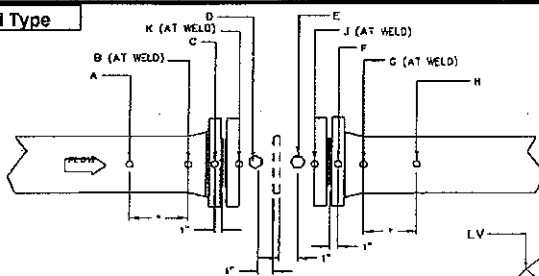


Meter Tube Calibration Record

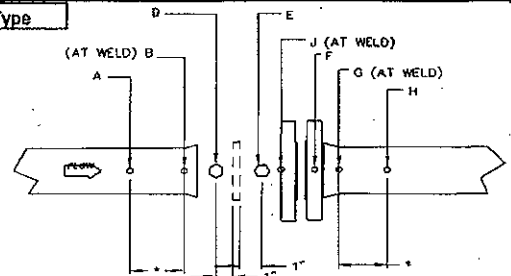
General Specifications

Customer:	RJV GASFIELD SERVICES	Date:	DECEMBER 15/ 2010
Location:	HUSKY	P.O. Number:	115321
Serial No.	11188862903	Work Order No.	111888629
Assembly Part No.	9A-MR-53-0129E	Part No.	40553-34221
Orifice Fitting:	3" 600# SCH. 80 DUAL CHAMBER	Meter Tube Type No.	2
Straightening Vane:		Yes	No
			X

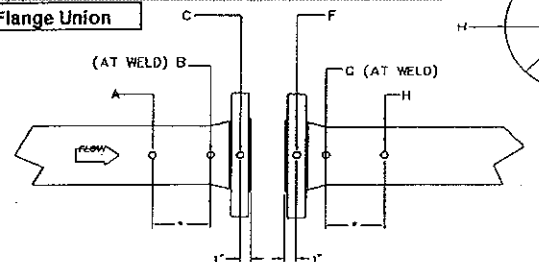
Type 1 Flanged Type



Type 2 Flangeweld Type



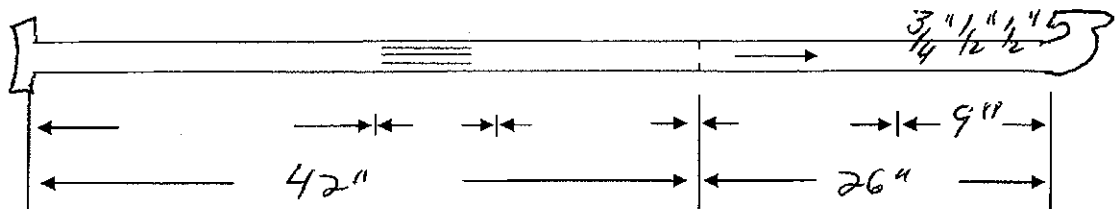
Type 3 Orifice Flange Union



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	2.895	2.900		2.896		2.897	2.894	2.907	2.900	2.895
LV	2.895	2.902		2.897		2.898	2.894	2.895	2.890	2.897
RV	2.898	2.900		2.898		2.899	2.894	2.895	2.890	2.899
H	2.898	2.898		2.897		2.897	2.894	2.912	2.902	2.896
Average	2.896	2.900		2.897		2.898	2.894	2.902	2.895	2.897
Upstream Mean Average to Stamp on I.D. Plate			2.897			Downstream Mean Average to Stamp on I.D. Plate			2.898	



AGA/API Figure	BETA	Meter Tap Location
3D (1991)	0.70	Upstream 1" Downstream 1"

Remarks:	Inspector:
68°F.	<i>[Signature]</i>

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

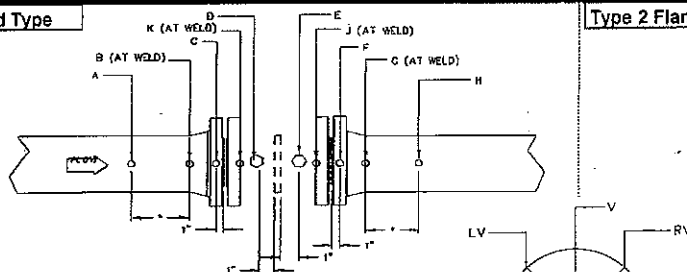
Certificate No.: 7277

Meter Tube Calibration Record

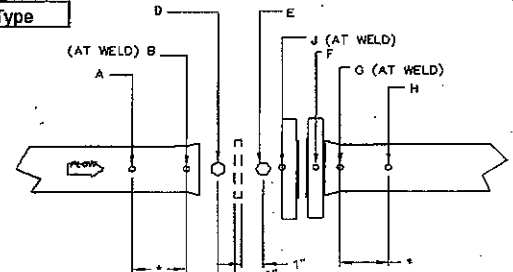
General Specifications

Customer:	RJV GASFIELD SERVICES	Date:	DECEMBER 15/ 2010	
Location:	HUSKY	P.O. Number:	115321	
Serial No.	11188862903	Work Order No.	111888629	
Assembly Part No.	9A-MR-53-0129E	Part No.	40553-34221	
Orifice Fitting:	3" 600# SCH. 80 DUAL CHAMBER	Meter Tube Type No.	2	
Straightening Vane:		Yes	No	X

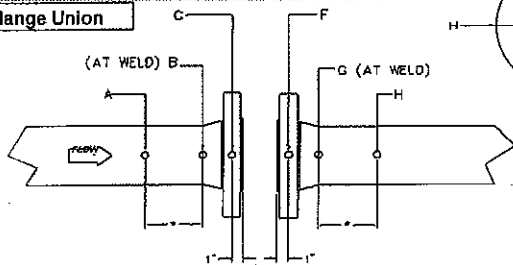
Type 1 Flanged Type



Type 2 Flangeweld Type



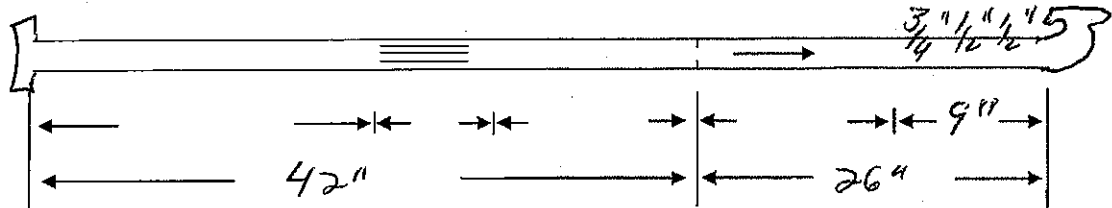
Type 3 Orifice Flange Union



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	2.895	2.900		2.896		2.897	2.894	2.907	2.900	2.895
LV	2.895	2.902		2.897		2.898	2.894	2.895	2.890	2.897
RV	2.898	2.900		2.898		2.899	2.894	2.895	2.890	2.899
H	2.898	2.899		2.897		2.897	2.894	2.912	2.902	2.896
Average	2.896	2.900		2.897		2.898	2.894	2.902	2.895	2.897
Upstream Mean Average to Stamp on I.D. Plate		2.897				Downstream Mean Average to Stamp on I.D. Plate		2.898		



AGA/API Figure 3D (1991)	BETA 0.70	Meter Tap Location	
Remarks: 68°F.		Upstream 1"	Downstream 1"
		Inspector: <i>Bryan McNeil</i>	

NUFLO™ DUAL CHAMBER ORIFICE FITTING

PART NO. **40553-34221**
 SERIAL NO. **11188862903**
 SIZE **3.0** BORE **2.900**
 SWP **1480** FLG **600**
 TRIM **SWEET**

CRN (ASME CODE) 0F01120.2C



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 (TRY 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-53-0129E

SERIAL NO. **11188862903**
 PIPE SIZE **3.0**
 AGA / API **3D (1991)**
 W.O. NO. **111888629**

U/S DIA. **2.897** D/S DIA. **2.898**
 SCH **80** RATING **600**
 MAT'L **WCB** DATE **12/10**

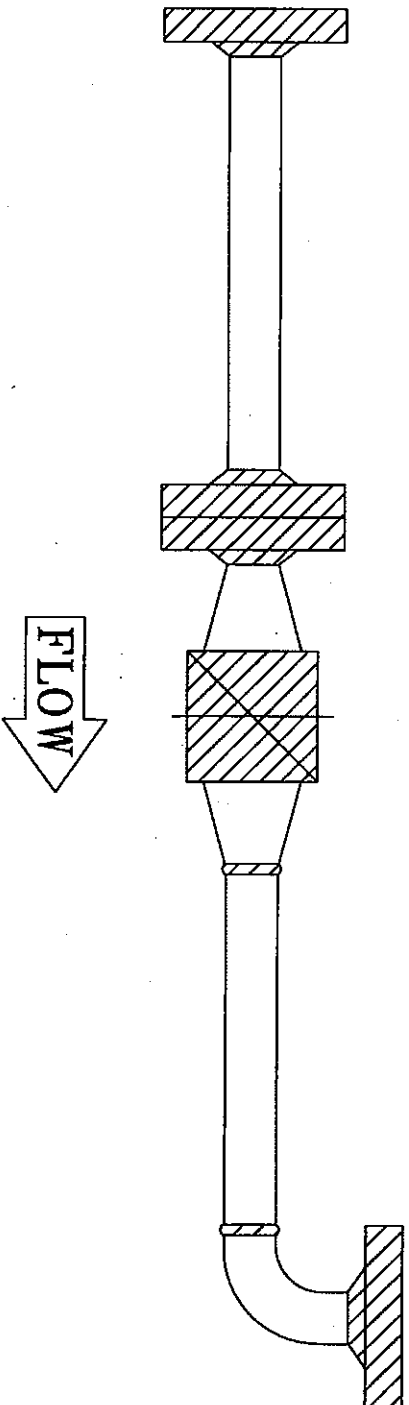
CALIBRATION
 CERTO BY

CAMERON

CRN (ASME CODE) 0F01120.2C



WELD IDENTIFICATION MAP



DESCRIPTION: 3" 600# SCH 80 DUAL CHAMBER METERRUN
SERIAL No.: 11188862903
CUSTOMER: RJV GASFIELD SERVICES
P/O No.: 115321 TAG No.: _____
W/O No.: 111888629 END USER: HUSKY
WELDER: KEN ASHWORTH FILE No.: W-17755
DATE: DECEMBER 15/ 2010 Bryan O'Neill
SYMBOL: J INSPECTOR _____



Cameron
Measurement Systems

3707 - 97th Street
Edmonton, Alberta
T6E 6J2

Alberta
LABOUR

ABSA

**Grade "B" Pressure Welder's
Certificate of Competency**
Kenneth Ashworth

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

Dated at Edmonton, this
September 23, 1999

W- 17755
File No.

[Signature]
Chief Inspector and Administrator

Form No. AB-117 Rev (9/910)

Nº 12381

PERFORMANCE QUALIFICATION **05295**

Process(es)	SMAW	SMAW	Materials (P.No)	P1 to P1
Filler Metal Group (F.No)	F3	F4	Min. Outside Diameter	1.0 in.
Max. Deposited Weld Metal	0.188 in.	0.684 in.	Position(s) Qualified	Flat
Backing	With or Without	With	Backing Gas	N/A
Progression	N/A	N/A		

October 19, 2012
P.Q. Expiry Date

[Signature]
Welding Examiner Signature

E-00324
Examiner File No.

LUDWIG ASSOCIATES LTD.
Materials and Welding Consulting
WELDER PERFORMANCE QUALIFICATION CARD

A.O.Q.P. No. 7106 (c)

Name: Kenneth Ashworth ABSA File No.: W - 17755

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders Regulation. The performance qualification is in accordance with ASME Section IX of the ASME Code and subject to the limitations on the reverse side.

October 19, 2010
Date of Test

[Signature]
Signature of Welder or Machine Operator

Kyle Melville
Welding Examiner

Card No.: **05295**

PERFORMANCE QUALIFICATION **05294**

Process(es)	GMAW	FCAW	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.	0.672 in.	Position(s) Qualified	GMAW: SP 0-45° & Flat FCAW: Flat
Backing	With or Without	With	Backing Gas	With or Without
Progression	Downhill	N/A		

October 19, 2012
P.Q. Expiry Date

[Signature]
Welding Examiner Signature

E-00324
Examiner File No.

LUDWIG ASSOCIATES LTD.
Materials and Welding Consulting
WELDER PERFORMANCE QUALIFICATION CARD

A.O.Q.P. No. 7106 (c)

Name: Kenneth Ashworth ABSA File No.: W - 17755

This card is issued pursuant to the Alberta Safety Codes Act and the Pressure Welders Regulation. The performance qualification is in accordance with ASME Section IX of the ASME Code and subject to the limitations on the reverse side.

October 19, 2010
Date of Test

[Signature]
Signature of Welder or Machine Operator

Kyle Melville
Welding Examiner

Card No.: **05294**

012420362

THIS IS TO CERTIFY THAT
KENNETH DAVID ASHWORTH
HAS COMPLETED AN ALBERTA APPRENTICESHIP PROGRAM AND HAVING ACHIEVED
THE STANDARDS ESTABLISHED UNDER THE ALBERTA APPRENTICESHIP AND
INDUSTRY TRAINING ACT, IS HEREBY AUTHORIZED TO WORK IN THE TRADE AS A
JOURNEYMAN AND TO USE THE TITLE CERTIFIED JOURNEYMAN

WELDER

EFFECTIVE DATE: May 9th, 1999

ISSUE DATE: May 25th, 1999

[Signature]
CLIFF DUNFORD, MINISTER OF
ADVANCED EDUCATION &
CAREER DEVELOPMENT

[Signature]
BARLEY DUL, EXECUTIVE
DIRECTOR OF APPRENTICESHIP
& INDUSTRY TRAINING

MST1201
9/11/06

Highland Foundry Ltd
CHEMICAL AND PHYSICAL ANALYSIS

Page 1
13 05 33

Product# 40713-001
Customer Part# 40713-001
Customer NUFLO MEASUREMENT SYSTEMS
ACCOUNTS PAYABLE
7944 10TH STREET N E
CALGARY AB T2E 8W1
CANADA

Order/Item# 28419 / 2
Customer P O # XP61147

3" DUAL CHAMBER BODY

Approved by Shyan Smith
Quality Assurance Technician

Melt#	Quantity	Date	Heat Treat	BATCH #	Specification
6-8569	12	8/30/06	BU1	-	ASTM A216 GRADE WCB

C H E M I C A L S					
C	1900	MN	7400	SI	4700
S	0080	NI	0600	CR	1000
CU	1300	V	0090	P	0160
				MO	0200

YIELD KSI 51 4
ELONGATION % 31

P H Y S I C A L S

TENSILE KSI 75 9
RED OF AR % 58

CE: .3518



MATERIAL TEST REPORT

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

ISO 9001:2000

Hardness Test Report



OUR REPUTATION IS STAINLESS

Customer	NuFlo Measurement Systems	PO Number	XP61147
Part Number & Description	40713-001 3" Dual Ch. Body	Order Number	28419 / 2
Material Specification	ASTM A216 Grade WCB	Date	09/12/06
Inspection Method	ASTM E10	Qty	60 pcs

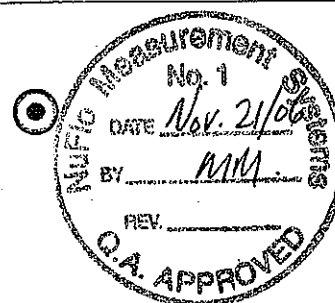
Equipment Used: Portable King Brinell Tester

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
4-7890 / BT7	10%	156, 152
3-3173 / BT8	10%	152, 156
3-3174 / BT9	10%	152, 156
6-8569 / BU1	10%	163, 152
3-3177 / BU2	10%	159, 159

Remarks:

Tested By:

Kulvinder Sandhu
Kulvinder Sandhu
CGSB 48.9712, Level 2, Reg# 10783

Product# . . . 40703-005
Customer Part#: 40703-005
Customer . . . : CAMERON MEASUREMENT SYSTEMS
ACCOUNTS PAYABLE
7944 10TH STREET N.E.
CALGARY AB T2E 8W1
CANADA

Order/Item# . 29053 / 2
Customer P.O.#: XP62142

3" DUAL CHAMBER LID

Approved by: Shyan Smith
Quality Assurance Technician

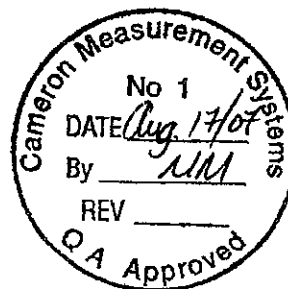
Melt#	Quantity	Date	Heat Treat	BATCH #	Specification
2-7235	44	3/08/07	GG2	-	ASTM A216 GRADE WCB

C H E M I C A L S					
C	2000	MN	.7300	SI	.4800
S	.0220	NI	.0900	CR	.1500
CU	.0800	V	.0130	P	.0200
				MO	.0200

P H Y S I C A L S	
YIELD KSI	50.1
ELONGATION %	32
TENSILE KSI	75.4
RED OF AR. %	55

CE: 0.3696

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



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	XP62142
Part Number & Description	40703-005 3" Dual Ch. Lid	Order Number	29053 / 2
Material Specification	ASTM A216 Grade WCB	Date	04/09/07
Inspection Method	ASTM E10	Qty	132 pcs

Equipment Used: Portable King Brinell Tester

Type of Ball:

Regular ☐

Carbide ☒

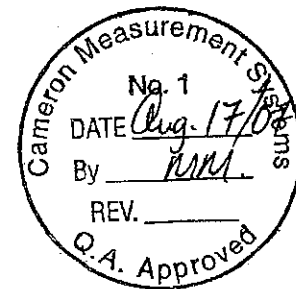
Load: 3000 kg

Holding Time: 10 sec

Hardness Required: 237 Max

Brinell ☒

Rockwell ☐



Heat No. / Batch No.	% of Batch Tested	Hardness Obtained
2-7235 / GG2	10%	163, 163, 159, 156
5-7802 / GG3	10%	159, 163, 163, 163
5-7807 / GG4	10%	163, 163, 159, 163

Remarks:

Tested By:

Kulwinder Sandhu
CGSB 48.9712, Level 2, Reg# 10783

NABLES MACHINE WORKS LTD. P.O. - 18147 S.O. - 245447

ASCOMETAL

Département Métallurgie Qualité
 Usine des Dures Boîte postale 41
 59941 Dunkerque cedex 2
 Téléphone 03 28 19 64 00
 Télécopie 03 28 19 60 03

DOCUMENT DE CONTROLE

Inspection Documents / Prüfbescheinigungen

Inspection Certificate 31

NFEN 10204 / DIN EN 10204 / ISO R 404

N° 03000033333
 L8 int. 0080090598/000006
 V/REF 17953 527176/186B
 YOUR ORDER / IHR ZIECHEN

DATE 07/10/2006

DATE EDITION

08/28/2006

DU

04/06/2006

DATE / DATUM

ORDRE DE FABRICATION F5001AD
 WORKS ORDER NUMBER / WERKBESTELLUNG

AFFAIRE SUIVIE PAR T WILSON
 YOUR CONTACT IS / BEARBEITER

N/REFERENCE 500553207 / 000010 (70019619)
 ASCOMETAL ORDER / WERKBESTELLUNG

QUANTITE 8 145 NUANCE A105
 QUANTITY / MENGE GRADE / WERKSTOFF

PRODUIT A105 ROL. ROUNDS CLESS TURN 6250 IN NORMALISED
 PRODUCT DESCRIPTION / BESCHREIBUNG

SPECIFICATION CLIENT ASTM A105-A350LF2-A696GRC-API6A45K
 SPECIFICATION / SPECIFICATION

IND SANS DATE 00.00.2001
 NEW / FERTIG DATE / DATUM

SPECIFICATION SUPP

SANS

CCU : D000002429

DESTINATAIRE DOCUMENT
 DOCUMENT FOR / EMPFANGER

Company
 INTEGRIS METALS LTD
 A DIVISION OF RIO ALGOM LTD
 7945, CORONET ROAD
 EDMONTONALB T6E 4N7
 CANADA

ANALYSE CHIMIQUE DE COULEE / LADLE ANALYSIS / SCHMELZEANALYSE

Élément (%)	ELEMENT	TEIL	C	Mn	S	Cr	Ni	Mo	Cu	P	S	Al	V
MINI	SPEC MIN	MINI		600	150								
VALEUR	ACTUAL	WERTE	163	1 224	272	103	985	027	152	012	013	031	011
MAXI	SPEC MAX	MAXI	230	1 350	300	300	400	120	400	035	035		080

Élément (%)	ELEMENT	TEIL	Cb
MINI	SPEC MIN	MINI	
VALEUR	ACTUAL	WERTE	0000
MAXI	SPEC MAX	MAXI	0200

Contraintes groupées Combined requirements / verbundene anforderungen
 FLMPFNT MINI VALEUR MAXI
 CEq 411 430
 Ni+Cr+Mo+Cu+V 378 1 000
 Cr+Mo 130 320

DURETE / HARDNESS / HÄRTE

Mappe / Batch number / Los Nummer C003 / *
 mid radius tested

FLMPFNT	ELEMENT	TEIL	HB
MINI	SPEC MIN	MINI	
VALEUR	ACTUAL	WERTE	152
MAXI	SPEC MAX	MAXI	187

CARACTERISTIQUES MECANQUES / MECHANICAL PROPERTIES / MECHANISCHE KENNWERTE

Traction / Tensile test / Zugversuch
 Mappe / Batch number / Los Nummer C003 / *
 Diameter of test coupon (in) 50
 Longitudinal test

mid radius tested
 Tensile test temperature (°F) 70

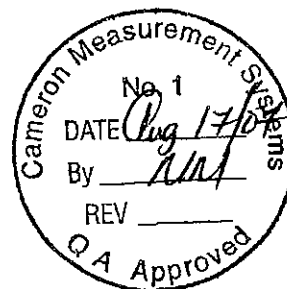
ELEMENT	ELEMENT	TEIL	E% (2in)	RA% Ys 2% PSI	UTS PSI
MINI	SPEC MIN	MINI	22 0	30	45000
VALEUR	ACTUAL	WERTE	34 8	70	47082
MAXI	SPEC MAX	MAXI			74487

95000

Résilience / Impact test / Kerbschlagproben
 Mappe / Batch number / Los Nummer C003 / *
 notch test 10 x 10
 Charpy V notch
 Impact test temperature (°F) 50

Mid radius testing
 Longitudinal test

FLMPFNT	ELEMENT	TEIL	Ft/Lbs	Ft/Lbs	Ft/Lbs	Mils LE	Mils LE	Mils LE
MINI	SPEC MIN	MINI	15 0	15 0	15 0			
VALEUR	ACTUAL	WERTE	80 1	75 4	74 7	41 0	41 0	41 0
MAXI	SPEC MAX	MAXI						



01148750 / 93A10495 → 500, 93A09746, 47

TIN # 500553207

Nous certifions que les produits ci-dessus sont conformes aux
 prescriptions de la directive européenne (Règ 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 compliant of the September (Règ 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
 Bestimmungsvorgaben der EU-Richtlinie 2000/53/CE vom
 18 September 2000 entsprechen und die gefertigten Produkte keine
 Radioaktivität die Höher als natürliche Strahlung der Umwelt
 aufweisen.

Ascometal
 SA à direction et conseil de surveillance
 au capital de 65 285 430 euros
 RCS Nanterre B 331 048 132

Siège social Immeuble LE COLISEE, 10 Avenue de l'Arche, Faubourg de l'Arche, 92419 Courbevoie Cedex

ASCOMETAL



Département Métallurgie Quainé
Unie des Dunes Boite postale 41
59411 Dunkerque cedex 2
Téléphone 03 28 29 60 00
Télécopie 03 28 29 60 03

DOCUMENT DE CONTROLE
Inspection Documents / Prüfbescheinigungen

Inspection Certificate 3 1
NFEN 10204 / DIN EN 10204 / ISO R 404

N° 030000033333
LS int. 0080090598/000006
V/REF 17953 527176/186B
YOUR ORDER / IHRE ZEICHEN

DATE 07/20/2006 DATE EDITION 08/28/2006
DU 04/06/2006
DATE / DATUM

ORDRE DE FABRICATION F5001AD WORKS ORDER NUMBER / WERKBESTELLUNG		COULEE F5001 CAST / SCHMELZE		DESTINATAIRE DOCUMENT DOCUMENT FOR / EMPFANGER																																					
AFFAIRE SUIVIE PAR T WILSON YOUR CONTACT IS / BEARBEITER				Company INTÉGRIS METALS LTD A DIVISION OF RIO ALGOM LTD 7945, CORONET ROAD EDMONTON ALB T6E 4N7 CANADA																																					
N/REFERENCE 500553207 / 000010 (70019619) ASCOMETAL ORDER / WERKBESTELLUNG																																									
QUANTITE 8 145 QUANTITY / MENGE	NUANCE A105 GRADE / WERKSTOFF																																								
PRODUIT A105 ROL ROUNDS CLESS TURN 6,250 IN NORMALISED PRODUCT DESCRIPTION / BESCHREIBUNG																																									
SPECIFICATION CLIENT ASTM A105/A350LF2/A696GRC/API6A45K SPECIFICATION / SPEZIFIKATION																																									
IND SANS REV / ENTWURF	DATE 00 00 2001 DATE / DATUM	CCU	D000002429																																						
Specification SUPP SANS																																									
Nappe / Batch number / Los Nummer C003 / * notch test 10 x 10 Charpy V notch Impact test temperature (°F) -60																																									
<table border="1"> <thead> <tr> <th>ELEMENT</th> <th>ELEMENT</th> <th>TEIL</th> <th>Ft/Lbs</th> <th>Ft/Lbs</th> <th>Ft/Lbs</th> <th>Mils LE</th> <th>Mils LE</th> <th>Mils LE</th> </tr> <tr> <th>MINI</th> <th>SPEC MIN</th> <th>MINI</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>VALEUR</td> <td>ACTUAL</td> <td>WERTE</td> <td>87.2</td> <td>83.2</td> <td>73.5</td> <td>47.0</td> <td>47.0</td> <td>39.0</td> </tr> <tr> <td>MAXI</td> <td>SPEC MAX</td> <td>MAXI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						ELEMENT	ELEMENT	TEIL	Ft/Lbs	Ft/Lbs	Ft/Lbs	Mils LE	Mils LE	Mils LE	MINI	SPEC MIN	MINI							VALEUR	ACTUAL	WERTE	87.2	83.2	73.5	47.0	47.0	39.0	MAXI	SPEC MAX	MAXI						
ELEMENT	ELEMENT	TEIL	Ft/Lbs	Ft/Lbs	Ft/Lbs	Mils LE	Mils LE	Mils LE																																	
MINI	SPEC MIN	MINI																																							
VALEUR	ACTUAL	WERTE	87.2	83.2	73.5	47.0	47.0	39.0																																	
MAXI	SPEC MAX	MAXI																																							
Mid radius testing Longitudinal test																																									
Nappe / Batch number / Los Nummer C003 / * notch test 10 x 10 Charpy V notch Impact test temperature (°F) -60 transverse test																																									
<table border="1"> <thead> <tr> <th>ELEMENT</th> <th>ELEMENT</th> <th>TEIL</th> <th>Ft/Lbs</th> <th>Ft/Lbs</th> <th>Ft/Lbs</th> <th>Mils LE</th> <th>Mils LE</th> <th>Mils LE</th> </tr> <tr> <th>MINI</th> <th>SPEC MIN</th> <th>MINI</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>VALEUR</td> <td>ACTUAL</td> <td>WERTE</td> <td>25.6</td> <td>36.9</td> <td>33.7</td> <td>14.0</td> <td>20.0</td> <td>18.0</td> </tr> <tr> <td>MAXI</td> <td>SPEC MAX</td> <td>MAXI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						ELEMENT	ELEMENT	TEIL	Ft/Lbs	Ft/Lbs	Ft/Lbs	Mils LE	Mils LE	Mils LE	MINI	SPEC MIN	MINI							VALEUR	ACTUAL	WERTE	25.6	36.9	33.7	14.0	20.0	18.0	MAXI	SPEC MAX	MAXI						
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MAXI	SPEC MAX	MAXI	187																																						
AUTRES RESULTATS / OTHER RESULTS / ANDERE PRÜFERGEBNISSE																																									
Electric furnace - vacuum degassed Ultrasonic testing satisfactory per ASTM A388																																									
Conforms to NACF MR 01-75 Conforms to ASME SA105/SA350LF2 class 1 Conforms to ASTM A696 gr C - ASME SA696 gr C No welding performed Conforms to ASTM A105 A350LF2 Grain size M-Quald Ehn Reduction ratio																																									
<table border="1"> <thead> <tr> <th>Min</th> <th>5</th> <th>Val</th> <th>7</th> <th>Max</th> <th>8</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>Val</td> <td>4.19</td> <td></td> <td></td> </tr> </tbody> </table>						Min	5	Val	7	Max	8			Val	4.19																										
Min	5	Val	7	Max	8																																				
		Val	4.19																																						



Nous certifions que les produits ci-dessus sont conformes aux prescriptions de la commande respectant la directive européenne 2009/53/CE du 18 septembre 2009 et présentant 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 2009 2009/53/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 2009/53/CE von 18 September 2009 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 euros
RCS Nanterre B 331 048 132

Siège social Immeuble LE COLISEE, 10 Avenue de l'Arche, Faubourg de l'Arche, 92419 Courbevoie Cedex

ASCOMETAL

Département Métallurgie Qualité
Unité des Dunes - Boite postale 41
59941 Dunkerque cedex 2
Téléphone 03 28 29 60 00
Télécopie 03 28 29 60 03

DOCUMENT DE CONTROLE

Inspection Documents / Prüfbescheinigungen

Inspection Certificate 31

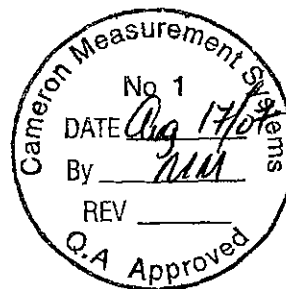
NFFN 10204 / DIN EN 10204 / ISO R 404

N° 030000033333
LS mt 0080090598/000006
V/REF : 17953 527176/186B
YOUR ORDER / IHRE ZEICHEN

DATE 07/20/2006 DATE EDITION 08/28/2006
DU 04/06/2006
DATE / DATUM

ORDRE DE FABRICATION F5001AD WORKS ORDER NUMBER / WERKBESTELLUNG		COULEE F5001 CAST / SCHMELZE		DESTINATAIRE DOCUMENT DOCUMENT FOR / EMPFÄNGER	
AFFAIRE SUIVIE PAR T WILSON YOUR CONTACT IS / BEARBEITER		Company INTEGRIS METALS LTD A DIVISION OF RIO ALGOM LTD 7945, CORONET ROAD EDMONTON ALB T6E 4N7 CANADA			
N/REFERENCE 500553207 / 000010 (70019619) ASCOMETAL ORDER / WERKBESTELLUNG					
QUANTITE 8 145 QUANTITY / MENGE	NUANCE A105 GRADE / WERKSTOFF				
PRODUIT A105 ROL ROUNDS CLESS TURN 6,250 IN NORMALISED PRODUCT DESCRIPTION / BESCHREIBUNG					
SPECIFICATION CLIENT ASTM A105+A350LF2+A696GRC+API6A45K SPECIFICATION / SPEZIFIKATION					
IND SANS REV / ENTWURF	DATE 00 00.2001 DATE / DATUM	CCU	D000002429		
SPECIFICATION SUPP SANS					
Continuous cast HOT ROLLED CARBON STEEL ROUND BARS ROUGH TURNED C/R DUTY UNPAID VANCOUVER (CAN) LUCCHINI USA SOC-11722/CPO-527176/186B COLOR CODE BLACK AND GOLD COUNTRY OF ORIGIN FRANCE					

Visa du chef de service
Stamp of inspection supervisor
Der Werkssachverständige
G Giroud



Nous certifions que les produits et, de plus, nos 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 référence de l'ambiant.

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 ambient.

Wir bestätigen hiermit dass die obengenannten Erzeugnisse den Bestimmungsvorschriften, 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 direction et conseil de surveillance
au capital de 65 285 430 euros
RCS Nanterre B 331 048 132

Siège social Immeuble LE COLISEE, 10 Avenue de l'Arche, Faubourg de l'Arche, 92419 Courbevoie Cedex

3" Sch 80 A105

三英鋼鐵股份有限公司
SAN ENG STEEL FORGING CO., LTD.

MILL TEST CERTIFICATE
=====

NO. 22 LANE 50, WAN SING STREET
SAN MIN DISTRICT, KAOSHIUNG,
TAIWAN, R. O. C.
Tel: 07-372 4249 07-371 2934
Fax: 07-371 2923 07-371 2846
URL: http://www.saneng.com.tw
e-mail: saneng@ksts.seed.net.tw

20 HOLLY STREET, SUITE 205
TORONTO, M4S 3B1, CANADA
TEL: 416-4810191 FAX: 416-4811790

CERT NO.: SE-5997BN
DATE: 02/15/2007

ORDER NO.: 5997/45000684
L/C NO.:

ASTM A-105-03/ASME SA-105
(2245.12 CAT I GR. 248 SOUR SERVICE-01)

PAGE: 4 OF 4

P R O D U C T			S P E C I F I C A T I O N F O R M A T E R I A L			S P E C I F I C A T I O N F O R F I T T I N G S												
FORGED CARBON STEEL FLANGES			(Z245.12 CAT I GR.248 SOUR SERVICE-01)			ASTM A-105-03/ASME SA-105 ASME B16.5-98a												
ITEM NO.	D E S C R I P T I O N	Q U A N T I T Y	C H E M I C A L C O M P O S I T I O N (%)															
			C	Si	Mn	P	S	Cu	Cr	Ni	Mo	V	Nb	N	C.E.			
31.	33874-105 600 HUB BLRF	1"	15 PCF	0.210	0.170	1.060	0.007	0.013	0.060	0.050	0.030	0.005	0.003	0.005	0.009	0.405		
32.	4907-105 600 WMT AS	3"	73 PCF	0.200	0.180	1.060	0.014	0.012	0.060	0.110	0.040	0.011	0.003	0.005	0.009	0.407		
33.	23887-105 1500 BLRF	3"	1 PCF	0.180	0.240	0.920	0.015	0.005	0.130	0.220	0.170	0.020	0.006	0.002	0.010	0.406		
34.	24157-105 600 BLRF	20"	1 PCF	0.180	0.270	0.890	0.011	0.012	0.160	0.140	0.140	0.010	0.006	0.009	0.007	0.380		
ITEM	HEAT	TENSILE STRENGTH (MPA)	YIELD STRENGTH (MPA)	ELONGATION (%)	HARDNESS (HB)	REDUCTION OF AREA (%)	HEAT TREATMENT	MATERIAL SUPPLIER								R E M A R K S		
		485 MIN	250 MIN	22.0 MIN	187 MAX	30.0 MIN												
31.	38912	497.20	389.30	32.6	159	66.8	NORMALIZED									NORMALIZATION: 880°C/3HRS CONFORMS TO MEET WITH NACE MR01-75/03 AND MR01-03/03		
32.	21511	519.80	317.70	34.8	153	65.9	NORMALIZED									OEM		
33.	69944	527.60	327.50	35.8	148	68.8	NORMALIZED									RED OCTOBER		
34.	50832	504.10	331.50	38.0	148	69.0	NORMALIZED									RED OCTOBER		

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIREMENTS CALLED FOR BY THE ABOVE ORDER AND IS THAT WHICH HAS BEEN TESTED TO THE SATISFACTION OF THE CERTIFICATE.



Purchaser : VAN LEEUWEN PIPE AND TUBE (CANADA) INC.

INSPECTION CERTIFICATE

TO EN10204 3.1

E-No. Purchase Order No. Job No.

MC-033 45001346

D M Y Certificate No.

Thai Benkan Co., Ltd.
58 Soi Watkrumai, Bangkok, Prapacheng,
Samutprakarn, 10130 Thailand.

26/09/2010 T 2010040161

No.	MFG. No. (Heat Identification No.)	Specification for Material Made from Seamless Pipe										Specification for Inspection		Visual Examination	Dimensional Inspection			
		ASTM A234-07/ASME SA234-07 Gr WPB GSA Z246 11-06 Gr 241 CAT 1 SS NACE MR0175/ISO 15156-2:2004/MS103-07										ASME B16.9-2007						
		Product & Size										Quantity	Heat Treatment (Note 1)			Hardness Actual Data	Item No.	
1		10G000005	90 EL WPB 3 S40										1,168/1,300	A	HB : 115 - 145	3518		
2		10G00013	90 EL WPB 3 S80										550	A	HB : 120 - 150	3584		
3		10G00008	90 EL WPB 8 S40										111/260	A	HB : 115 - 145	3534		
4		10G00070	90 EL WPB 8 S40										21/260	A	HB : 115 - 145	3534		
5		10G00001	90 EL WPB 1 1/2 S40										150	A	HB : 125 - 140	3509		
Specification			Chemical Composition %										Tension Test #2					
			C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	C.E.	YS	TS	E	
			X 100	X 100	X 100	X 1000	X 1000	X 100	X 100	X 100	X 100	X 1000	X 1000	X 100				
			MPa.										HARDNESS MAX					
Min.																		
Max.				10	29								240	415	30	197 HB : GOOD		
Material Heat No.			30		106	50	58	40	40	40	15	80	20	45	585			
1		962982	16	19	76	19	2	13	9	20	6	0	0	35	330	513	31	
2		863009	15	21	75	16	2	15	10	20	6	0	0	35	312	493	33	
3		J7L5020	18	20	81	10	8	2	3	5	1	0	1	33	301	475	40	
4		J8K5501	20	20	80	14	7	2	2	6	1	0	0	35	292	482	41	
5		3-74110	19	24	87	16	2	<1	1	2	<1	<1	<1	34	344	504	49	

(Note 1) A : Hot formed with final temperature between 620 °C-980°C, Air Cooling N : Normalizing 910°Cx0.5 HR, Air Cooling *N : Normalizing 910°Cx0.5 HR, Air Cooling (Specification for material made from plate) S : Stress Relieving 675° Cx0.5 HR, Air C

The fillings was manufactured, sampled, tested and inspected in accordance with the specification and was found to meet the requirements.
C.E. = C+Mn/6+(Cr+Ni+V)/5+(Ni+Cu)/15
MAGNETIC PARTICLE EXAMINATION FOR TEE ONLY :

We hereby certify that the product described herein has been manufactured in accordance with the specifications concerned and also with the purchaser's requirements and that the test results shown herein are correct.

Quality Assurance Manager
Thai Benkan Co., Ltd.



WFE INTERNATIONAL
NUCLEAR PRODUCTS
 Manufacturer of Piping and Pressure Vessel Components
 4467 Haygood St - Houston, TX 77022
 Phone: 713-695-3633 Fax: 713-695-3528
 A Bonney Forge Company

Page 2 of 2

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

Mtr #: 191,594

PO #: CI-10 - 301

Sales Order #: c001006764

Date: 07/08/2010

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 WFE 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: 58073

Material: A/SA105 09

Item	Quantity	Description
6	120	36 - 3/4 X 1/2 3M THP A/SA105N

Chemical Composition

Ladle	C	CR	CU	NI	MO	SI	P	S
	0.200	0.03	0.110	1.01	0.010	0.03	0.007	0.021
ST	V							
	0.22	0.004						
Carbon Equivalency:	Ladle		0.39					

Product	Tensile PSI	Yield PSI	Elong %	RA %	Hardness	
As Forged	77,900	47,300	32.00	50.40	156 BHN	0 BHN

Marie Dohmer
 Quality Assurance Representative



Manufacturer of Piping and Pressure Vessel Components

4407 Haygood St - Houston, TX 77022

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

A Bannay Forge Company

Page 29 of 30

Sold To: TRANS AM PIPING PRODUCTS
LTD
9335 ENDEAVOR DRIVE S.E.
CALGARY AB T2S 0A1

Mtr #: 192,876

PO #: CI-10-355

Sales Order #: C001008457

Date: 08/03/2010

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.

Material: A/SA105N 09

Item	Quantity	Description
17		36 - 1 1/2 X 3/4 3M THP A/SA105N
36		36 - 1 1/2 X 3/4 3M SWP A/SA105N

Certified Material Test Report

Heat Code: 58010

Chemical Composition

Ladle	C	CR	CU	HN	MO	NB	NI	P
	0.210	0.03	0.040	1.02	0.000	0.013	0.02	0.007
	S	SI	V					
	0.024	0.22	0.003					
Carbon Equivalency:		Ladle		0.39				

Product	Tensile PSI	Yield PSI	Elong %	RA %	Hardness
	75,500	51,000	29.00	66.00	149 BHN

Nonnormalized

IN ACCORDANCE WITH NACE SPEC MR0175-2002

Marie Dehmer
Quality Assurance Representative



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

Material Test Report

Manufactured by:
Arcelor Mittal Shelby
132 W. Main Street

Customer Order No: 4502555576

Scot Order No:

738554.01 Country of Origin: UNITED STATES OF AMERICA

Shelby, OH 44875 US

CAMERON MEASUREMENT SYSTEMS
5003-93RD STREET
EDMONTON AB T6E-5S9

Material Supplier: 965.00
Part Number: 9A-C1609-024-4200
Scot Rec. No: 10082400

Heat Number: A100720

Grade: 1026

Dimensions: 3.500" OD 2.900" ID X 25R30

Scot Spec: MS-S-00022

ASTM Spec: A519

Other Spec: A106-B

Description: CDS NORMALIZE STEEL TUBING YIELD @ .2% OFFSET METHOD

Chemical Analysis

C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Al	V
0.26	0.76	0.005	0.017	0.3	0.14	0.06	0.07	0.02	0.007	0.021	0.002
0.001	0.001	0.001	0.001	0.0071							

Mechanical Test Results

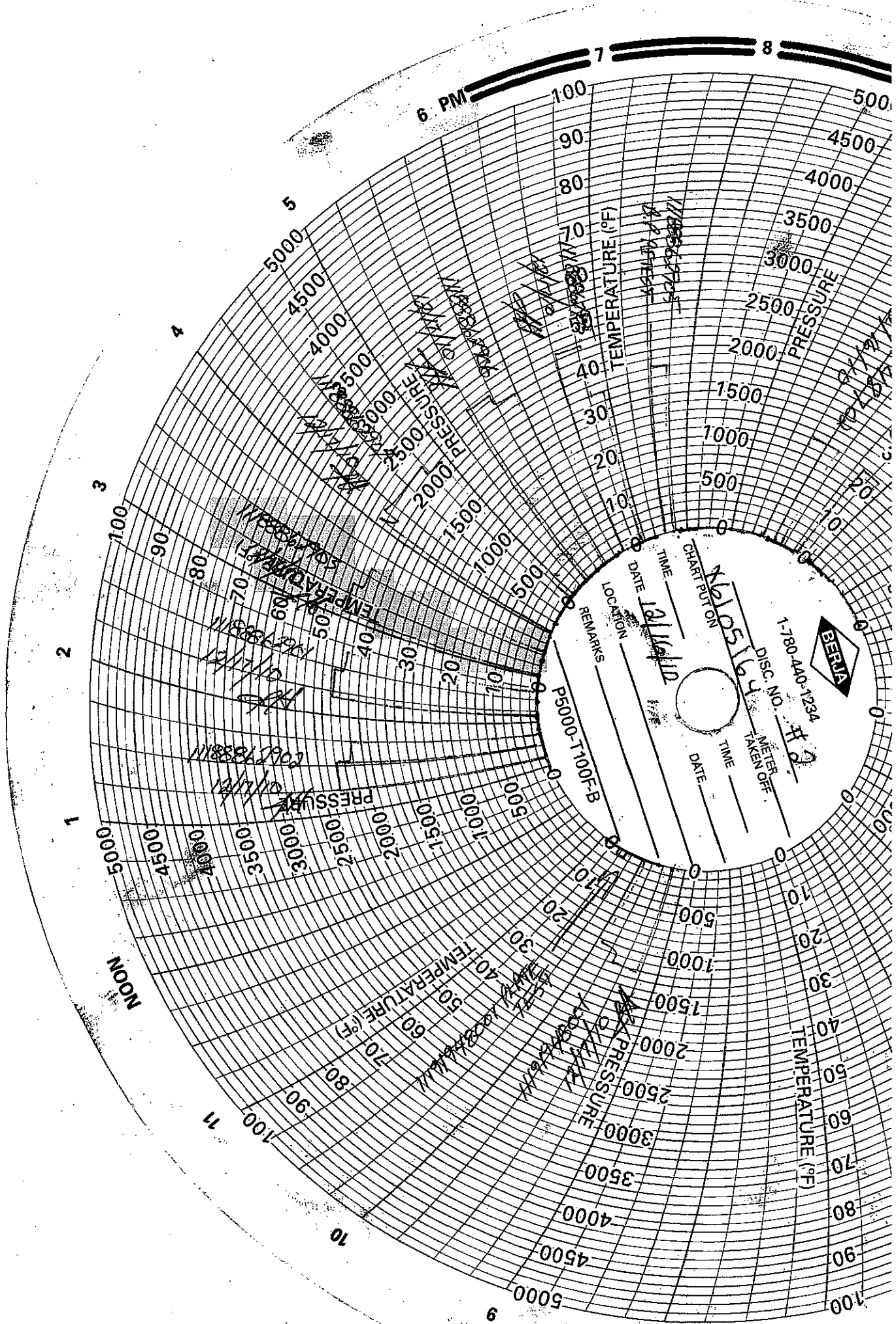
Yield Strength:(PSI)	Tensile Strength:(PSI)	Elongation:(%) in 2" G.L.	ROA:(%)	Hardness
51300	76600	35		81 (HRB)

Charpy Impact Energy		Size	Energy ()			Shear Area (%)		
Temp	1	2	3	Avg	1	2	3	Avg

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.

Sherry Lee
Quality Assurance
08/16/10



BEA

1-780-440-1234

DISC. NO. 11838/11

WEEK OFF 11838/11

TAKEN OFF 11838/11

DATE 11/1/11 TIME 11:00

CHART BUTON 11838/11

REMARKS P5000-T100FB