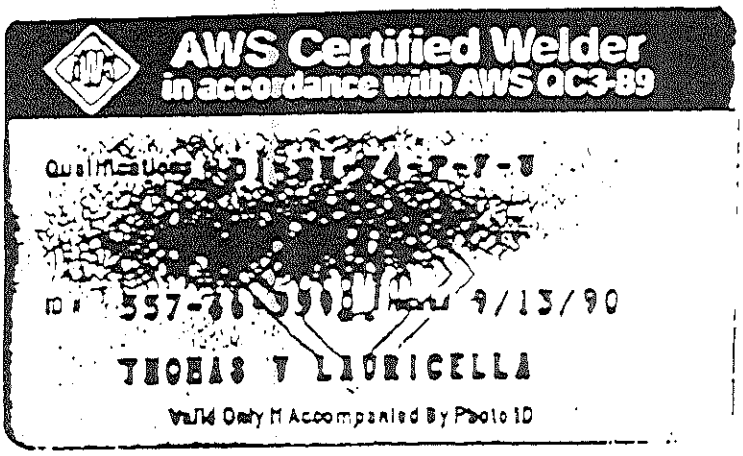

AWS Certified Welder
in accordance with AWS QC3-89
9/13/90
THOMAS V LAURICELLA
Valid Only If Accompanied By Photo ID

AWS QC-3

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes ☐ No ☑ Type of Eye Correction Eye glasses ☐ Contact lenses ☐ Magnifiers ☐

Name Thomas Lauricella Social Security # 557-46-9990

Welder ☐ Operator ☐

Qualified with AWS WPS No. ____ Supplement No. ____ Test No. ____

Process(es) GMAW Manual ☐ Semi-Automatic ☑ Automatic ☐ Machine ☐

Test base metal specification A36 1" To A36 1"

Material number (M or P Number) ____ To ____

Shielding Gas 92% CO2 8% ~~Argon~~ Flow Rate 40 CFH

AWS filler metal classification E70T-1 F no ____ Size ____

Backing Yes ☑ No ☐ Consumable Insert Yes ☐ No ☐

Double Welded ☐ or Single Welded ☐ Short circuiting arc (GMAW) Yes ☐ No ☐

Current AC ☐ DC ☑ Back Purging Yes ☐ No ☐

Test results

Visual test results Pass ☐ Fail ☐ Radiographic test results NA ☐ Pass ☑ Fail ☐

Bend test results NA ☐ Pass ☐ Fail ☐ QAL 96-589 Jay E. Faulkenberry

PROCESS(es) QUALIFIED FOR ____

POSITION(s) QUALIFIED FOR:

Groove:

Pipe 1G ☐ 2G ☐ 5G ☐ 6G ☐ 6GR ☐ (T) Min ___ Max ___ Diameter ___ Range ___

Plate 1G ☑ 2G ☐ 3G ☐ 4G ☐ (T) Min ___ Max ___

Consumable Insert ☐ Backing type ☐

Fillet:

Pipe 1F ☐ 2F ☐ 4F ☐ 5F ☐ (T) Min ___ Max ___

Plate 1F ☐ 2F ☐ 3F ☐ 4F ☐ (T) Min ___ Max ___

Vertical Up ☐ Down ☐ Weld Deposit Min ___ Max ___

Single side ☐ Double side ☐

The above named person is qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and ____ Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder.

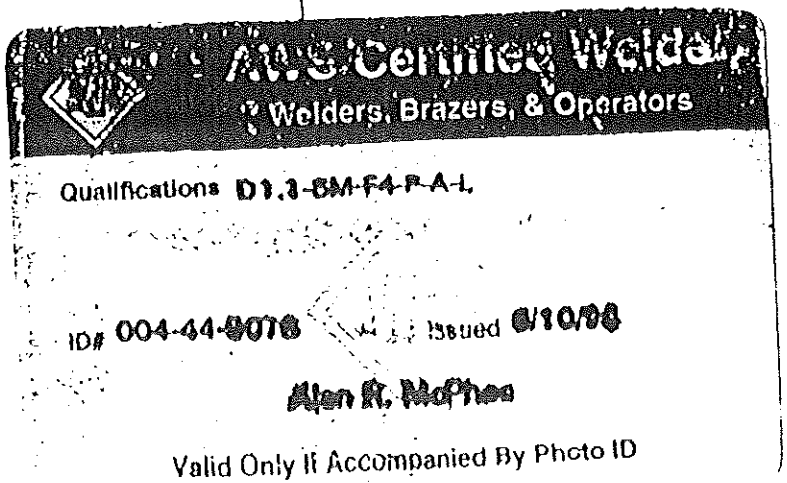
Date Tested 8/9/96 Signed by Roland McKeen
Test Supervisor

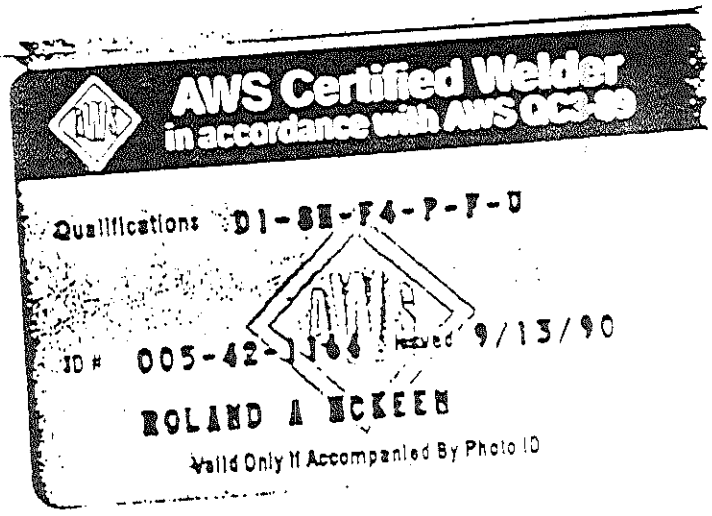
AWS CWI No. ____

Signed by James McBrady
Corporate Representative

Title

Form QC-WF1 — Performance Qualification Test Record


A.W.S. Certified Welder
Welders, Brazers, & Operators
Qualifications D1.1-6M-F4-P-A-L
ID# 004-44-9078
Issued 6/10/98
Alan R. McPhee
Valid Only If Accompanied By Photo ID


AWS Certified Welder
in accordance with AWS QC3-89
Qualification: D1-8S-F4-P-F-U
ID # 005-42-
Issued 9/13/90
ROLAND A MCKEEN
Valid Only If Accompanied By Photo ID

WELDER QUALIFICATION TEST REPORT

rication James A. McBrady, Inc. Location Scarborough, Maine

of Applicant Roland McKeen Test Plate No. RM2 Test Date 1/18/82

Code Spec.: AWS D1.1-75 + AASHTO Revisions Sec. 5 Part ____ Fig. ____

of Weld Groove Thickness 3/8" Position Vertical

rial A36 Yield 36,000 Preheat 70°

cess SMAW Type(Manual, Semi-Auto, Auto) Manual

rent (Type & Polarity) DCRP Joint Preparation Bevel & Ground

ctrode E7018 Flux or Shielding Gas ____

Spec. A5.1 - 69 No. Electrodes ____

Stickout ____ Travel Speed ____ Total No. Passes 12

d No. 1-12 Electrode Dia. 1/8 Current 100±10 Voltage ____

No. ____ Electrode Dia. ____ Current ____ Voltage ____

certify that the statements in this record are correct and that the test was prepared and welded in accordance with the requirements.

nature of Welder: Roland McKeen SS No. 005-42-1164

ature of Test Supervisor James Colgan

above named Test Supervisor Jane Volger personally appeared re me and made oath that the statements given above his signature are true the best of his knowledge and belief.

MY COMMISSION EXPIRES NOVEMBER 17, 1986

Notary Public Jane Volger State Maine

atment of Weld Reinf. ____ Method of Testing Radiography

ct(s) Passed

nature of Tester: [illegible] Testing Agency Radiographic Labs

ed or Failed Passed.

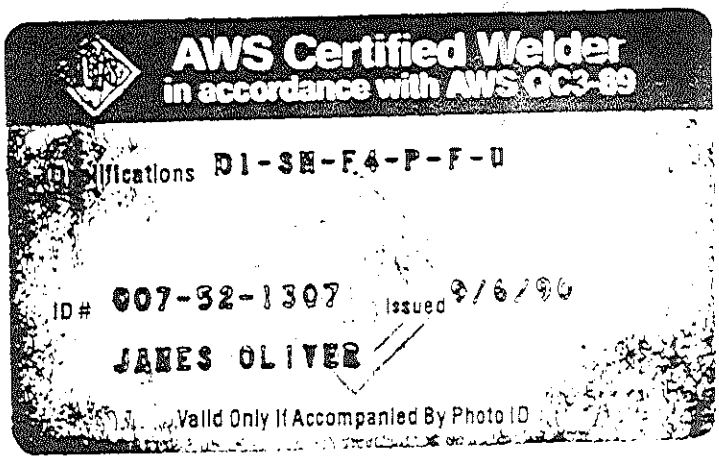
above named (welder)(welding operator)(is)(is not) pre-qualified to do ing for positions of welding in accordance with Table 5.23 when using ctrode classification of (Paragraph 5.16.1.3 of Part C of Sect. 5, D1.1-75 + AASHTO.

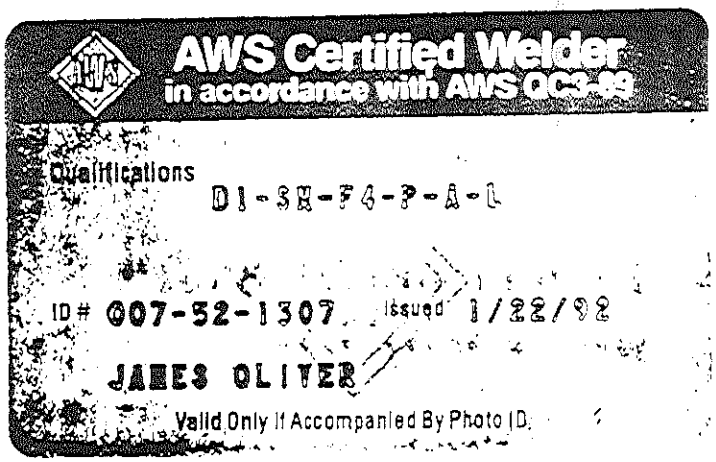
nature of Inspector: ____ Inspection Agency ____

ents: ____

iewed and Approved: ____ Date ____

Welding Supervisor Engineer


AWS Certified Welder
in accordance with AWS QC3-89
Qualifications D1-SH-F4-P-F-U
ID# 007-52-1307 Issued 9/6/96
JAMES OLIVER
Valid Only If Accompanied By Photo ID


AWS Certified Welder
in accordance with AWS QC3-89
Qualifications D1-SH-F4-P-A-L
ID# 007-52-1307 Issued 1/22/98
JAMES OLIVER
Valid Only If Accompanied By Photo ID

AWS QC-3

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes ☐ No ☐ Type of Eye Correction Eye glasses ☐ Contact lenses ☐ Magnifiers ☐

Name James Oliver Social Security # 007-52-1307

Welder ☑ Operator ☐

Qualified with AWS WPS No. _____ Supplement No. _____ Test No. _____

Process(es) GMAW Manual ☐ Semi-Automatic ☐ Automatic ☐ Machine ☐

Test base metal specification A36 1" To A36 1"

Material number (M or P Number) J.O. To _____

Shielding Gas 92% Co2 8% Flow Rate 40 CFH

AWS filler metal classification _____ F no _____ Size _____

Backing Yes ☑ No ☐ Consumable Insert Yes ☐ No ☐

Double Welded ☐ or Single Welded ☐ Short circuiting arc (GMAW) Yes ☐ No ☐

Current AC ☐ DC ☑ Back Purging Yes ☐ No ☐

Test results

Visual test results Pass ☐ Fail ☐ Radiographic test results NA ☐ Pass ☒ Fail ☐

Bend test results NA ☐ Pass ☐ Fail ☐ QAL 96-599 Dary E Packhamian

PROCESS(es) QUALIFIED FOR _____

POSITION(s) QUALIFIED FOR:

Groove:

Pipe 1G ☐ 2G ☐ 5G ☐ 6G ☐ 6GR ☐ (T) Min ___ Max ___ Diameter ___ Range ___

Plate 1G ☑ 2G ☐ 3G ☐ 4G ☐ (T) Min ___ Max ___

Consumable Insert ☐ Backing type ☐

Fillet

Pipe 1F ☐ 2F ☐ 4F ☐ 5F ☐ (T) Min ___ Max ___

Plate 1F ☐ 2F ☐ 3F ☐ 4F ☐ (T) Min ___ Max ___

Vertical Up ☐ Down ☐ Weld Deposit Min ___ Max ___

Single side ☐ Double side ☐

The above named person is qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and _____ Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder:

Date Tested 8/15/96 Signed by Roland McKeag
Test Supervisor

AWS CWI No. _____

Signed by _____
Corporate Representative

_____
Title

AWS QC-WF1—Performance Qualification Test Record

AWS Certified Welder

Welders, Brazers, & Operators

Qualifications 1-D1.1-SM-F4-P1-A-U

ID# 263-85-3467 Issued 5/23/97

Wayne A. Wilson

Valid Only If Accompanied By Photo ID

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes ☐ No ☐ — Type of Eye Correction: Eye glasses ☐ Contact lenses ☐ Magnifiers ☐

Name *Wayne Wilson* — Social Security # *263-8534-67*

Welder ☑ Operator ☐

Qualified with AWS WPS No. ______ Supplement No. ______ Test No ______

Process(es) *GMAW* Manual ☐ Semi-Automatic ☑ Automatic ☐ Machine ☐

Test base metal specification *A36 1"* To *A36 1"*

Material number (M or P Number) *WAYNE* To ______

Shielding Gas *75% Argon 25% CO2* Flow Rate *40 CFH*

AWS filler metal classification ______ F no ______ Size ______

Backing Yes ☑ No ☐ — Consumable Insert Yes ☐ No ☐

Double Welded ☐ or Single Welded ☐ — Short circuiting arc (GMAW) Yes ☐ No ☐

Current AC ☐ DC ☑ — Back Purging Yes ☐ No ☐

Test results

Visual test results Pass ☐ Fail ☐

Bend test results NA ☐ Pass ☐ Fail ☐

Radiographic test results NA ☐ Pass ☑ Fail ☐ [illegible]

PROCESS(es) QUALIFIED FOR ______

POSITION(s) QUALIFIED FOR:

Groove:

Pipe 1G ☐ 2G ☐ 5G ☐ 6G ☐ 6GR ☐ (T) Min ___ Max ___ Diameter ___ Range ______

Plate 1G ☑ 2G ☐ 3G ☐ 4G ☐ (T) Min ___ Max ___

Consumable Insert ☐ Backing type ☐

Fillet:

Pipe 1F ☐ 2F ☐ 4F ☐ 5F ☐ (T) Min ___ Max

Plate 1F ☐ 2F ☐ 3F ☐ 4F ☐ (T) Min ___ Max ___

Vertical Up ☐ Down ☐ Weld Deposit Min ___ Max ___

Single side ☐ Double side ☐

The above named person is qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and ______ Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder.

Date Tested *11/14/96* — Signed by *Roland McLean* (Test Supervisor)

AWS CWI No ______

Signed by ______ (Corporate Representative) ______ (Title)

Qualifications 1-D1.1-SM-F4-P1-A-U

ID# 004-60-6312 Issued 5/23/97

Mark W. Yattow

Valid Only If Accompanied By Photo ID

AWS QC-3

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes ☐ No ☐ Type of Eye Correction: Eye glasses ☐ Contact lenses ☐ Magnifiers ☐

Name MARK YATTAW Social Security # 004-60-6312

Welder ☑ Operator ☐

Qualified with AWS WPS No. _____ Supplement No. _____ Test No _____

Process(es) GMAW Manual ☐ Semi-Automatic ☑ Automatic ☐ Machine ☐

Test base metal specification A36 1" To A36 1"

Material number (M or P Number) _____ To _____

Shielding Gas 90% CO2 8% ~~Argon~~ Flow Rate 40 CFA

AWS filler metal classification E70T-1 F no _____ Size _____

Backing Yes ☑ No ☐ Consumable Insert Yes ☐ No ☐

Double Welded ☐ or Single Welded ☐ Short circuiting arc (GMAW) Yes ☐ No ☐

Current AC ☐ DC ☑ Back Purging Yes ☐ No ☐

Test results

Visual test results Pass ☐ Fail ☐ Radiographic test results NA ☐ Pass ☒ Fail ☐

Bend test results NA ☐ Pass ☐ Fail ☐ QAL 96-589 Jerry E Puechmineau

PROCESS(es) QUALIFIED FOR _____

POSITION(s) QUALIFIED FOR:

Groove:

Pipe 1G ☐ 2G ☐ 5G ☐ 6G ☐ 6GR ☐ (T) Min ___ Max ___ Diameter ___ Range ___ ___

Plate 1G ☑ 2G ☐ 3G ☐ 4G ☐ (T) Min ___ Max ___

Consumable Insert ☐ Backing type ☐

Fillet:

Pipe 1F ☐ 2F ☐ 4F ☐ 5F ☐ (T) Min ___ Max ___

Plate 1F ☐ 2F ☐ 3F ☐ 4F ☐ (T) Min ___ Max ___

Vertical Up ☐ Down ☐ Weld Deposit Min ___ Max ___

Single side ☐ Double side ☐

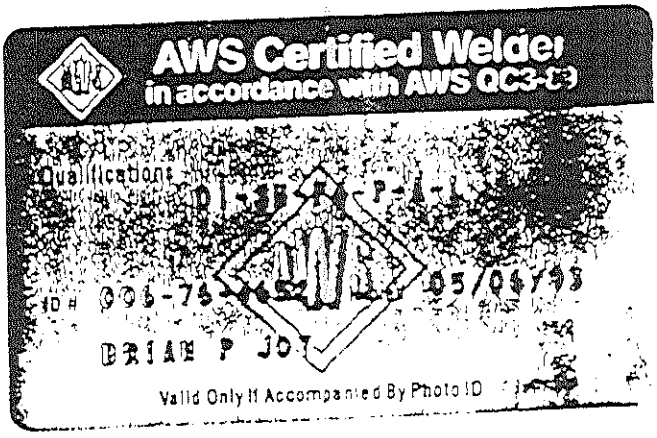
The above named person is qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and _____ Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder.

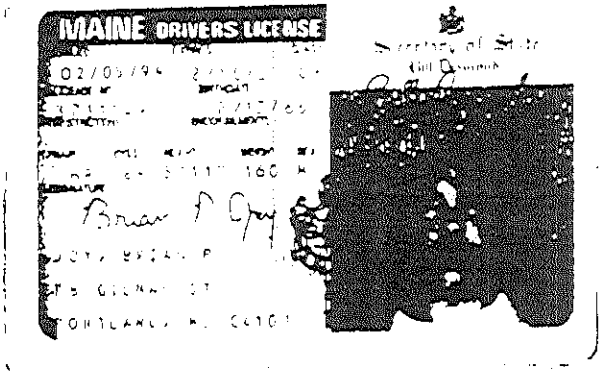
Date Tested 8/9/96 Signed by Richard McKeen
Test Supervisor

AWS CWI No. _____

Signed by James O'Neil Bradley Title
Corporate Representative

Form QC-WF1—Performance Qualification Test Record


AWS Certified Welder
in accordance with AWS QC3-93
Qualifications
05/06/93
Valid Only If Accompanied By Photo ID


MAINE DRIVERS LICENSE

AWS QC-3

PERFORMANCE QUALIFICATION TEST RECORD

Eye correction required Yes ☐ No ☐ Type of Eye Correction Eye glasses ☐ Contact lenses ☐ Magnifiers ☐

Name Gary Young Social Security # 007-49-3014

Welder ☑ Operator ☐

Qualified with AWS WPS No. ____ Supplement No. ____ Test No ____

Process(es) GMAW Manual ☐ Semi-Automatic ☑ Automatic ☐ Machine ☐

Test base metal specification A36 1" To A36 1"

Material number (M or P Number) GY To ____

Shielding Gas 75-25 Flow Rate 50 CFH

AWS filler metal classification ____ F no ____ Size ____

Backing Yes ☑ No ☐ Consumable Insert Yes ☐ No ☐

Double Welded ☐ or Single Welded ☐ Short circuiting arc (GMAW) Yes ☐ No ☐

Current AC ☐ DC ☑ Back Purging Yes ☐ No ☐

Test results

Visual test results Pass ☐ Fail ☐ Radiographic test results NA ☐ Pass ☐ Fail ☑

Bend test results NA ☐ Pass ☐ Fail ☐ Daniel Pratt Level II QA# 98-056

PROCESS(es) QUALIFIED FOR ____

POSITION(s) QUALIFIED FOR:

Groove:

Pipe 1G ☐ 2G ☐ 5G ☐ 6G ☐ 6GR ☐ (T) Min ___ Max ___ Diameter ___ Range ___

Plate 1G ☑ 2G ☐ 3G ☐ 4G ☐ (T) Min ___ Max ___

Consumable Insert ☐ Backing type ☐

Fillet:

Pipe 1F ☐ 2F ☐ 4F ☐ 5F ☐ (T) Min ___ Max ___

Plate 1F ☐ 2F ☐ 3F ☐ 4F ☐ (T) Min ___ Max ___

Vertical Up ☐ Down ☐ Weld Deposit Min ___ Max ___

Single side ☐ Double side ☐

The above named person is qualified for the welding process(es) used in this test within the limits of essential variables shown above, including materials and filler metal variables of the AWS Standard for welder certification and ____ Code or Standard. I hereby certify that I was not involved in the training of the above named individual as a welder:

Date Tested 2/4/98 Signed by Roland McLeod
Test Supervisor

AWS CWI No ____

Signed by ____ ____ Title
Corporate Representative

Attn. Patti 805-0216

K.L. Jack

INDUSTRIAL FASTENERS & SUPPLIES

CERTIFICATE OF COMPLIANCE

MCBRADY, J.A..
P.O. BOX 8239
PORTLAND, MAINE 04104

¾-10 X 6 ½ HEX CAP SCREW A449 ZINC PLATED
¾-10 X 5 ½ HEX CAP SCREW A449 ZINC PLATED
¾-10 FIN HEX NUT A563 GR.A ZINC PLATED
¾" USS FLAT WASHER F844 ZINC PLATED
½-13 X 1 ¾ HEX CAP SCREW A449 ZINC PLATED
½-13 FIN HEX NUT A563 GR.A ZINC PLATED
½" USS FLAT WASHER F844 ZINC PLATED
¾-10 X 8 HEX CAP SCREW A307a H.D.G.
¾-10 FIN HEX NUT A563 GR.A H.D.G.
¾" FLAT WASHER F844 H.D.G.
¾-10 X 1 ¾ BOLT A325 TYPE 1 H.D.G.

INVOICE # : 440692-00
DATE OF SHIPMENT: 12-06-02
PURCHASE ORDER: 10375

The parts described in this certificate were produced from material for which we have available chemical and/or physical reports or other evidence of conformance to applicable specifications.

The parts described in this certificate have been inspected and/or tested, such specimens and samples as have been tested were taken from random lot quantities and meet requirements specifically stated on the purchase order.

BAYOU STEEL CORPORATION

RIVER ROAD P.O. BOX 5000
LA PLACE, LOUISIANA 70069-1156
Telephone (985) 652-4900

MATERIAL CERTIFICATION REPORT

INFRA-METALS CO.
8 PENT HIGHWAY
WALLINGFORD, CT 06492

INFRA METALS CO.
#8 PENT HIGHWAY
WALLINGFORD, CT 06492

TESTED IN ACCORDANCE WITH: ASTM A6

INVOICE NO. BSLP02206351 DATE 08/19/02 PO:C12237
PRODUCT UNEQUAL ANGLES Cust I-3443 -0002
HEAT NO. 13017 21 Pcs GRADE A36 -01
Length 40'0" SIZE U 6 X 3-1/2 X 5/16 X 9.800 L6385

CHEMICAL ANALYSIS	
C	.13
Mn	.67
P	.024
S	.03
Si	.23
Cu	.45
Ni	.20
Cr	.17
Mo	.048
Cb	.000
V	.000
B	
Al	.008
Sn	
N	
Ti	

CE	
CI	

MECHANICAL PROPERTIES	TEST 1 IMPERIAL	TEST 1 METRIC	TEST 2 IMPERIAL	TEST 2 METRIC	TEST 3 IMPERIAL	TEST 3 METRIC
YIELD STRENGTH	45,982 PSI	317 MPa	46,335 PSI	319 MPa	PSI	MPa
TENSILE STRENGTH	66,286 PSI	457 MPa	66,868 PSI	461 MPa	PSI	MPa
ELONGATION	42.0 %	42.0 %	41.0 %	41.0 %	%	%
GUAGE LENGTH	8 in	203 mm	8 in	203 mm	in	mm
BEND TEST DIAMETER	d	d	d	d	d	d
BEND TEST RESULTS						
SPECIMEN AREA	sq in	sq mm	sq in	sq mm	sq in	sq mm
REDUCTION OF AREA	%	%	%	%	%	%
IMPACT STRENGTH	ft-lbs	J	ft-lbs	J	ft-lbs	J

IMPACT STRENGTH	IMPERIAL	METRIC	INTERNAL CLEANLINESS		GRAIN SIZE HARDNESS	
AVERAGE	ft-lbs	J	SEVERITY			
TEST TEMP	F	C	FREQUENCY		GRAIN PRACTICE REDUCTION RATIO	
ORIENTATION			RATING			

Customer Grade & Specs: A36 - 97a M183 GR.36

I HEREBY CERTIFY THAT THE MATERIAL TEST RESULTS PRESENTED HERE ARE FROM THE REPORTED HEAT AND ARE CORRECT. ALL TESTS WERE PERFORMED IN ACCORDANCE TO THE SPECIFICATIONS REPORTED ABOVE. ALL STEEL IS ELECTRIC FURNACE MELTED, MANUFACTURED, PROCESSED, AND TESTED IN THE U.S.A WITH SATISFACTORY RESULTS, AND IS FREE OF MERCURY CONTAMINATION IN THE PROCESS.

NOTARIZED UPON REQUEST:

SWORN TO AND SUBSCRIBED BEFORE ME IN AND FOR ST. JOHN PARISH ON THIS _____ DAY OF _____ . 20____

_____
(NOTARY PUBLIC)

SIGNED Timothy R. White
TIMOTHY R. WHITE, QUALITY ASSURANCE MANAGER

DIRECT ANY QUESTIONS OR NECESSARY CLARIFICATIONS CONCERNING THIS REPORT TO THE SALES DEPARTMENT.

1-800-535-7692 (USA)

Atlas Tube Inc.

[redacted]

Ref.B/L:20083597
Date:04.02.2002
Customer:97

200 Clark Street, Harrow, Ontario, Canada N0R 1G0
Tel. (519) 738-5000 Fax (519) 738-5004

Sold to
Leroux Steel - Quebec
1331 Graham Bell
BOUCHERVILLE QC J4B 6A1
CANADA

memo 10324
P.O. 10088

Shipped to
Leroux Steel - Boucherville
1331 Graham Bell
BOUCHERVILLE QC J4B 6A1
CANADA

Material.	8.0x6.0x313x60'0"0(2x2).				Material No.		800603136000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
1085A	0.200	0.820	0.009	0.005	0.010	0.034	94185	89104
Bundle No	Yield		Tensile		Elm.2in		Certification	
M200082010	061353 Psi		076240 Psi		31.5 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	8.0x6.0x313x60'0"0(2x2).				Material No.		800603136000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
1091A	0.190	0.880	0.006	0.005	0.010	0.028	94185	89104
Bundle No	Yield		Tensile		Elm.2in		Certification	
M200082010	057822 Psi		073009 Psi		32.4 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	8.0x6.0x313x60'0"0(2x2).				Material No.		800603136000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
1091A	0.190	0.880	0.006	0.005	0.010	0.028	94185	89104
Bundle No	Yield		Tensile		Elm.2in		Certification	
M200082009	057822 Psi		073009 Psi		32.4 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Jennifer Baker
Shipping Clerk

Authorized by Quality Assurance: _____

Steel Tube Institute of North America
Steel Service Center Institute
Standards Council of Canada / Conseil canadien des normes

Atlas TUBE INC.
0 Clark Street, Harrow, Ontario, Canada N0R 1G0
L (519) 738-5000 Fax (519) 738-5004

Material Test Report

Ref.B/L:80105840
Date:12.16.2002
Customer 111

Sold to
Federal Pipe and Steel Corporation
300 Gay Street
MANCHESTER NH 03103
USA

memo

Shipped to
Federal Pipe and Steel Corporation
300 Gay Street
MANCHESTER NH 03103
USA

Material.	6.0x6.0x375x30'0"0(2x2).				Material No.		60060375	Made In Canada
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
7954A	0.170	0.730	0.006	0.008	0.020	0.040	107938	612927
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100172262	060530 Psi		072040 Psi		30.6 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	6.0x6.0x375x30'0"0(2x2).				Material No.		60060375	Made In Canada
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
7954A	0.170	0.730	0.006	0.008	0.020	0.040	107938	612927
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100172263	060530 Psi		072040 Psi		30.6 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	12.0x12.0x625x30'0"0(1x1).				Material No.		120120625	Made In Canada
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
728861	0.200	0.800	0.018	0.004	0.040	0.045	107938	612927
Bundle No	Yield		Tensile		Eln.2in		Certification	
M200115259	061670 Psi		064540 Psi		31.5 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	3.0x3.0x188x48'0"0(6x3).				Material No.		300301884800	Made In Canada
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
223288	0.180	0.800	0.011	0.012	0.014	0.054	108355	612944
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100167681	059190 Psi		074440 Psi		28.0 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	6.0x6.0x375x48'0"0(3x2).				Material No.		600603754800	Made In Canada
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
0818X	0.180	0.730	0.016	0.020	0.030	0.047	108355	612944
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100172367	066700 Psi		076060 Psi		24.1 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Authorized by Quality Assurance: _____

Steel Tube Institute of North America
Steel Service Center Institute
Standards Council of Canada / Conseil canadien des normes

Po 6.12943

165481

ATLAS STEELTUBE

Material Test Report

Ref.BAL:80088533
Date:01.21.2002
Customer:165

Atlas Tube Inc.
200 Clark Street, Harrow, Ontario, Canada N0R 1G0
Tel (519) 738-5000 Fax (519) 738-5004

Sold to
Leroux Steel - Terrebonne
1026 Boul. des Entreprises
TERREBONNE QC J6Y 1V2
CANADA

memo 9908
P.O. 10080

Shipped to
Marshall Reyalcor
1025 boul. des Entreprises
TERREBONNE QC J6Y 1V2
CANADA

Material	8.0x8.0x250x60'0"0(3x2).				Material No.		600602506000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
668544	0.190	0.800	0.014	0.005	0.008	0.041	84145	M-3019
Bundle No	Yield		Tensile		Elo.2in		Certification	
M100099960	062575 Psi		076800 Psi		28.4 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material	8.0x8.0x213x60'0"0(3x1).				Material No.		600603126000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
725276	0.190	0.820	0.011	0.004	0.040	0.040	83215	M-2797
Bundle No	Yield		Tensile		Elo.2in		Certification	
M100100332	063478 Psi		070886 Psi		27.3 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material	8.0x8.0x313x60'0"0(2x2).				Material No.		600603136000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
725513	0.190	0.810	0.012	0.006	0.040	0.046	83878	M-3014
Bundle No	Yield		Tensile		Elo.2in		Certification	
M200065529	061089 Psi		073420 Psi		32.2 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material	8.0x8.0x250x60'0"0(3x2).				Material No.		600602506000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
0134995	0.200	0.720	0.008	0.005	0.011	0.048	83212	M-3002
Bundle No	Yield		Tensile		Elo.2in		Certification	
M200065968	054931 Psi		074163 Psi		29.7 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material	8.0x8.0x250x60'0"0(3x2).				Material No.		600602506000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
857717	0.180	0.800	0.010	0.006	0.010	0.035	83212	M-3002
Bundle No	Yield		Tensile		Elo.2in		Certification	
M200060797	054475 Psi		070240 Psi		29.3 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Authorized by Quality Assurance: _____

Steel Tube Institute

Steel Service Center Institute

elphia Galvanizing Corp.
2520 East Hagert Street
Philadelphia, PA 19125
(215) 739-8911

QUALITY ASSURANCE CERTIFICATION

CUSTOMER NAME
Haydon Bolts
1181 Unity
Phila., Pa. 19124

SHOP ORDER NO: X56
DATE GALVANIZED: 10/24/02
DATE INSPECTED: 10/24/02

CUSTOMER ORDER NO.: PO#368
PROJECT NAME/NO.:
SHIPPER NO.:

Rods 2(4.5)x46
Rods 7/8(9)x32
Rods 1¼(7)x24
Slot Flt Hd 1(8)
~~Rods 1¼(7)x21~~
Rods 3/4(10)x28
36 Hvy Hx Hd 1(8)x12
500 Round Head Bolt 3/4(10)x7 7/8

This is to certify that the material on the shop order no. noted above was galvanized in accordance with the recommended practices outlined in the ASTM Standards for the type material described in our shipping document; and that this material has been inspected and does meet the minimum standards for acceptance as described by the ASTM Standards.

Applicable Specifications:
ASTM A123/153

Owner/Designer Inspection & Approval

V & S Philadelphia Galvanizing Corp.
Thomas T Vos
Operations Manager

Haydon Bolts
Cert Cover Page

JAMES A. MC BRADY INC.

Customer PO: **10044**

Invoice No.: **B2110024**

Invoice Date: **11/1/02**

Sales Order: **S47401**

Cert No:	Line No	Item No	Qty	Haydon PO	Manufacturer	Lot	Heat	Assembly No
10046	10000	HXHD	8	A36334	NUCOR STEEL AUB		P2191	
9709	40000	HNAG125	8	A37959	HEADS & THREADS C OF C			
8847	50000	WFAG125	8	A34509	COATESVILLE WAS C OF C			

Haydon Bolts - Cert Separator Sheet

Cert No:	Invoice No	Line No	Item No	Qty	PO	Manufacturer	Lot	Heat	Sales Order	LinNo
10046	B2110024	10000	HXHD	8	A36334	NUCOR STEEL AU		P2191	S47401	0

108 pcs. = 9908
HEAT# P2191
DATE SHIPPED 10/25/2002
SHIPMENT# 0209475
SIZE: RD 1 1/4
ORDER ITEM# 119953/ 07
SOLD TO: HAYDON BOLTS INC

R 21827
HAYDON BOLTS

CERTIFIED TEST REPORT

Approved
10/28/02
BV

NUCOR
BAR MILL-AUBURN
NUCOR STEEL AUBURN, INC.
P.O. BOX 2008
AUBURN, NY 13021

CUST. P.O. BLANKET
PART #:
GRADE : F1554-94 GR 55 SECTIONS
SPEC 8, 9.1 AND S1.5.2.1 ONLY
SUPP. REQ:
SHIP TO: HAYDON BOLTS
FAX # 2157446450

CHEMICAL ANALYSIS %

C	MN	SI	P	S	CU	NI	CR	MO	SN	V	CB	TI	B	N2	O2
.220	1.100	.180	.015	.040	.260	.0800	.120	.032	.011	.033	.0050	.0022	.0004	XXX	.001

MECHANICAL RESULTS

YIELD	TENSILE	GAUGE	%	BEND	%
K.S.I.	K.S.I.	LENGTH	ELONG	PIN. DIA	R.A.
64.84	87.70	8	20.0	.0	30.7
63.46	86.94	8	21.3	.0	32.1
MPa	MPa	GAUGE	%	BEND	
		LENGTH	ELONG	PIN. DIA	R.A.

CHARPY IMPACT TEST

TEMP. F	FT.-LB.	%SHEAR	LAT.EXP.MILS

Grain Size	Reduction Ratio	As Rolled Hardness	D.I.	C.E.	C.I.
XXX	XXX	XXX	XXX	.422	XXX

JOMINY END-QUENCH HARDENABILITY RESULTS (HRC)

J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12

J13	J14	J15	J16	J18	J20	J22	J24	J26	J28	J30	J32

I CERTIFY THESE RESULTS TO BE CORRECT AS CONTAINED IN THE RECORDS OF THE COMPANY.

JIM BIERNAT, METALLURGIST
STATE OF NEW YORK SS.
COUNTY OF CAYUGA

Jim Biernat
(print)

AFTER BEING DULY SWORN BY ME, DECLARES THAT: THESE RESULTS ARE CORRECT AS CONTAINED IN THE RECORDS OF NUCOR STEEL AUBURN, INC

(sign)

SUBSCRIBED AND SHOWN BEFORE ME

THIS _____ DAY OF _____

L.S. _____

THIS CERTIFICATE IS NOTARIZED ONLY WHEN REQUESTED

ALL MANUFACTURING PROCESSES FOR THIS STEEL, INCLUDING MELTING FROM SCRAP AND HOT ROLLING HAVE BEEN PERFORMED IN THE U.S.A. NO WELD REPAIR PERFORMED, STEEL NOT EXPOSED TO MERCURY OR ANY LIQUID ALLOY WHICH IS LIQUID AT AMBIENT TEMPERATURES.

NOTARIZED CERTIFICATION

CUSTOMER SPECIAL INSTRUCTIONS:

ASTM F1554-97 GR. 55 IS DUAL CERTIFIED TO

[illegible]IBED ON BW & BV CHEM. CODES ONLY

BV/05180
128600

Haydon Bolts - Cert Separator Sheet

Cert No:	Invoice No	Line No	Item No	Qty	PO	Manufacturer	Lot	Heat	Sales Order	LinNo
9709	B2110024	40000	HNAG125	8	A37959	HEADS & THREAD	C OF C		S47401	0

International LLC
08872
732.727.5800
headsandthreads.com

Fax: Accounting 732.727.7130
Corporate 732.727.9261
Mills 732.727.5840
Purchasing 732.727.3555
Sales 732.727.5888

DATE 8/15/02

Haydon Bolts Inc
1181 Unity Street
Philadelphia Pa. 19124-3196

This letter will certify that the merchandise shipped to you against your P.O. A37959 has been purchased by Heads & Threads International from its suppliers with the understanding that this product was manufactured to and conforms with the current and applicable ANSI/ ASME, ASTM, SAE or IFI specifications as shown in the IFI Fasteners Manual sixth edition.

500 - 1 1/4 (7) Hex Nut A563A HDG

Our suppliers chemical and physical test reports, on all through hardened product, are kept on file and are available upon request.

Sincerely,

Bob Sadowski

Haydon Bolts - Cert Separator Sheet

Cert No:	Invoice No	Line No	Item No	Qty	PO	Manufacturer	Lot	Heat	Sales Order	LinNo
8847	B2110024	50000	WFAG125	8	A34509	COATESVILLE WA	C OF C		S47401	0

COATESVILLE WASHER COMPANY

TO: **HAYDON BOLTS, INC.**
1181 UNITY STREET
PHILADELPHIA, PA 19124

DATE: JUNE 7, 2002

PART: **WASHERS, STEEL, PLAIN(FLAT), UNHARDENED FOR GENERAL USE.**

SPEC.: ASTM F844 & ANSI B18.22.1

FINISH : **PLAIN, ZINC & CLEAR DICHROMATE , HOT DIP GALV. & MECH. GALV.**

GENTLEMEN:

I HEREBY CERTIFY THAT THE ABOVE SUPPLIES CALLED FOR BY PURCHASE ORDER/CONTRACT WERE MANUFACTURED IN CHINA USING MILD STEEL , IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS, AND THAT SUCH SUPPLIES WERE IN THE QUANTITY AND QUALITY CALLED FOR, AND WERE IN ALL RESPECTS IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS. ALL DIMENSIONAL INSPECTION REPORTS ARE ON FILE AND AVAILABLE FOR REVIEW UPON REQUEST. CHEMICAL & PHYSICAL REPORTS ARE NOT AVAILABLE SINCE THEY ARE OPTIONAL AND NOT REQUIRED BY THE ABOVE REFERENCED SPECIFICATIONS.

COATESVILLE WASHER COMPANY

BY: _____
GENERAL MANAGER

P.O. Box 100 • 103 West First Avenue • Parkesburg, PA 19365 • (610) 857-2656 • FAX: (610) 857-0110

Material Test Report

Ref.B/L:80099173
Date 07.13.2002
Customer 66

Atlas TUBE INC.
www.atlastube.com
200 Clark Street, Harrow, Ontario, Canada N0R 1G0
Tel. (519) 738-5000 Fax (519) 738-5004

Sold to
George Dean
PO Box 81066
WARWICK RI 02888
USA

Shipped to
George Dean
2095 Elmwood Avenue
WARWICK RI 28888
USA

Material.	4.0x4.0x250x20'0"0(5x4).				Material No.		400402502000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
4524A	0.200	0.830	0.011	0.005	0.020	0.035	100411	31268
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100146739	000000 Psi		000000 Psi		%		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	8.0x6.0x375x48'0"0(2x2).				Material No.		800603754800	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
1881A	0.190	0.790	0.011	0.007	0.010	0.028	99892	31224
Bundle No	Yield		Tensile		Eln.2in		Certification	
M200086353	059917 Psi		073720 Psi		31.6 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	8.0x8.0x625x40'0"0(2x2).				Material No.		8008[illegible]4000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
726568	0.190	0.780	0.017	0.004	0.040	0.045	10039[illegible]	31262
Bundle No	Yield		Tensile		Eln.2in		Certification	
M200096463	060723 Psi		071910 Psi		32.3 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	8.0x8.0x625x40'0"0(2x2).				Material No.		8008[illegible]254000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
868770	0.180	0.780	0.012	0.006	0.040	0.047	100397	31262
Bundle No	Yield		Tensile		Eln.2in		Certification	
M200096463	054751 Psi		065840 Psi		33.0 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Material.	10.0x2.0x250x40'0"0(2x4).				Material No.		1000202504000	
Heat No	C	Mn	P	S	Si	Al	Sales order	Purchase Order
3886A	0.200	0.840	0.008	0.007	0.010	0.026	99621	31189
Bundle No	Yield		Tensile		Eln.2in		Certification	
M100145621	060090 Psi		075950 Psi		25.5 %		ASTM A500 GR.B & C	
Material Note:								
Sales Or.Note:								

Authorized by Quality Assurance:

ELD CANADA INC.
SY AVENUE
ON, ONTARIO L6X 2M3
DA

LTV COPPERWELD
TUBULAR PRODUCTS

Customer Order No.

Internal Order No. 713698

Invoice No. 17079875

Date 10/08/02

TEST REPORT

er:
RGE H DEAN
BOX 81066
ELMWOOD AVE.
WICK, RI 02888

Specification:
6 IN, SQ,
45 Ft
ASTM A500 GRB 01A

HEAT NO.	CHEMICAL ANALYSIS, %										
	C	Mn	P	S	SI	AL	CB	V	CU	NI	CR
C.E. .33	.19	.83	.015	.007	.01	.032	.005	.008	.010	.010	.010

MECHANICAL PROPERTIES

HEAT NO.	C.L./D.L.	YIELD STRENGTH PSI	TENSILE STRENGTH PSI	ELONGATION %	HARDNESS Rb
A		67700	80900	35	

ELD STRENGTH IS 0.2% OFFSET - ELONGATION IN 2 INCHES

r Tests

TV Copperweld certifies that the material purchased on this order eets all chemical and physical requirements in accordance with the ification noted above.

JIM CLARK, METALLURGIST

COPPERWELD
E. 122nd Street
HICAGO, IL 60633
(773) 646-4500

LTV COPPERWELD
TUBULAR PRODUCTS

TEST REPORT

Internal Order No. 717664

Invoice No. 19048910

Date 09/30/02

Customer:

GEORGE H DEAN
P O BOX 81066
2095 ELMWOOD AVE.
WARWICK, RI 02888

Specification:

5 IN, SQ, 1/4
30 Ft
ASTM A500 GRB 01A

CHEMICAL ANALYSIS, %

HEAT NO.	C	Mn	P	S	SI	AL			CU	NI	CR
20514* C.E. .33	.19	.82	.010	.002	.03	.039			.016	.011	.02

MECHANICAL PROPERTIES

HEAT NO.	C.I./D.I.	YIELD STRENGTH PSI	TENSILE STRENGTH PSI	ELONGATION %	HARDNESS Rb
20514		63400	80600	33	

YIELD STRENGTH IS 0.2% OFFSET - ELONGATION IN 2 INCHES

Other Tests
* MELTED & MANUFACTURED IN THE U.S.A. (D)

LTV Copperweld certifies that the material purchased on this order meets all chemical and physical requirements in accordance with the

BLAINE HYDE, QUALITY ASSURANCE MANAGER

Material Test Report

Ref.B/L 80084600
Date:10.23.2001
Customer:66

Atlas TUBE INC.
www.atlastube.com
200 Clark Street, Harrow, Ontario, Canada N0R 1G0
Tel. (519) 738-5000 Fax (519) 738-5004

Sold to
George Dean
PO Box 81066
WARWICK RI 02888
USA

Shipped to
George Dean
2095 Elmwood Avenue
WARWICK RI 28888
USA

Material. 6.0x6.0x375x30'0"0(3x3). Material No. 60060375

Heat	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni
867897	0.190	0.820	0.012	0.006	0.039	0.038	0.036	0.000	0.000	0.000

P.order	S.Order	Bundle No	Yield	Tensile	Eln.2in	Certification
29880	83849	M100083747	064452 Psi	078090 Psi	29.0 %	ASTM A500 GR.B & C

Material Note:
Sales Or.Note:

Material. 4.0x4.0x313x40'0"0(5x2). Material No. 400403134000

Heat	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni
00301714	0.174	0.753	0.014	0.007	0.020	0.038	0.000	0.000	0.000	0.000

P.order	S.Order	Bundle No	Yield	Tensile	Eln.2in	Certification
29869	83594	M100080891	057618 Psi	067615 Psi	28.3 %	ASTM A500 GR.B & C

Material Note:
Sales Or.Note:

Material. 4.0x4.0x313x40'0"0(5x2). Material No. 400403134000

Heat	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni
00401710	0.175	0.727	0.013	0.010	0.013	0.051	0.000	0.000	0.000	0.000

P.order	S.Order	Bundle No	Yield	Tensile	Eln.2in	Certification
29869	83594	M100080891	059373 Psi	070340 Psi	31.1 %	ASTM A500 GR.B & C

Material Note:
Sales Or.Note:

Material. 6.0x2.0x313x40'0"0(3x3). Material No. 600203134000

Heat	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni
868058	0.190	0.810	0.007	0.006	0.040	0.054	0.016	0.000	0.000	0.000

P.order	S.Order	Bundle No	Yield	Tensile	Eln.2in	Certification
29869	83594	M100082746	063829 Psi	079292 Psi	24.9 %	ASTM A500 GR.B & C

Material Note:
Sales Or.Note:

Material. 6.0x2.0x375x40'0"0(3x3). Material No. 600203754000

Heat	C	Mn	P	S	Si	Al	Cu	Cb	Mo	Ni
868055	0.190	0.820	0.007	0.005	0.050	0.044	0.055	0.000	0.000	0.000

P.order	S.Order	Bundle No	Yield	Tensile	Eln.2in	Certification
29869	83594	M100082755	058852 Psi	081350 Psi	22.1 %	ASTM A500 GR.B & C

Material Note:
Sales Or.Note:

Authorized by Quality Assurance:

WELD CANADA INC.
TBY AVENUE
MPTON, ONTARIO L6X 2M3
ANADA

LTV COPPERWELD
TUBULAR PRODUCTS

Customer Order No.

Internal Order No. 722253

Invoice No. 17081768

Date 10/31/02

TEST REPORT

Customer:

GEORGE H DEAN
P O BOX 81066
2095 ELMWOOD AVE.
WARWICK, RI 02888

Specification:

6 IN, SQ, 3/8
48 Ft
ASTM A500 GRB 01A

CHEMICAL ANALYSIS, %

HEAT NO.	C	Mn	P	S	SI	AL	CB	V	CU		CR
4493A C.E. .34	.20	.84	.014	.006	.02	.052	.005	.008	.010		.010

MECHANICAL PROPERTIES

HEAT NO.	C.I./D.I.	YIELD STRENGTH PSI	TENSILE STRENGTH PSI	ELONGATION %	HARDNESS Rb
4493A		67300	79900	34	

YIELD STRENGTH IS 0.2% OFFSET - ELONGATION IN 2 INCHES

Other Tests

LTV Copperweld certifies that the material purchased on this order meets all chemical and physical requirements in accordance with the specification noted above.

Jim Clark

JIM CLARK, METALLURGIST

CHEMICAL AND PHYSICAL TEST REPORT

MADE IN U.S.A

Shippers Number: G-007744

AMERISTEEL®

CARTERSVILLE STEEL MILL DIVISION
METALLURGICAL DEPARTMENT
384 OLD GRASSDALE RD NE, CARTERSVILLE, GA 30121 memo 9043 P.O. 10368

PRODUCING MILL IS KNOWN BY HEAT ID PREFIX

B=CARTERSVILLE BB, C=CHARLOTTE, G=CARTERSVILLE, J=JACKSONVILLE, K=KNOXVILLE, N=GERDAU COURTICE, O=ORRVILLE BB, V=JACKSON TN

SHIP TO:	INVOICE TO:	SHIP DATE	
FEDERAL PIPE AND STEEL CORP 300 GAY STREET 888-606-1937 MANCHESTER NH 03103	FEDERAL PIPE & STEEL CORP ACCTS PAYABLE 1331 GRAHAM BELL BOUCHERVILLE PQ J4B 6A1	06/30/02	
		CUST. ACCOUNT NO 40120027	

SHAPE AND SIZE	GRADE	SPECIFICATION																SALES ORDER	CUSTOMER P.O. NUMBER				
HEAT I.D. NO	C	MN	P	S	V	SI	CR	CU	NI	SN	AL	MO	N	NB			C EQU	YIELD PT LBS/SQ IN	TENSIL LBS /SQ IN	% ELONG 8 IN	BEND	DEF.	% LIGHT HEAVY
W 10 X 149	A36/A992	ASTM A36-01, ASTM A992-01, ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4762	.17	.92	.011	.033	.019	.25	.10	.28	.10	.011	.003	.021	.49	.002				40	56300	77300	22.8			
METRIC EQUIVALENT: YIELD = 380.24 MPA; TENSILE = 512.38 MPA; %ELONG./200MM = 22.8 DEF. = MM																							
W 10 X 100	A36/A992	ASTM A36-01, ASTM A992-01 ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4762	.17	.92	.011	.033	.019	.25	.10	.28	.10	.011	.003	.024	.0080	.002				40	57000	75300	24.9			
METRIC EQUIVALENT: YIELD = 393.00 MPA; TENSILE = 519.18 MPA; %ELONG./200MM = 24.9 DEF. = MM																							
W 10 X 100	A36/A992	ASTM A36-01, ASTM A992-01 ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4759	.15	.93	.011	.034	.019	.23	.10	.31	.10	.012	.001	.020	.0100	.001				39	53100	73900	23.7			
METRIC EQUIVALENT: YIELD = 368.11 MPA; TENSILE = 509.52 MPA; %ELONG./200MM = 23.7 DEF. = MM																							
W 10 X 100	A36/A992	ASTM A36-01, ASTM A992-01 ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4759	.15	.93	.011	.034	.019	.23	.10	.31	.10	.012	.001	.020	.0100	.001				39	54300	73700	22.0			
METRIC EQUIVALENT: YIELD = 374.39 MPA; TENSILE = 508.14 MPA; %ELONG./200MM = 22.0 DEF. = MM																							
W 10 X 100	A36/A992	ASTM A36-01, ASTM A992-01 ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4760	.15	.92	.012	.033	.019	.21	.11	.28	.09	.012	.001	.022	.0090	.001				39	55200	73300	24.4			
METRIC EQUIVALENT: YIELD = 380.59 MPA; TENSILE = 505.39 MPA; %ELONG./200MM = 24.4 DEF. = MM																							
W 10 X 100	A36/A992	ASTM A36-01, ASTM A992-01 ASTM A572 GR50-01 ASTM A709 G36-01A																	20040220	612712			
G2-4760	.15	.92	.012	.033	.019	.21	.11	.28	.08	.012	.001	.022	.0090	.001				39	54000	70700	24.4			
METRIC EQUIVALENT: YIELD = 372.32 MPA; TENSILE = 487.46 MPA; %ELONG./200MM = 24.4 DEF. = MM																							
C 10 X 15.3#	A36/572G50	ASTM A36-01, ASTM A572 GR50-01, SA-36-01 ASTM A709 GR36-01A																	20040220	612712			
G2-4717	.17	.94	.012	.033	.015	.21	.11	.41	.09	.012	.002	.017	.0080	.001				42	55200	78400	23.0			
METRIC EQUIVALENT: YIELD = 387.49 MPA; TENSILE = 540.55 MPA; %ELONG./200MM = 23.0 DEF. = MM																							

This material, including the billets, was produced and manufactured in the United States of America.

A. J. Turner
Quality Assurance Manager
Mill Group

THE ABOVE FIGURES ARE CORRECT EXTRACTS FROM THE ORIGINAL CHEMICAL AND PHYSICAL TEST REPORT AS CONTAINED IN THE PERMANENT RECORDS OF THE COMPANY.

NOVA TUBE AND STEEL CORPORATION
600 Dean Sievers Place
Morrisville, PA, 19067
Tel: 215-295-8813 Fax: 215-295-8798

T E S T C E R T I F I C A T E

old to: FEDERAL PIPE& STEEL INC
hip to: FEDERAL PIPE
300 GAY ST.
MANCHESTER,NH. memo 9043 P.O. 10348

DATE SHIPPED: 10/24/02
B/L #: 108669
P.O. #:612864
SALES ORDER #: 105191

Description	Dimensions	Pcs	Mill/Heat Number	Specifications
Hot Roll Rectangular Tub	8x4x0.188x288	10	BETH/411K4801	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.188x288	10	BETH/411K4801	ASTM A500 GRADE B
Hot Roll Rectangular Tub	8x4x0.188x480	10	BETH/412N5641	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.188x576	8	BETH/412N5641	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.250x288	10	BETH/421N3691	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.250x480	6	BETH/421N3691	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.250x576	6	BETH/421N1671	ASTM A 500 B/C
Hot Roll Rectangular Tub	8x4x0.375x576 ✓	4	BETH/411N9081	ASTM A 500 B/C
HSS Square Tubing	1x1x0.065x288	100	STE /459173	UNTESTED RESERVAT'N
HSS Square Tubing	1x1x0.083x288	100	STE /660412	UNTESTED RESERVAT'N
HSS Square Tubing	4x4x0.375x576	8	BETH/402N7971	ASTM A 500 B/C

Heat Number	Chemical Analysis C	Mn	P	S	Si	Cu	Ni	Cr	Cb	Mo	V	Al	N	Sn	B	Ti
BETH/411K4801	0.210	0.730	0.015	0.016	0.006	0.040	0.030	-	-	-	-	-	-	-	-	-
	Melted & Manufactured in U.S.A.															
BETH/412N5641	0.200	0.710	0.014	0.008	0.018	0.010	0.020	0.030	-	0.001	0.001	0.062	0.002	-	-	-
	Melted & Manufactured in U.S.A.															
BETH/421N3691	0.200	0.790	0.011	0.013	0.015	0.010	0.020	0.020	-	0.001	0.001	0.062	0.002	-	-	-
	Melted & Manufactured in U.S.A.															
BETH/421N1671	0.180	0.680	0.017	0.013	0.013	0.010	0.020	0.030	-	0.002	0.001	0.054	0.004	-	-	-
	Melted & Manufactured in U.S.A.															
BETH/411N9081	0.210	0.760	0.013	0.008	0.014	0.020	0.020	0.030	-	0.002	0.001	0.061	0.002	-	-	-
	Melted & Manufactured in U.S.A.															
STE/459173	0.140	0.350	0.007	0.016	0.009	0.009	0.011	0.031	0.002	0.004	0.002	0.037	-	-	-	-
STE/660412	0.050	0.660	0.014	0.006	0.050	0.013	0.011	0.037	0.012	0.003	0.030	0.031	-	-	-	-
BETH/402N7971	0.200	0.710	0.014	0.013	0.012	0.030	0.020	0.040	-	0.002	0.001	0.051	0.004	-	-	-
	Melted & Manufactured in U.S.A.															

continue . . . .