

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1 Page 1 of 2

1. Manufactured and certified by River Bend Industries, LLC, 1700 Crystal Lake Drive, Blanchard, Oklahoma, 73010, USA  
(Name and address of Manufacturer)

2. Manufactured for UNKNOWN BUILT FOR STOCK  
(Name and address of Purchaser)

3. Location of Installation UNKNOWN BUILT FOR STOCK  
(Name and address)

4. Type Vertical 6445 N/A 60250300 REV-1 6445 2025  
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)

5. ASME Code, Section VIII, Division 1 2023/ N/A N/A N/A  
[Edition and Addenda, if applicable (date)] (Code Case numbers) [Special service per UG-120(d)]

6. Shell: SA-106 C 3.5" 0" 24.0" (OD) 8' 0.0"  
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) [Length (overall)]

Body Flanges on Shells												
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Seams: TYPE S SMLS N/A 85% NONE N/A TYPE 1\*\*\* FULL 100% 1  
[Long. (welded, dbl., sngl., lap, butt)] [R.T.(spot or full)] (Eff.,%) (H.T. temp) (Time, hr) [Girth. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff., %) (No. of courses)

8. Heads: (a) SA-516 (70) N (b) SA-516 (70) N  
(Material spec. number, grade or type) (H.T. - time and temp.) (Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	TOP	1.25"	0	8.5"	0	0	0	8.5"	N/A		X	None	N/A	100%
(b)	BOTTOM	1.25"	0	8.5"	0	0	0	8.5"	N/A		X	None	N/A	100%

Body Flanges on Heads													
No.	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting				
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material	
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A

9. MAWP 5000 psi 0 psi at max. temp. 200 °F 0 °F  
(Internal) (External)

Min. design metal temp. -20\*\* at 5000 psi Hydro, pneu., or comb. test pressure HYDRO at 6500 psi

Proof test N/A

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet, Gas Outlet	2	3"	Pipe	SA-106 C	N/A	0.600"	0	Inherent	UW-16.1(l)	N/A	Head/Shell
Drain	1	2"	Pipe	SA-106 C	N/A	0.436"	0	Inherent	UW-16.1(l)	N/A	Head
*Relief	2	2"	Pipe	SA-106 C	N/A	0.436"	0	Inherent	UW-16.1(i)	N/A	Shell
Pressure Gauge	1	1"	Pipe	SA-106 C	N/A	0.250"	0	Inherent	UW-16.1(a)	N/A	Shell

11. Supports: Skirt No Lugs 2 Legs 0 Other 4 Pads Attached Welded to Shell  
(Yes or no) (Number) (Number) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report:  
N/A  
(Name of part, item number, Manufacturer's name and identifying stamp)

\*Relief per UG-150; \*\*Production Impact Testing Required YES per UG-84(1)(a) & UCS-67(a)(1);  
\*\*\*X-ray RT-1 per UW-11(a); Hydro test in the horizontal position; Extra consideration per  
U-1(d); Reviewed by P.E. & B.V. Houston Office.

## FORM U-1A

Page 2 of 2

Manufactured by **River Bend Industries, LLC, 1700 Crystal Lake Drive, Blanchard, Oklahoma, 73010, USA**Manufacturer's Serial No. **6445**CRN **N/A**National Board No. **6445****CERTIFICATE OF SHOP/FIELD COMPLIANCE**

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number **49367**

expires **February 22, 2027**Date **07/31/2025**

Co. name

**River Bend Industries, LLC**  
(Manufacturer)

Signed

  
(Representative)**CERTIFICATE OF SHOP/FIELD INSPECTION**Vessel constructed by **River Bend Industries, LLC** at **1700 Crystal Lake Drive, Blanchard, Oklahoma, 73010, USA**

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by

**Bureau Veritas Inspection and Insurance Company, of Lynn, MA**have inspected the component described in this Manufacturer's Data Report on **July 31, 2025**,

and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor the Inspector's employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor the Inspector's employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date **07/31/2025**

Signed

  
(Authorized Inspector)

Commissions

**7936, OK263**

(National Board Authorized Inspector Commission number)



River Bend Industries, LLC

# ASME INSPECTION REPORT

REPEAT JOB START

U VESSEL

N.D.E. REQ: RT-1 SERIAL NUMBER: 6445 M.A.W.P.: 5000 PSI  
N.C.R. NO#: \_\_\_\_\_ NAT'L BD NO: 6445 AT: 200 DEG F  
HEAT TREAT TIME: \_\_\_\_\_ WO NUMBER: 1024-6 M.D.M.T.: -20 DEG F  
HEAT TREAT TEMP: PREHEAT 200° CUSTOMER: TRILOGIC TEST: 7500 PSI  
DWG NUMBER: 60250300 REV-1 DESC: SDT-24965000-V1P

## PREFABRICATION CHECK LIST

FAB DWG :	Q.C.	DATE	A.I.	DATE
CALCULATIONS:	<u>JR</u>	<u>5/13/2025</u>	* <u>ADM</u>	<u>5/13/2025</u>
WELDER QUAL:	<u>JR</u>	<u>5/13/2025</u>		
WELD PROC:	<u>JR</u>	<u>5/13/2025</u>		
MAT'L REC'D & I.D.:	<u>SEE RECEIVING REPORT</u>			
M.T.R. VERIFIED:	<u>SEE RECEIVING REPORT</u>			

(\* HOLD POINT)

## FABRICATION CHECK LIST

LAYOUT CHECK:	Q.C.	DATE	PARTIAL INTERNALS
LAYOUT HEAD:	<u>MV</u>	<u>07/28/25</u>	
LAYOUT HEAD:	<u>MV</u>	<u>07/28/25</u>	
LAYOUT SHELL:	<u>MV</u>	<u>07/28/25</u>	
LAYOUT INTERNAL:	<u>MV</u>	<u>07/28/25</u>	
FITUP CHECK:	Q.C.	DATE	SECOND STAGE INSPECTION:
NOZZLES PREP:	<u>MV</u>	<u>7-25-25</u>	Q.C. DATE
NOZZLES HEAD:	<u>MV</u>	<u>7/28/25</u>	
NOZZLES HEAD:	<u>MV</u>	<u>07/28/25</u>	
NOZZLES SHELL:	<u>MV</u>	<u>7-25-25</u>	
WELDNECK QUALITY:			ATTACHMENTS:

(MP03)

FIT UP R.S. & L.S.:	Q.C.	DATE	HEAT NO:
FIT UP HEAD & SHELL:	<u>MV</u>	<u>07/28/25</u>	HEAD: <u>B3A1-2</u> ✓ Tmin: <u>1.367</u>
FIT UP HEAD & SHELL:	<u>MV</u>	<u>07/28/25</u>	HEAD: <u>B3A1-2</u> ✓ Tmin: <u>1.363</u>
FIT UP SHELL & SHELL:			SHELL: <u>B3A5-8</u> ✓ THK:
FIT UP SHELL L.S.:			NOZZLES:

## POST FABRICATION CHECK LIST

WELD SIZE & APPEARANCE:	Q.C.	DATE	INTERNAL INSP: A.I.
WELDER STAMPS:	<u>K, D, H</u>	<u>07/29/25</u>	Q.C. <u>7-29-25</u> *
ADDITIONAL N.D.E.:			N.P. STAMP: A.I. <u>7-31-25</u> *
PARTIAL DATA REPORT:			Q.C. <u>7-31-25</u> *
S.N. Stamped in shell:	<u>MV</u>	<u>07/29/25</u>	HYDRO TEST: A.I. <u>7-31-25</u> *
FINAL INSPECTION:	<u>MV</u>	<u>07/29/25</u>	Q.C. <u>7-31-25</u> *
R.T. REPORTS:	<u>QR</u>	<u>7-31-25</u>	SIGN DATA: A.I. <u>7-31-25</u> *
			Q.C. <u>7-31-25</u> *



River Bend Industries, LLC

**Work Order #**

1024-6

Drawing #

60250300

REV-1

Serial #

6445

## Nozzle Heat Numbers

NOT REQUIRED

## Notes, Other



## NON-DESTRUCTIVE TESTING AND INSPECTION

17110 East Pine St, Tulsa, OK 74116

Tele: (918) 234-6300 Fax: (918) 234-6301

## CUSTOMER DATA

NAME RBI

ADDRESS \_\_\_\_\_

PURCHASE ORDER \_\_\_\_\_

ATTENTION 24" 100% BOTTLEDAY THURSDAY

DATE

7/31/2025

Project # \_\_\_\_\_ Report # \_\_\_\_\_








## RADIOGRAPHIC INSPECTION REPORT

JOB NUMBER 1024-6 SO# SN-6445 PAGE 1 OF 1APPLICABLE CODE ASME ACCEPTANCE CRITERIA SEC. 8 UW51PROCEDURE # API-RT-002-ASME REVISION # 18 REV. DATE: 1/1/2024 Per Diem \_\_\_\_\_TRUCK# T-417 TRAVEL MILES \_\_\_\_\_ TRAVEL HRS. \_\_\_\_\_ WORK HRS. \_\_\_\_\_ STANDBY HRS. \_\_\_\_\_ TOTAL HRS. \_\_\_\_\_RADIOGRAPHER SETH SKINNER LEVEL II ASSISTANT ADAM STIDHAM LEVEL I

## TESTING VARIABLES

IR 192 ☒ CO <sup>60</sup> ☐ X-RAY ☐PROCESSING: AUTOMATIC ☐ MANUAL ☒ DEV. TIME 5 MIN. TEMP. 68CURIES 55.87 Kv. \_\_\_\_\_  
FOCAL SPOT 0.164 Ma. \_\_\_\_\_  
MATERIAL TYPE \_\_\_\_\_ CS

## RT TECHNIQUE

Technique - A	Technique - B	Technique - C	Technique - D	Technique - E	Technique - F	Technique - G
						
SWE/SWV	SWE/SWV	SWE/SWV	DWE/SWV	DWE/SWV	DWE/DWV	DWE/DWV

FILM:	FILM USAGE:	3 1/2" X 8 1/2"	3 1/2" X 10"	3 1/2" X 17"	70 mm X 12"
MFG. <u>FUJI</u>	4 1/2" X 8 1/2"	4 1/2" X 10"	4 1/2" X 17"	12	70 mm X 17"
TYPE <u>100</u>	70mm X 8 1/2"	8" X 10"	7" X 17"	OTHER _____	OTHER _____
CLASS <u>II</u>	70 mm X 6"	5" X 7"	14" X 17"	OTHER _____	OTHER _____

SENSITIVITY 2-2T  
FILM/CASSETTE 1  
Pb. Screen Thk. Front 0.005 Back 0.005ORIGINAL FILM 12 REPAIR FILM \_\_\_\_\_  
TOTAL # EXPOSURES 2

	FILM I.D.	INTERVAL	IQI	RT TECHNIQUE	SHM / BLOCK	MAT'L THK	WELD REIN	TOTAL MAT. THK	SOD	OFD	DIA.	UG	DENSITY	DISCONTINUITY	ACCEPT	REJECT	WELDER I.D.
1	RS-1	(1-2)	B	A		1.5"	0.125	1.625"	9.5"	1.625"	24"	<.20	2.0-4.0		X		
2	K/D	(2-3)	"			"	"	"	"	"	"	"	"		X		
3		(3-4)	B			"	"	"	"	"	"	"	"		X		
4		(4-5)	"			"	"	"	"	"	"	"	"		X		
5		(5-6)	B			"	"	"	"	"	"	"	"		X		
6		(6-1)	"			"	"	"	"	"	"	"	"		X		
7	RS-2	(1-2)	B	A		"	"	"	"	"	"	"	"		X		
8	K/H	(2-3)	"			"	"	"	"	"	"	"	"		X		
9		(3-4)	B			"	"	"	"	"	"	"	"		X		
10		(4-5)	"			"	"	"	"	"	"	"	"		X		
11		(5-6)	B			"	"	"	"	"	"	"	"		X		
12		(6-1)	"			"	"	"	"	"	"	"	"		X		
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## DEFECT CODE

AB - ARC BURN  
AI - ALIGNED INDICATION  
BT - BURN THROUGH  
CON - CONCAVITY  
CRACK - CRACKHB - HOLLOW BEAD  
IF - INADEQUATE FUSION  
IP - INCOMPLETE PENETRATION  
MA - MISALIGNMENT  
POR - POROSITYSLI - SLAG INCLUSION  
SLL - SLAG LINE  
SURF - SURFACE INDICATION  
UCE - UNDERCUT EXTERNAL  
UCI - UNDERCUT INTERNAL

## ABBREVIATED TERMS

SOD = SOURCE TO OBJECT DISTANCE  
OFD = SOURCE SIDE OF OBJECT TO FILM DISTANCE  
OD = OUTER DIAMETER  
WT = WELD THICKNESS  
WR = WELD REINFORCEMENTREP = REPAIR  
RES = RESHOOT  
BM = BASE MATERIAL  
RET = RETAKE  
Acc = AccumulationRADIOGRAPHERS SIGNATURE: SETH SKINNER DATE: 7/31/2025Print: SETH SKINNER

FILM INTERPRETOR

Sign: SETH SKINNERDATE: 7/31/2025

CLIENT REPRESENTATIVE:

Print:

Sign: Quimer

Form# RT-F-001 Rev. 0

AMERICAN PIPING INSPECTION, INC. ASSUMES NO RESPONSIBILITY FOR LOSSES OF ANY KIND DUE TO INTERPRETATION



## NON-DESTRUCTIVE TESTING AND INSPECTION

17110 East Pine St, Tulsa, OK 74116

Tele: (918) 234-6300 Fax: (918) 234-6301

## RADIOGRAPHIC INSPECTION REPORT

## CUSTOMER DATA

NAME RBI  
ADDRESS \_\_\_\_\_  
PURCHASE ORDER \_\_\_\_\_  
ATTENTION NOZZELS  
DAY THURSDAY DATE 7/31/2025  
Project # \_\_\_\_\_ Report # \_\_\_\_\_








JOB NUMBER 1024-6 SO# SN-6445 PAGE 1 OF 1  
APPLICABLE CODE ASME ACCEPTANCE CRITERIA B31.3 NFS  
PROCEDURE # API-RT-002-ASME REVISION # 18 REV. DATE: 1/1/2024 Per Diem \_\_\_\_\_  
TRUCK# T-417 TRAVEL MILES \_\_\_\_\_ TRAVEL HRS. \_\_\_\_\_ WORK HRS. \_\_\_\_\_ STANDBY HRS. \_\_\_\_\_ TOTAL HRS. \_\_\_\_\_  
RADIOGRAPHER SETH SKINNER LEVEL II ASSISTANT ADAM STIDHAM LEVEL I

## TESTING VARIABLES

IR 192 ☒ CO <sup>60</sup> ☐ X-RAY ☐ PROCESSING: AUTOMATIC ☐ MANUAL ☒ DEV. TIME 5 MIN. TEMP. 68

CURIES 55.87 Kv. \_\_\_\_\_  
FOCAL SPOT 0.164 Ma. \_\_\_\_\_  
MATERIAL TYPE \_\_\_\_\_ CS

## RT TECHNIQUE

Technique - A	Technique - B	Technique - C	Technique - D	Technique - E	Technique - F	Technique - G
						
SWE/SWV	SWE/SWV	SWE/SWV	DWE/SWV	DWE/SWV	DWE/DWV	DWE/DWV

FILM: \_\_\_\_\_ FILM USAGE: 3 1/2" X 8 1/2" 12 3 1/2" X 10" 3 1/2" X 17" 70 mm X 12"  
MFG. FUJI 4 1/2" X 8 1/2" 4 1/2" X 10" 4 1/2" X 17" 70 mm X 17"  
TYPE 50 70mm X 8 1/2" 8" X 10" 7" X 17" OTHER \_\_\_\_\_  
CLASS I 70 mm X 6" 5" X 7" 14" X 17" OTHER \_\_\_\_\_

SENSITIVITY 2-2T  
FILM/CASSETTE 1  
Pb. Screen Thk. Front 0.005 Back 0.005

ORIGINAL FILM 12 REPAIR FILM \_\_\_\_\_

TOTAL # EXPOSURES 12

	FILM I.D.	INTERVAL	IQI	RT TECHNIQUE	SHM / BLOCK	MAT'L THK	WELD REIN	TOTAL MAT. THK	SOD	OFD	DIA.	UG	DENSITY	DISCONTINUITY	ACCEPT	REJECT	WELDER I.D.
1	N1	1-2-3-4-1	B	D		0.436	0.125	0.561	1.814"	0.561	2.375"	<.20	2.0-4.0		X		J
2	N2	1-2-3-4-1	B	D		"	"	"	"	"	"	"	"		X		J
3	N3	1-2-3-4-1	B	D		"	"	"	"	"	"	"	"		X		J
4																	
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## DEFECT CODE

## ABBREVIATED TERMS

AB - ARC BURN	HB - HOLLOW BEAD	SLI - SLAG INCLUSION	SOD = SOURCE TO OBJECT DISTANCE
AI - ALIGNED INDICATION	IF - INADEQUATE FUSION	SLL - SLAG LINE	OFD = SOURCE SIDE OF OBJECT TO FILM DISTANCE
BT - BURN THROUGH	IP - INCOMPLETE PENETRATION	SURF - SURFACE INDICATION	OD = OUTER DIAMETER
CON - CONCAVITY	MA - MISALIGNMENT	UCE - UNDERCUT EXTERNAL	WT = WELD THICKNESS
CRACK - CRACK	POR - POROSITY	UCI - UNDERCUT INTERNAL	WR = WELD REINFORCEMENT
			REP = REPAIR
			RES = RESHOOT
			RET = RETAKE
			Acc = Accumulation
			BM = BASE MATERIAL

RADIOGRAPHERS SIGNATURE: SETH SKINNER DATE: 7/31/2025

Print: SETH SKINNER

FILM INTERPRETOR

Sign: SETH SKINNER

DATE: 7/31/2025

CLIENT REPRESENTATIVE:

Print:

Sign: Quimer



## Test Report

Attn: Jenny Reimer  
River Bend Industries  
1700 Crystal Lake Drive  
Blanchard, OK 73010

**Lab Number:** 25070291  
**Date Received:** 07/22/2025  
**Date Reported:** 07/24/2025  
**PO Number:** 40854

**Coupon Description:** 1.5" Thick to 3.5" Thick Weld Plate  
**Welder Name:** Efran Lopez  
**Base Material 1:** SA-516, Grade 70N (1.5")  
**Welder ID:** E  
**Base Material 2:** SA-516, Grade 70N (3.5")  
**WPS:** RBI-5  
**Process:** SAW  
**Position:** 1G

### Charpy V-Notch Impact Test per ASTM A370-24a / ASTM E23-23a

**Condition:** As Received  
**Notch Type:** V-Notch  
**Orientation:** Perpendicular to the Weld  
**Notch Location:** Base Metal (Side 1)  
**Charpy Specimen Size:** 10mm x 10mm  
**Temperature, °F:** -20  
**Weld Code:** ASME Sec. VIII (2023), Div. 1, UG-84

	Impact Value 1 (ft-lbf)				Lateral Expansion 1 (mils)				Shear 1 (%)			
	1	2	3	Avg	1	2	3	Avg	1	2	3	Avg
<b>Results</b>	65	63	65	64	47	46	47	47	55	55	55	55

Test Comments: Specified test requirements modified according to ASTM A370-24a, Table 10 when subsize specimens are permitted or necessary, or both.

Absorbed energy values above 80% of the 240 ft-lbf capacity of the impact tester are approximate. If the absorbed energy value(s) exceed(s) 192 ft-lbf, the average was not calculated per the requirements of ASTM E23-23a, Section 9.3.3.1.

Striker Radius: 8mm

These results MEET the requirements of ASME Sec.VIII (2023), Div.1, Figure UG-84.1





## Test Report

### Charpy V-Notch Impact Test per ASTM A370-24a / ASTM E23-23a

Condition: As Received

Notch Type: V-Notch

Orientation: Transverse Across the Weld

Notch Location: HAZ at 1/4t to 1/2t from Cap Surface (Base Side 1)

Charpy Specimen Size: 10mm x 10mm

Temperature, °F: -20

Weld Code: ASME Sec. VIII (2023), Div. 1, UG-84

	Impact Value 1 (ft-lbf)				Lateral Expansion 1 (mils)				Shear 1 (%)			
	1	2	3	Avg	1	2	3	Avg	1	2	3	Avg
Results	57	49	54	53	42	38	41	40	50	50	50	50

Test Comments: Specified test requirements modified according to ASTM A370-24a, Table 10 when subsize specimens are permitted or necessary, or both.

Absorbed energy values above 80% of the 240 ft-lbf capacity of the impact tester are approximate. If the absorbed energy value(s) exceed(s) 192 ft-lbf, the average was not calculated per the requirements of ASTM E23-23a, Section 9.3.3.1.

Striker Radius: 8mm

These results MEET the requirements of ASME Sec.VIII (2023), Div.1, Figure UG-84.1

### Charpy V-Notch Impact Test per ASTM A370-24a / ASTM E23-23a

Condition: As Received

Notch Type: V-Notch

Orientation: Transverse Across the Weld

Notch Location: Weld Metal at 1/16" from Cap Surface

Charpy Specimen Size: 10mm x 10mm

Temperature, °F: -20

Weld Code: ASME Sec. VIII (2023), Div. 1, UG-84

	Impact Value 1 (ft-lbf)				Lateral Expansion 1 (mils)				Shear 1 (%)			
	1	2	3	Avg	1	2	3	Avg	1	2	3	Avg
Results	13	40	31	28	9	31	26	22	30	55	35	40

Test Comments: Specified test requirements modified according to ASTM A370-24a, Table 10 when subsize specimens are permitted or necessary, or both.

Absorbed energy values above 80% of the 240 ft-lbf capacity of the impact tester are approximate. If the absorbed energy value(s) exceed(s) 192 ft-lbf, the average was not calculated per the requirements of ASTM E23-23a, Section 9.3.3.1.

Striker Radius: 8mm

These results MEET the requirements of ASME Sec.VIII (2023), Div.1, Figure UG-84.1





## Test Report

### Charpy V-Notch Impact Test per ASTM A370-24a / ASTM E23-23a

Condition: As Received

Notch Type: V-Notch

Orientation: Transverse Across the Weld

Notch Location: HAZ at 1/4t to 1/2t from Cap Surface (Base Side 2)

Charpy Specimen Size: 10mm x 10mm

Temperature, °F: -20

Weld Code: ASME Sec. VIII (2023), Div. 1, UG-84

	Impact Value 1 (ft-lbf)				Lateral Expansion 1 (mils)				Shear 1 (%)			
	1	2	3	Avg	1	2	3	Avg	1	2	3	Avg
Results	111	107	123	114	73	64	70	69	60	60	65	62

Test Comments: Specified test requirements modified according to ASTM A370-24a, Table 10 when subsize specimens are permitted or necessary, or both.

Absorbed energy values above 80% of the 240 ft-lbf capacity of the impact tester are approximate. If the absorbed energy value(s) exceed(s) 192 ft-lbf, the average was not calculated per the requirements of ASTM E23-23a, Section 9.3.3.1.

Striker Radius: 8mm

These results MEET the requirements of ASME Sec.VIII (2023), Div.1, Figure UG-84.1

### Charpy V-Notch Impact Test per ASTM A370-24a / ASTM E23-23a

Condition: As Received

Notch Type: V-Notch

Orientation: Perpendicular to the Weld

Notch Location: Base Metal (Side 2)

Charpy Specimen Size: 10mm x 10mm

Temperature, °F: -20

Weld Code: ASME Sec. VIII (2023), Div. 1, UG-84

	Impact Value 1 (ft-lbf)				Lateral Expansion 1 (mils)				Shear 1 (%)			
	1	2	3	Avg	1	2	3	Avg	1	2	3	Avg
Results	87	99	68	85	61	65	49	58	50	60	40	50

Test Comments: Specified test requirements modified according to ASTM A370-24a, Table 10 when subsize specimens are permitted or necessary, or both.

Absorbed energy values above 80% of the 240 ft-lbf capacity of the impact tester are approximate. If the absorbed energy value(s) exceed(s) 192 ft-lbf, the average was not calculated per the requirements of ASTM E23-23a, Section 9.3.3.1.

Striker Radius: 8mm

These results MEET the requirements of ASME Sec.VIII (2023), Div.1, Figure UG-84.1



## Test Report

Approved By: Brent Fowler Title: Technical Director

Signature: BT Fh

\*Test results relate only to the items tested. This document shall not be reproduced, except in full, without the written approval of American Piping Inspection, Inc. Metallurgical Laboratory.  
Conformance statements are based on the Simple Acceptance Rule for measurement of uncertainty.



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CERTIFIED BY  
River Bend Industries, LLC  
BLANCHARD, OK



500 PSI AT 200°F  
MAWP

RT-1  
-20 °F AT 5000 PSI  
MDMT

6445

MFG, S/N

2025

YEAR BUILT