



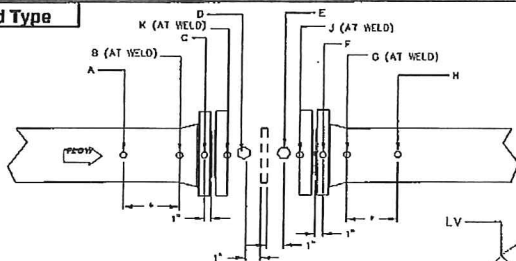
MEASUREMENT SYSTEMS

Meter Tube Calibration Record

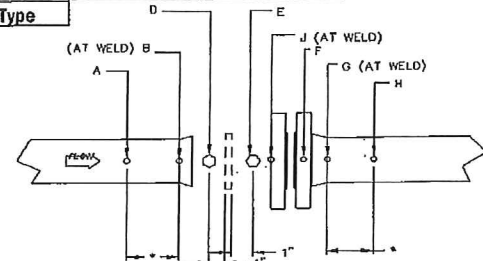
General Specifications

Customer:	RJV GASFIELD SERVICES	Date:	06/20/2011
Location:	HUSKY	P.O. Number:	118106
Serial No.	11209214501	Work Order No.	112092145
Assembly Part No.	9A-MR-52-0168E	Part No.	40552-34221
Orifice Fitting:	2" 600# SCH. 80 DUAL CHAMBER	Meter Tube Type No.	2
Straightening Vane:		Yes	X No

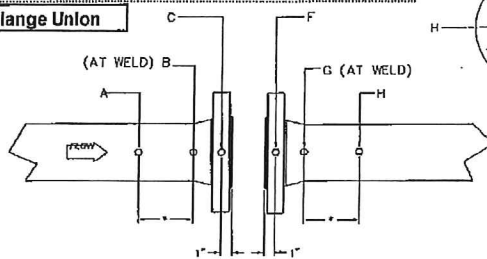
Type 1 Flanged Type



Type 2 Flangeweld Type



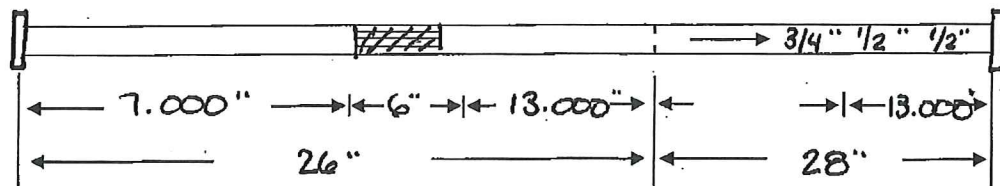
Type 3 Orifice Flange Union



Type 4 weldneck Type Valve or Door
Check Location Point A-B-D on Upstream Tube,
Point E-G-H on Downstream Tube

*Cross section 'A' and 'H' shall be one pipe diameter
except if such Cross Section falls within the lifting or weld
it shall be made 1" inside the pipe

Location	Upstream Meter Tube					Downstream Meter Tube				
	A	B	C	D	K	E	F	G	H	J
V	1.936	1.934		1.940		1.939	1.949	1.946	1.930	1.942
LV	1.931	1.934		1.940		1.939	1.949	1.949	1.937	1.947
RV	1.936	1.936		1.941		1.943	1.949	1.947	1.931	1.946
H	1.931	1.934		1.941		1.942	1.949	1.948	1.941	1.947
Average	1.936	1.935		1.941		1.941	1.949	1.948	1.935	1.946
Upstream Mean Average to Stamp on I.D. Plate			1.941			Downstream Mean Average to Stamp on I.D. Plate			1.941	



AGA/API Figure	BETA	Meter Tap Location	
3C(1991)	6.70	Upstream	Downstream
Remarks:	Inspector:		
68°F			



www.c-a-m.com
Phone: 780.463.6868
3707-97th Street, Edmonton, AB. T6E 6J2
rev.5 03/11/11

Certificate of Authorization Permit

Quality Management System

Expiry Date: **January 19, 2013**

Reg. No.: **AQP-5046**

This is to certify that:

**CAMERON
MEASUREMENT SYSTEMS DIVISION
3707 - 97 STREET
EDMONTON, ALBERTA**

having complied with the provisions of the SAFETY CODES ACT, is hereby authorized to:

Manufacture Category 'F' Fittings in accordance with CSA B51

Alter Category 'C' Fittings in accordance with CSA B51

at the above SHOP address.



Dated at Edmonton, this 1st day of February, 2010

Chief Inspector and Administrator

Certificate No.: 7277



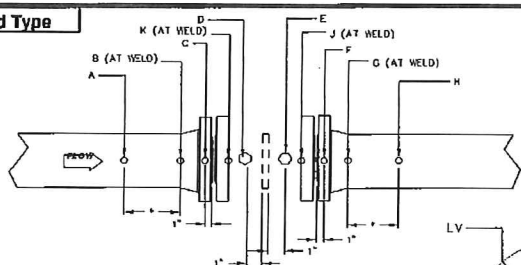
MEASUREMENT SYSTEMS

Meter Tube Calibration Record

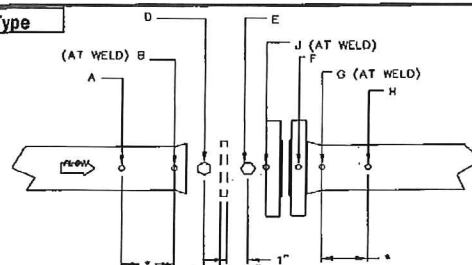
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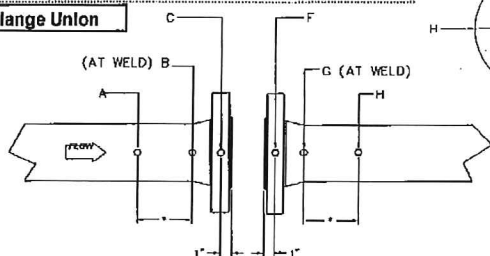
Type 1 Flanged Type



Type 2 Flangeweld Type



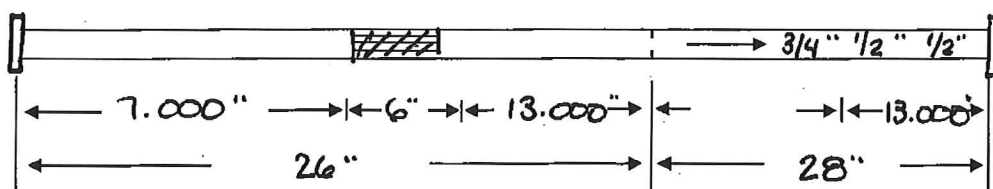
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AGA/API Figure	BETA	Meter Tap Location	
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Remarks:	Inspector:		
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Phone: 780.463.6868
3707-97th Street, Edmonton, AB. T6E 6J2
rev.5 03/11/11

NUFLO™ DUAL CHAMBER ORIFICE FITTING

PART NO. **40552-34221**

SERIAL NO. **11209214501**

SIZE **2.0** BORE **1.939**

SWP **1480** FLG **600**

TRIM **SWEET**

CRN (ASME CODE) 0F01120.2C

 **CAMERON**
EDMONTON, ALBERTA, CANADA

TO REMOVE PLATE FROM CHAMBER

1. CLOSE ORIFICE CHAMBER (INDEX ORIFICE OUT OF OPERATION)
2. OPEN BLEED VALVE.
3. OPEN CHAMBER LID (REMOVE TWO TOP NUTS ONLY).
4. REMOVE ORIFICE PLATE (PRY ON HOLES IN RETAINER HANDLE).

TO PLACE ORIFICE PLATE IN OPERATION

1. REPLACE ORIFICE WITH OUTLET ON PLATE AND SEAL ON RETAINER FACING UPWARD.
2. CLOSE LID.
3. CLOSE BLEED VALVE.
4. OPEN EQUALIZING VALVE.
5. OPEN ORIFICE CHAMBER (INDEX ORIFICE INTO OPERATION).
6. CLOSE EQUALIZING VALVE.

NUFLO™ METER RUN

ASSY NO.

9A-MR 52 0168E

SERIAL NO. **11209214501**

PIPE SIZE **2.0**

AGA / API **3C (1991)**

W.O. NO. **11209145**

U/S DIA.

1.941

D/S DIA.

1.941

SCH

80

RATING

600

MAT'L

WCB

DATE

06/2011

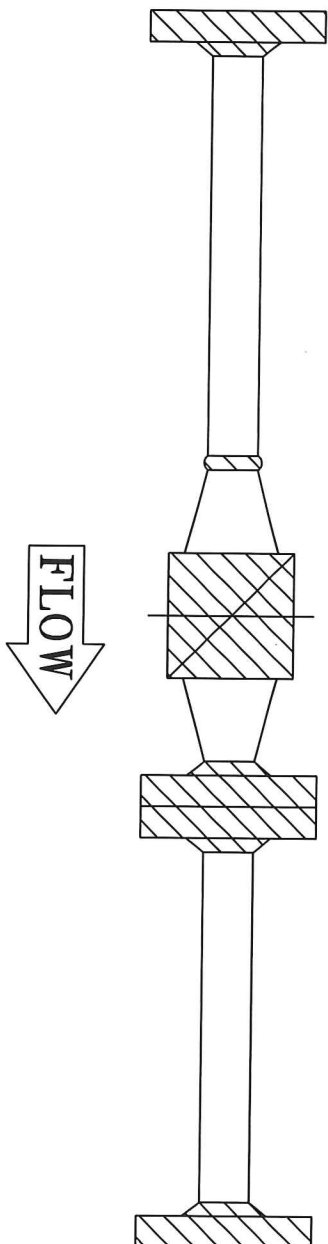
CALIBRATION
CERT'D BY

CAMERON

CRN (ASME CODE) 0F01120.2C

 **CAMERON**
EDMONTON, ALBERTA, CANADA

WELD IDENTIFICATION MAP



DESCRIPTION: 2" 600# SCH. 80 DUAL CHAMBER METER RUN

SERIAL No.: 11209214501

CUSTOMER: RJV GASFIELD SERVICES

P/O No.: 118106 TAG No.:

W/O No.: 112092145 END USER: HUSKY

WELDER: COLIN WELBY FILE No.: W-17591

DATE: JUNE 22, 2011 Lorne Dagg

SYMBOL: "V" QUALITY ASSURANCE INSPECTOR

 **CAMERON** MEASUREMENT SYSTEMS

3707 - 97th STREET
EDMONTON, ALBERTA
T6E 6J2



A.O.Q.P. No. 7108 (c)

LUDWIG ASSOCIATES LTD.

Materials and Welding Consulting

WELDER PERFORMANCE QUALIFICATION CARD

Name: Colin Welby

ABS File No.: W-17591

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welding Regulations.
The performance qualification is in accordance with ASME Section IX of the ASME Code and subject to the provisions of the relevant code.

February 14, 2011
Date of Test

Signature of Welder or Machine Operator

Taylor Mason
Welding Examiner

Card No.: 05392



A.O.Q.P. No. 7108 (c)

LUDWIG ASSOCIATES LTD.

Materials and Welding Consulting

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February 14, 2011
Date of Test

Signature of Welder or Machine Operator

Taylor Mason
Welding Examiner

Card No.: 05393

PERFORMANCE QUALIFICATION

05392

Process(es)	GMAW	SMAW	Materials (P-No)	P1 to P1
Filler Metal Group (F-No)	F6	F4	Min. Outside Diameter	1.0 in.
Max. Deposited Weld Metal	0.110 in.	Max. to be Welded	Position(s) Qualified	GMAW SP 0.45° & Flat SMAW Flat
Backing	With or Without	With	Backing Gas	With or Without
Progression	Downhill	N/A		

February 14, 2013
P.Q. Expiry Date

Welding Examiner Signature

E-00320
Examiner File No.**PERFORMANCE QUALIFICATION**

05393

Process(es)	GMAW	FGAW	Materials (P-No)	P1 to P1
Filler Metal Group (F-No)	F6	F6	Min. Outside Diameter	1.0 in.
Max. Deposited Weld Metal	0.110 in.	Max. to be Welded	Position(s) Qualified	GMAW SP 0.45° & Flat FGAW Flat
Backing	With or Without	With	Backing Gas	With or Without
Progression	Downhill	N/A		

February 14, 2013
P.Q. Expiry Date

Welding Examiner Signature

E-00320
Examiner File No.**Grade B Pressure Welders
Certificate of Competency**

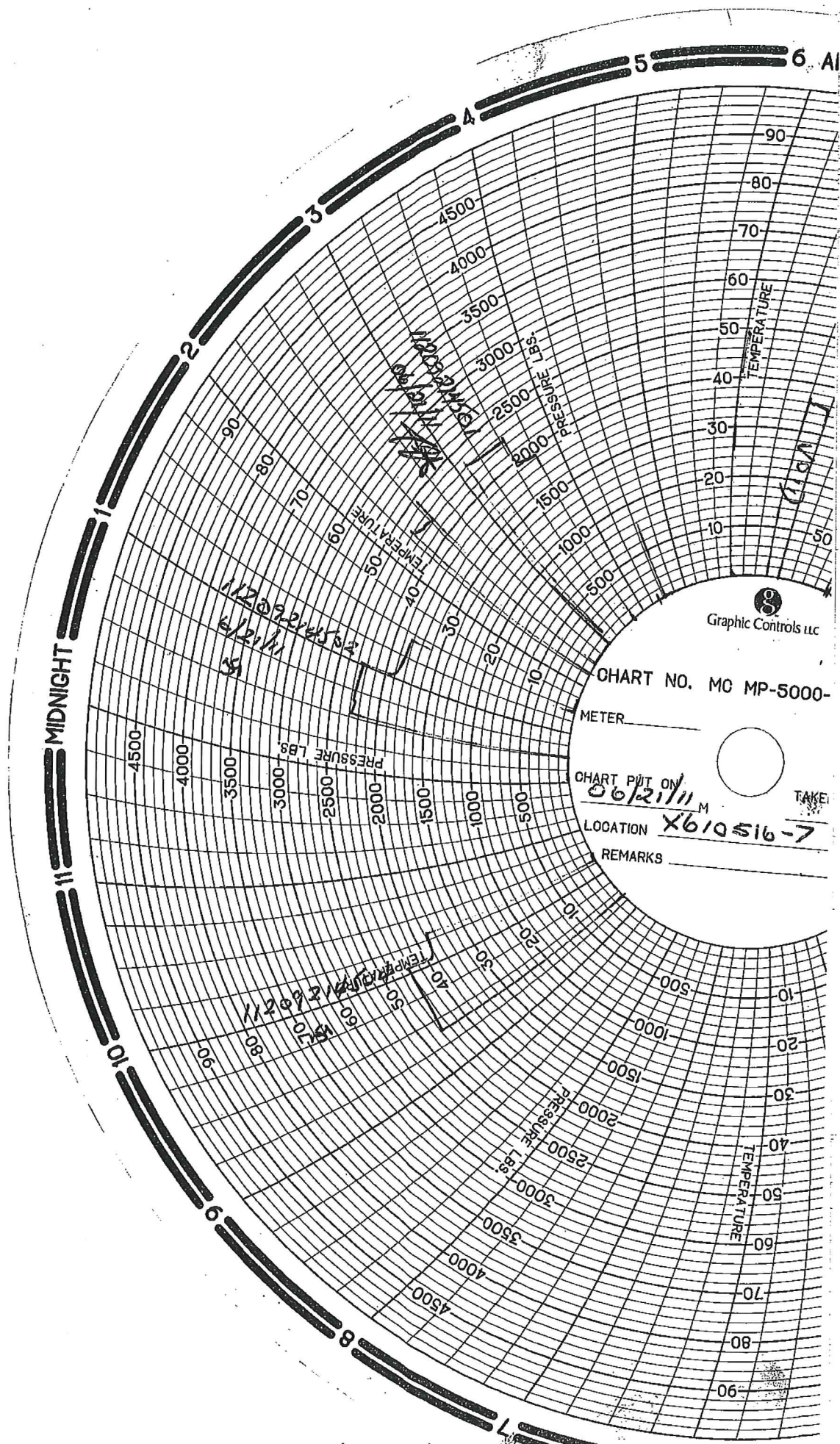
This is to Certify that **Colin Welby**
having complied with provisions of the Safety Codes Act, is authorized to engage in
pressure welding in accordance with the prescribed Regulations

W-17591
File No.Dated at Edmonton this
April 8, 1999

Chief Inspector and Administrator

Form No. AB-117 Rev (06/10)

No 12052



MST1201
2/21/07

Highland Foundry Ltd.
CHEMICAL AND PHYSICAL ANALYSIS

Page 1
11:24:49

Product# . . . : 40552-026
Customer Part# : 40552-026
Customer . . . CAMERON MEASUREMENT SYSTEMS
ACCOUNTS PAYABLE
7944 10TH STREET N.E
CALGARY AB T2E 8W1
CANADA

Order/Item# . . 29051 / 1
Customer P.O.# XP62140

2" DUAL CHAMBER BODY

Approved by: Shyan Smith
Quality Assurance Technician



Melt#	Quantity	Date	Heat Treat	BATCH #	Specification
6-8768	34	1/31/07		GB2 - -	ASTM A216 GRADE WCB

C H E M I C A L S			
C .2000	MN:.7500	SI:.4700	P .0150
S .0120	NI:.0900	CR:.1200	MO:.0300
CU .0800	V : 0110		

P H Y S I C A L S	
YIELD KSI 49.3	TENSILE KSI 74.7
ELONGATION % 32	RED OF AR. % 55

CE: 0.3685

$$(CE = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Ni + Cu}{15})$$



MATERIAL TEST REPORT

9670-187th Street, Surrey, BC Canada V4N 3N6
Phone 604-888-8444 Fax 604-888-3634
www.highlandfoundry.com

ISO 9001:2000

Hardness Test Report



OUR REPUTATION IS STAINLESS

Customer	Cameron Measurement Systems	PO Number	XP62140
Part Number & Description	40552-026 2" Dual Ch. Body 150# - 900#	Order Number	29051 / 1
Material Specification	ASTM A216 Grade WCB	Date	02/21/07
Inspection Method	ASTM E10	Qty	71 pcs

Equipment Used: Portable King Brinell Tester

Type of Ball:

Regular ☐

Carbide ☒

Load: 3000 kg

Holding Time: 10 sec

Hardness Required: 237 Max

Brinell ☒

Rockwell ☐



Heat No. / Batch No.	% of Batch Tested	Hardness Obtained
6-8768 / GB2	10%	152, 156, 156
4-8153 / GB3	10%	156, 156, 156
6-8759 / FW1	10%	152

Remarks:

Tested By:

Misha Dominato
Misha Dominato
CGSB 48.9712, Level 2, Reg# 12895

MST1201
1/11/07

Highland Foundry Ltd.
CHEMICAL AND PHYSICAL ANALYSIS

Page 1
14 10 22

Product# . . . 40701-052
Customer Part# 40701-052
Customer . . . CAMERON MEASUREMENT SYSTEMS
ACCOUNTS PAYABLE
7944 10TH STREET N.E.
CALGARY AB T2E 8W1
CANADA

Order/Item# . : 28906 / 1
Customer P.O.# XP61926

2" DUAL CHAMBER LID

Approved by. Shyan Smith
Quality Assurance Technician

Melt#	Quantity	Date	Heat Treat	BATCH #	Specification
5-7652	52	1/03/07		FF7 - -	ASTM A216 GRADE WCB

C H E M I C A L S			
C .2200	MN .7900	SI .5500	P .0190
S .0170	NI .1100	CR .1700	MO .0300
CU: 1200	V .0180		

P H Y S I C A L S			
YIELD KSI	53.3	TENSILE KSI	80.6
ELONGATION %	30	RED OF AR. %	52

CE . 0.4106

$$(CE = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Ni + Cu}{15})$$



MATERIAL TEST REPORT

9670-187th Street, Surrey, BC Canada V4N 3N6
Phone 604-888-8444 Fax 604-888-3634
www.highlandfoundry.com

ISO 9001:2000

Hardness Test Report



OUR REPUTATION IS STAINLESS

Customer	Cameron Measurement Systems	PO Number	XP61926
Part Number & Description	40701-052 2" Dual Ch. Lid	Order Number	28906 / 1
Material Specification	ASTM A216 Grade WCB	Date	01/12/07
Inspection Method	ASTM E10	Qty	220 pcs

Equipment Used: Portable King Brinell Tester

Type of Ball:

Regular ☐

Carbide ☒

Load: 3000 kg

Holding Time: 10 sec

Hardness Required: 237 Max

Brinell ☒

Rockwell ☐



Heat No. / Batch No.	% of Batch Tested	Hardness Obtained
4-8044 / EN8	10%	163
5-7584 / EN9	10%	167
5-7642 / FF5	10%	167, 167, 163, 167, 163
5-7649 / FF6	10%	159, 163, 170, 163, 163
5-7652 / FF7	10%	167, 170, 163, 163, 163
5-7654 / FF8	10%	163, 163, 159, 163, 156

Remarks:

Tested By:

Mischa Dominato
Mischa Dominato
CGSB 48.9712, Level 2, Reg# 12895

ASCOMETAL

DOCUMENT DE CONTROLE

Inspection Documents / Prüfbescheinigungen

Inspection Certificate 3.1

NFEN 10204 / DIN EN 10204 / ISO R 404
2004 2004 2004



Département Métallurgie Qualité
Usine des Dunes - Boite postale 41
59941 Dunkerque Cedex 2
Téléphone : 03 28 29 60 00
Télécopie : 03 28 29 60 03

Livraison : 80150215 / 000006
N° Contrôle : 030000139414

Date : 29.07.2010
Date d'édition : 20.09.2010

ORDRE DE FABRICATION : G9329AH
WORKS ORDER NUMBER / WERKBESTELLUNG

AFFAIRE SUIVIE PAR : LE CORRE
YOUR CONTACT AS / BEARBEITER

N/REFERENCE : 500989803 / 000010 (70036017)
ASCOMETAL ORDER / WERKBESTELLUNG

V/REFERENCE : SOC-13131 682804-192 (0113-7850)
YOUR ORDER / IHRS ZEICHN

QUANTITE : 4,870 TO
QUANTITY / MENGE

PRODUIT : A105 RON ECR 5,750 IN NOR
PRODUCT DESCRIPTION / BESCHREIBUNG

SPECIFICATION CLIENT : ASTM A105+A350LF2+A696GRC+API6A45K
SPECIFICATION / SPEZIFIKATION

IND : SANS
REV / ENTWURF

SPECIFICATIONS SUPP. : CEQ<=430 S<=35 P<=35

COULEE : G9329
CAST / SCHMIEßZE

DESTINATAIRE DOCUMENT :
DOCUMENT FOR / FÜR ANFORDER

Société
RYERSON
7945 CORONET ROAD
EDMONTON ALB T6E 4N7
Canada

MARQUE :

CCU : D000003650

Analyse chimique de coulée / Ladle analysis / Schmelzeanalyse

Elément (%)			C	Mn	Si	Cr	Ni	Mo	Cu	P	S	Al
Elément	Element	Teil										
Mini	Spec min	Min		0,600	0,150							
Valeur	Actual	Werte	0,154	1,111	0,275	0,159	0,240	0,061	0,233	0,013	0,014	0,021
Maxi	Spec max	Max	0,230	1,350	0,300	0,300	0,400	0,120	0,400	0,035	0,035	
Elément			V	Cb								
Elément	Element	Teil										
Mini	Spec min	Min										
Valeur	Actual	Werte	0,013	0,0000								
Maxi	Spec max	Max	0,080	0,0200								
Contraintes groupées												
Elément			Mini		Valeur		Maxi					
CEq					0,417		0,430					

Caractéristiques mécaniques / Mechanical properties / Mechanische Kennwerte

Traction / tensile test / Zugversuch
Nappe / Batch number / Loss number : G677
mid radius tested
Longitudinal test
Tensile test temperature (°F)

70

Elément	Elément	Teil	Ys.2%	UTS	E (2ln)	RA
Unité	Unit	Meinheit	PSI	PSI	%	%
Mini	Spec min	Min	45000,0	70500,0	22,0	30,0
Valeur	Actual	Werte	48343,0	71630,0	32,0	66,3
Maxi	Spec max	Max		95000,0		

Résilience / Impact test / Kerbschlagproben
Nappe / Batch number / Los number : G677
notch test 10 x 10
Mid radius testing
Charpy V notch
Longitudinal test
Impact test temperature (°F)

-50

Elément	Elément	Teil	Ft/Lbs	Ft/Lbs	Ft/Lbs	Exp lat	Exp lat	Exp lat
Unité	Unit	Meinheit	Ft/Lbs	Ft/Lbs	Ft/Lbs	"	"	"
Mini	Spec min	Min	11,0	11,0	11,0			
Valeur	Actual	Werte	82,0	101,3	94,5	0,0	0,1	0,1
Maxi	Spec max	Max						

Nous certifions que les produits ci-dessus sont conformes aux prescriptions de la commande, respectent la directive européenne 2000/53/CE du 18 septembre 2000 et présentent un niveau de radioactivité au plus égal à la radioactivité ambiante.

We hereby certify the above mentioned products are complying with the order requirements, are respectful of the September, 18th 2000 - 2000/53/CE - european directive, and have a radioactivity level which does not exceed that present in the environment.

Wir bestätigen hiermit dass die obengenannten Erzeugnisse den Bestimmungsvorschriften, der EU-Richtlinie 2000/53/CE von 18 September 2000 entsprechen und die geltenden Produkte keine Radioaktivität, die Höher ist als natürliche Strahlung der Umwelt, aufweisen.

ASCOMETAL
SA à directoire et conseil de surveillance
au capital de 65 285 430 EUR
331 048 132 RCS Nanterre

Siège social : Immeuble le Colisée - 8, avenue de l'Arche, Faubourg de l'Arche, 92419 COURBEVOIE Cedex

ASCOMETAL



Département Métallurgie Qualité
Usine des Dunes - Boite postale 41
59941 Dunkerque Cedex 2
Téléphone : 03 28 29 60 00
Télécopie : 03 28 29 60 03

DOCUMENT DE CONTROLE

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NPEN 10204 / DIN EN 10204 / ISO R 404
2004 2004 2004

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COULEE : G9329
CAST / SCHMELZE

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DOCUMENT FOR / KRAFTFÄHIGKEIT

AFFAIRE SUIVIE PAR : LE CORRE
YOUR CONTACT IS / BEARBEITER

Société
RYERSON
7945, CORONET ROAD
EDMONTON ALB T6E 4N7
Canada

N/REFERENCE : 500989803 / 000010 (70036017)
ASCOMETAL ORDER / WERKHEFTSTÜLLUNG

V/REFERENCE : SOC-13131 682804-192 (0113-7850)
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QUANTITE : 4,870 TO
QUANTITY / MENGE

NUANCE : A105
GRADE / WERKSTOFF

PRODUIT : A105 RON ECR 5,750 IN NOR
PRODUCT DESCRIPTION / BESCHREIBUNG

SPECIFICATION CLIENT : ASTM A105+A350LF2+A696GRC+API6A45K
SPECIFICATION / SPEZIFIKATION

IND : SANS
REV / ENTWURF

DATE : 00.00.2001
DATE / DATUM

CCU : D000003650

SPECIFICATIONS SUPP. : CEQ<=430 S<=35 P<=35

Résilience / Impact test / Kerbschlagproben
Nappe / Batch number / Los nummer : G677
notch test 10 x 10
Mid radius testing
Charpy V notch
Longitudinal test
Impact test temperature (°F)

-60

Elément	Element	Teil	Ft/Lbs	Ft/Lbs	Ft/Lbs
Unité	Unit	Meinheit	Ft/Lbs	Ft/Lbs	Ft/Lbs
Mini	Spec min	Min			
Valeur	Actual	Werte	95,4	113,2	99,4
Maxi	Spec max	Max			

Résilience / Impact test / Kerbschlagproben
Nappe / Batch number / Los nummer : G677
notch test 10 x 10
Mid radius testing
Charpy V notch
Impact test temperature (°F)
transverse test

-60

Elément	Element	Teil	Ft/Lbs	Ft/Lbs	Ft/Lbs
Unité	Unit	Meinheit	Ft/Lbs	Ft/Lbs	Ft/Lbs
Mini	Spec min	Min			
Valeur	Actual	Werte	29,0	25,7	24,0
Maxi	Spec max	Max			

Traitement thermique / Heat treatment / Warmbehandlung

Traitement	T Min	T	T Max	Durée	Refoldissement
Norm. temp.		1652 °F		3,00 hrs	Normalized air cooled

Dureté de surface sur barres / Bars surface hardness / Stäbe Randhärte

Elément	Element	Teil	BHN top
Unité	Unit	Meinheit	
Mini	Spec min	Min	
Valeur	Actual	Werte	145
Maxi	Spec max	Max	187

Autres résultats / Other results / Andere Prüfergebnisse

Elément	Mini	Valeur	Maxi
Grain size M-Quaid Ehn	5	7	8

Nous certifions que les produits ci-dessus sont conformes aux prescriptions de la communauté, respectent la directive européenne 2000/53/CE du 18 septembre 2000 et présentent un niveau de radioactivité au plus égal à la radioactivité ambiante.

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ASCOMETAL
SA à directoire et conseil de surveillance
au capital de 65 285 430 EUR
331 048 132 RCS Nanterre

Siège social : Immeuble la Colisée - 8, Avenue de l'Arche, Faubourg de l'Arche, 92419 COURBEVOIE Cedex

ASCOMETAL

DOCUMENT DE CONTROLE

Inspection Documents / Prüfbescheinigungen

Inspection Certificate 3.1

NFEN 10204 / DIN EN 10204 / ISO R 404
2004 2004 2004



Département Métallurgie Qualité
Usine des Duners - Boite postale 41
59941 Dunkerque Cedex 2
Téléphone : 03 28 29 60 09
Télécopie : 03 28 29 60 03

Livraison : 80150215 / 000006
N° Contrôle : 030000139414

Date : 29.07.2010
Date d'édition : 20.09.2010

ORDRE DE FABRICATION : G9329AH
WORKS ORDER NUMBER / WERKBESTELLUNG

AFFAIRE SUIVIE PAR : LE CORRE
YOUR CONTACT IS / BEARBEITER

N/REFERENCE : 500989803 / 000010 (70036017)
ASCOMETAL ORDER / WERKURSTELLUNG

V/REFERENCE : SOC-13131 682804-192 (0113-7850)
YOUR ORDER / IHRE ZEICHNUNG

QUANTITE : 4,870 TO NUANCE : A105
QUANTITY / MENGE GRAD / WINKSTÖRKE

PRODUIT : A105 RON ECR 5,750 IN NOR
PRODUCT DESCRIPTION / BESCHREIBUNG

SPECIFICATION CLIENT : ASTM A105+A350LF2+A696GRC+API6A45K
SPECIFICATION / SPEZIFIKATION

IND : SANS DATE : 00.00.2001
REV / ENTWURF DATE / DATUM

SPECIFICATIONS SUPP. : CEQ=430 S<=35 P<=35

COULEE : G9329
CAST / SCHMELZE

DESTINATAIRE DOCUMENT :
DOCUMENT FOR / EMPFÄNGER

Société
RYERSON
7948, CORONET ROAD
EDMONTON ALB T6E 4N7
Canada

MARQUE :

CCU : D000003650

Électro furnace - vacuum degassed
Ultrasonic testing satisfactory per ASTM A388-05

Conforms to API 6A type 75K - PSL I-3
Conforms to NACE MR 01-75
Conforms to ASME SA105/SA350LF2
Conforms to ASTM A696 gr C - ASME SA696 gr C
No welding performed

LIN
Produit en France / Product of France / In Frankreich hergestellt

Visa du chef de service
Stamp of inspection supervisor
Der Werkssachverständige
Anne Rasquelle

Nous certifions que les produits ci-dessus sont conformes aux
prescriptions de la commande, respectent la directive européenne
2000/53/CE du 18 septembre 2000 et présentent un niveau de
radioactivité au plus égal à la radioactivité ambiante.

We hereby certify the above mentioned products are complying with
the order requirements, are respectful of the September, 18th 2000 -
2000/53/CE - european directive, and have a radioactivity level which
does not exceed that present in the environment.

Wir bestätigen hiermit dass die obengenannten Erzeugnisse den
Bestellungsanforderungen, der EU-Richtlinie 2000/53/CE vom 18
september 2000 entsprechen und die gelieferten Produkte keine
Radioaktivität, die Höher ist als natürliche Strahlung der Umwelt,
aufweisen.

ASCOMETAL
SA à directoire et conseil de surveillance
au capital de 65 285 430 EUR
331 048 132 RCS Nanterre

Siège social : immeuble le Colisée - 8, avenue de l'Arche, Faubourg de l'Arche, 92419 COURBEVOIE Cedex

Heat Number: 58184
Trans Am Piping Products Ltd. - Rev'd By: SED 1 / 2X3 / 4-36 CL 3000 F9 THREADED PIPE
Shipment / Seq #: S 10 - 1700 4 A105N



Manufacturer of Piping and Pressure Vessel Components

4407 Haygood St - Houston, TX 77022

Phone: 713-695-3633 Fax: 713-695-3528

A Bonney Forge Company

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Sold To: TRANS AM PIPING PRODUCTS
LTD
9335 ENDEAVOR DRIVE S.E.
CALGARY AB T3S 0A1

MTR #: 200,085

PO #: CI-10-527

Sales Order #: C001013323

Date: 12/17/2010

This product has not come in direct contact with mercury or any of its compounds, nor with any mercury-containing device employing a single boundary of containment. No welding performed.

We certify that the contents of this report are correct and accurate, and that all test results and operations performed by WFI or its subcontractors are in compliance with the material specification and requirements of the referenced code or standard, and that the material conforms to the dimensional requirements of the order. This document is in accordance with EN10204 3.1.

Certified Material Test Report

Heat Code: 58184

Material: A/SA105N 09

Item	Description
7	36 - 3/4 X 1/2 3M THP A/SA105N

Chemical Composition

Ladle	C	CR	CU	MN	MO	NB	NI	P
	0.220	0.04	0.070	1.03	0.000	0.01	0.02	0.008
B	SI	V						
	0.019	0.26	0.00					

Carbon Equivalency: Ladle 0.41

Product	Tensile PSI	Yield PSI	Elong %	RA %	Hardness
	75,000	49,900	29.00	66.00	144 BHN

144 BHN

Normalized

1. IN ACCORDANCE WITH NACE SPEC MR0175-2002

Marie Dehmer
Quality Assurance Representative

P.O.# 4502839384 Item# 5
 Heat Number: 58266
 Trans Am Piping Products Ltd. - Rev'd By: SB 3/4X11/2-36 CL 3000 FS THREADED PIPE
 A105N
 Shipment/Seq #: S 11 - 1227 1



Manufacturer of Piping and Pressure Vessel Components

4407 Haygood St - Houston, TX 77022
 Phone: 713-695-3633 Fax: 713-695-3528
 A Bonney Forge Company

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Sold To: TRANS AM PIPING
 PRODUCTS LTD
 9335 ENDEAVOR DRIVE S.E.
 CALGARY AB T3S 0A1

MTR #: 203,925

PO #: CL-11-165

Sales Order #: C001101776

Date: 03/08/2011

This product has not come in direct contact with mercury or any of its compounds, nor with any mercury-containing device employing a single boundary of containment. No welding performed.

We certify that the contents of this report are correct and accurate, and that all test results and operations performed by WFI or its subcontractors are in compliance with the material specification and requirements of the referenced code or standard, and that the material conforms to the dimensional requirements of the order. This document is in accordance with EN10204 3.1.

Material: A/SA105N 09

Item	Description
11	36 - 1 1/2 X 3/4 3M THP A/SA105N

Chemical Composition

Ladle	C	CR	CU	MN	MO	NB	NI	P
	0.200	0.03	0.150	1.01	0.010	0.01	0.04	0.007
	S	SI	V					
	0.017	0.20	0.00					

Carbon Equivalency: Ladle 0.39

Product	Tensile PSI	Yield PSI	Elong %	RA %	Hardness
	74,500	51,000	30.00	68.00	143 BHN

Normalized

1. IN ACCORDANCE WITH NACE SPEC MR0175-2002

Marie Dehmer
 Quality Assurance Representative

3020 FORON RD.
1121 HARRISON AV PMB 293
CENTRALIA WA 98531

Manufactured by:
ZHANGJIAGANG City Precision Pi

Scot Order No:	742150.01	Country of Origin:	CHINA	CN
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Material Supplier:	9687.00
Part Number:	9A-C1609-016-04200
Scott Rec. No:	10071119

Description: CDS NORMALIZE STEEL TUBING

[illegible]

Yield Strength.(PSI)	Tensile Strength.(PSI)	Elongation:.(%) in 2" G.L.	ROA.(%)	Hardness
56564	66717	38		{ }

[illegible]

Eddy Current

The reported analysis and test results are certified to be the same as furnished to us by our supplier. All records and test reports covering the above materials are on file at Scot Industries and may be examined by your personnel or by any agent authorized by you.

Quality Assurance
12/30/10

Quality Assurance
12/30/10