable in Interior

☐ Back gouging / Bevelled Edges Long seams

☐ Backgouging / Bevelled Edges Circ Seam

☐ Back gouging Nozzles Listed

☐ Back gouging Cat "D" nozzles Listed

☐ Completed Cat "D" Nozzles Listed

OTHER:

Spot # (or) Area # (or)	1	2	3	4	5	6
I Nozzle Mark # (or) Shell #						
N Crack						
D Gouge						
I Arc Strike						
C Thickness in Area						
A Undercut						
T Other						
I						
O Defect Ground Out						
N Acceptable						
S Reject						
A Minor Repairs Req'd <50%						
C Major Repairs Req'd >50%						
T Fill & Grind						
I Blend						
O Area Marked in Vessel						
N Hydro / Rehydro						
S AI Approval Required						
NCR #						

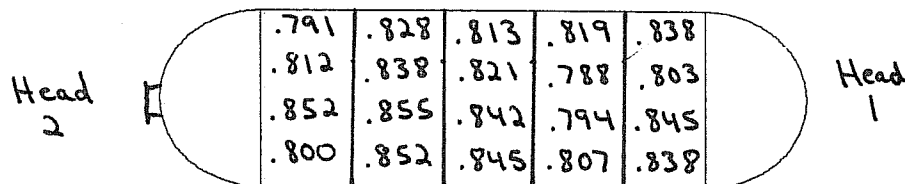
Comments: No relevant indications found.

COPIES TO: ☐ File ☐ Supervisor ☐ Plant Office ☐ Recorded In Log Book

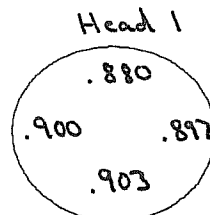
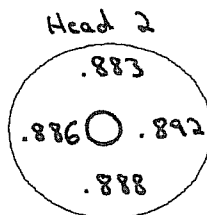
MaXfield Inc. REPORT NUMBER 992003

Date Sept 9/05
 Job Number 31-1310
 Serial # 12212A

Page 1 of 1
 Inspected by: CS.



Head 1



Vessel Information
 Shell Mat'l A-516-70 Nom Thk: .7781
 Head Mat'l A-516-70 Nom Thk: .7725
☒ Storage
☐ Portable
☐ UHT
 Shell Min Thickness 0.7681
 Head Min Thickness 0.7625

MPI- Rev
☐ 1. Dry Visible
☐ 2. Wet Visible
☐ 3. WFMPI
☒ UT
Type of Inspection and Equipment
☐ Contrast
☐ AC Yoke
☐ DC Yoke
☐ Black Light
☐ Prepared Bath
☐ Contrast Paint
☐ Visual
☒ UT Survey
☐ Acceptance Standard ASME SEC VIII App 6
☐ Acceptance Standard ASME SEC VIII App 8

Time of Inspection

☒ Prelim. Insp.
☐ Before Hydro
☐ After Hydro
☐ Before PWHT
☐ After PWHT

Procedure Used

☐ Pre WFMPI
☐ TB2 WFMPI
☒ UT Survey
☐ Visible
☐ 2 (300) Halogen
☐ 1 (300) I
☐ 3 "D" Flashlight
☐ 3 "C" Flashlight
☐ Rechargeable Flashlight
☐ Light Meter

Scope

☐ All Internal Welds (Pads, Nozzles, Circs, Longs)
☐ All External Welds (Pads, Nozzles, Circs, Longs)
☐ 100% Interior surface of heads
☐ 100% Exterior surface of heads
☐ External welds visibly discernable in Interior
☐ Back gouging / Bevelled Edges Long seams
☐ Back gouging / Bevelled Edges Circ Seam
☐ Back gouging Nozzles Listed
☐ Back gouging Cat "D" nozzles Listed
☐ Completed Cat "D" Nozzles Listed

OTHER: Random spots on shells + Heads

Spot # (or) Area # (or)	1	2	3	4	5	6
I Nozzle Mark # (or) Shell #						
N Crack						
D Gouge						
I Arc Strike						
C Thickness in Area						
A Undercut						
T Other						
I						
O Defect Ground Out						
N Acceptable						
S Reject						
A Minor Repairs Req'd <50%						
C Major Repairs Req'd >50%						
T Fill & Grind						
I Blend						
O Area Marked in Vessel						
N Hydro / Rehydro						
S AI Approval Required						
NCR #						

Comments: All recorded thicknesses above minimum

COPIES TO: ☐ File ☐ Supervisor ☐ Plant Office ☐ Recorded In Log Book

MaXfield Inc.

Affidavit of HYDRO

Job Number: 31-1310

Date: Sept 26/05

Serial Number: 12212 A

Alberta #: 126332

National Board #: —

Other ID #: —

Medium: Water

Temperature: Ambient

Gauge(s): 356/354.

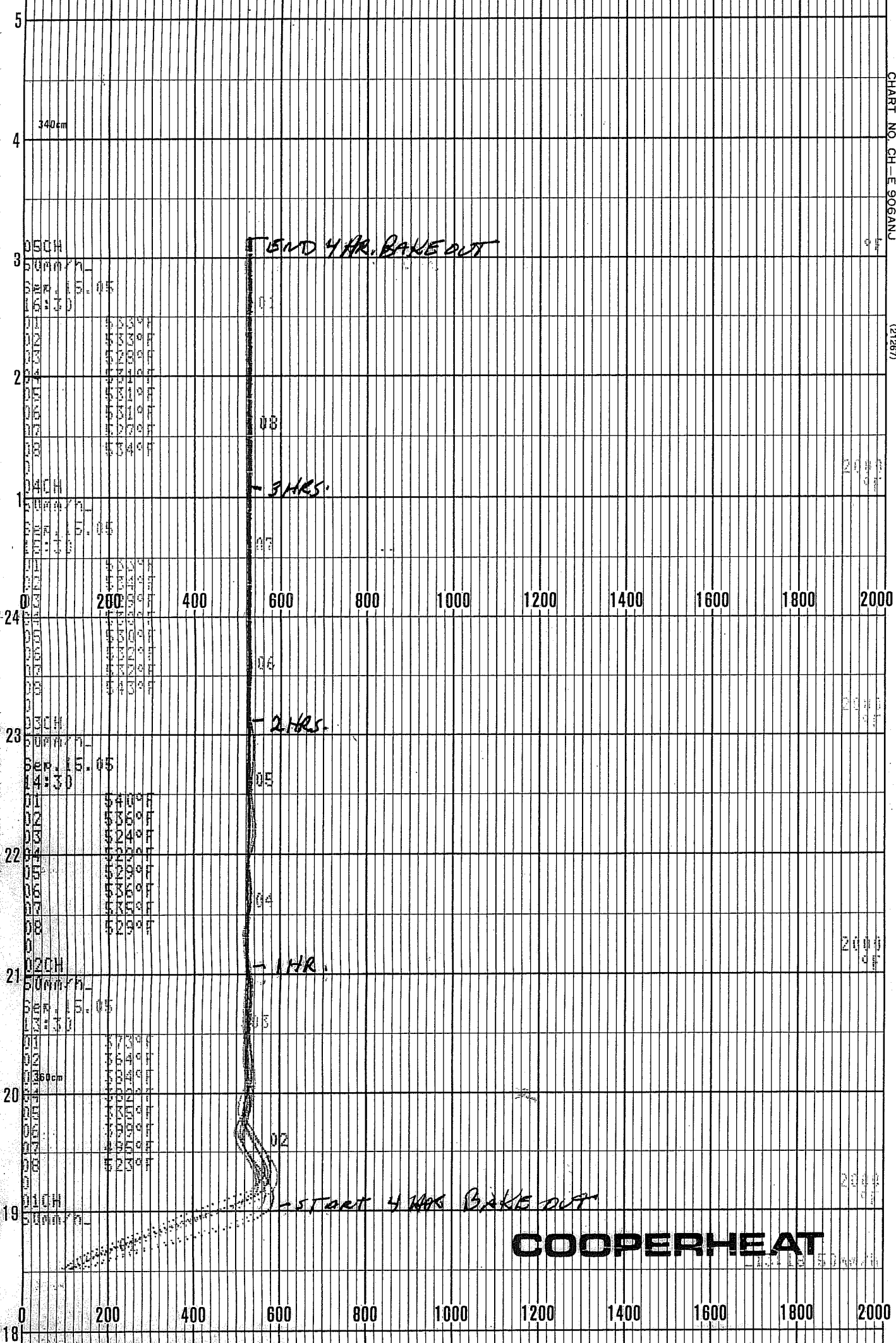
Time: 1 HR

Pressure: 375 psi / _____ kPa



MaXfield Inc. Q.A.I.: 

ABSA Inspector: _____

Customer Representative: _____



COOPERHEAT

TEAM  COOPERHEAT  MGS		CH JOB#: 12535	HT Report#: 363957
Customer: MAXFIELD		Site: CROSS FIELD	PO#:
Recorder S/N: 4370FA810		Cal. Cert.# 48125	Chart Speed: 50mm/hr

COMMENTS: BAKE OUT ON PROPANE TANK.

Weld #	Weld Dia	T/C #	Line #	Weld #	Weld Dia	T/C #	Line #	Specifications
x1			x6					JOB# 31-1310
x2			x7					S/N: 12212A
x3			x8					
x4			x9					
x5			x10					

TR. PLACEMENT



CERTIFICATE OF CALIBRATION

OWNER <u>TEAM COOPERHEAT - MSS</u>	JOB No. <u>N/A</u>	Certificate No. <u>48125</u>
---------------------------------------	-----------------------	---------------------------------

Instrument Model Yokogawa LR 1800 Serial No. 4370 FA 810
Range: ☒ 0 - 2000°F ☐ Other Sensor Type: ☒ K ☐ Other
Environmental Conditions: Temperature 68 °F Humidity 32 %
Date of Cal. APRIL 8/05 Next Cal. Due OCT 8/05

INSTRUMENT USED TO PERFORM CALIBRATION

Certificate No. 33317 Serial No. 3007400 Next Cal. Due JULY 4/05

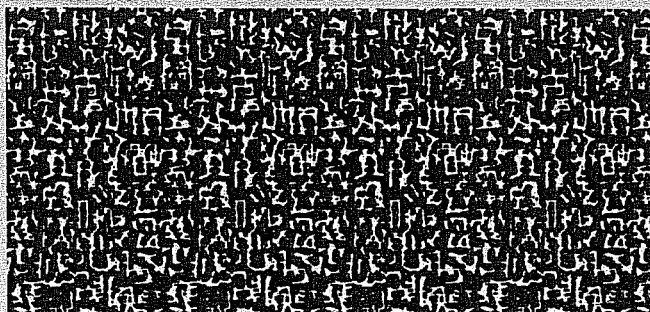
CALIBRATION DATA

ALL ENTRIES ARE °F UNLESS OTHERWISE NOTED

Signal Input	As Found	As Left	Accuracy (Tolerance)
Test Temp. "a" <u>200</u>	<u>200</u>	<u>200</u>	± <u>6</u>
Test Temp. "b" <u>800</u>	<u>800</u>	<u>800</u>	± <u>6</u>
Test Temp. "c" <u>1000</u>	<u>1000</u>	<u>1000</u>	± <u>6</u>
Test Temp. "d" <u>1200</u>	<u>1200</u>	<u>1200</u>	± <u>6</u>
Test Temp. "e" <u>1600</u>	<u>1600</u>	<u>1600</u>	± <u>6</u>

CONDITION FOUND: ☒ In Tolerance ☐ Out of Tolerance ☐ New

I, DEAN MCNEED (print name) certify that the above work was performed and that calibration was in accordance with CH-C-012 Rev. 7 and against standards traceable to the National Institute of Standards and Technology.



Signature

Employee No. 064

District Office EDMONTON

