1024-2
W.O. #

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

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** (Horizontal or vertical, tank) | **6399** (Manufacturer's serial number) | **N/A** (CRN) | **60250300 REV-1** (Drawing number) | **6399** (National Board number) | **2025** (Year built)

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

6. Shell: **SA-106 C** (Material spec. number, grade) | **3.5"** (Nominal thickness) | **0"** (Corr. allow.) | **24.0" (OD)** (Inner diameter) | **8' 0.0"** [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** [Long. (welded, dbl., sngl., lap, butt)] | **N/A** [R.T.(spot or full)] | **85%** (Eff.,%) | **NONE** (H.T. temp) | **N/A** (Time, hr) | **TYPE 1***** [Girth. (welded, dbl., sngl., lap, butt)] | **FULL** [R.T. (spot or full)] | **100%** (Eff., %) | **1** (No. of courses)

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

9. MAWP **5000 psi** (Internal) | **0 psi** (External) at max. temp. **200 °F** (Internal) | **0 °F** (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** (Yes or no) Lugs **2** (Number) Legs **0** (Number) Other **4 Pads** (Describe) Attached **Welded to Shell** (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

Manufactured by **River Bend Industries, LLC, 1700 Crystal Lake Drive, Blanchard, Oklahoma, 73010, USA**

Manufacturer's Serial No. **6399** CRN **N/A** National Board No. **6399**

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:	6399	M.A.W.P.:	5000	PSI
N.C.R. NO#:		NAT'L BD NO:	6399	AT:	200	DEG F
HEAT TREAT TIME:		WO NUMBER:	1024-2	M.D.M.T.:	-20	DEG F
HEAT TREAT TEMP:		CUSTOMER:	TRILOGIC	TEST:	6500	PSI
DWG NUMBER:	60250300 REV0	DESC:	SDT-24965000			

PREFABRICATION CHECK LIST

	Q.C.	DATE		A.I.	DATE
FAB DWG :					
CALCULATIONS:	JR	4/4/2025	*	ADM	4/4/2025
WELDER QUAL:	JR	4/4/2025			
WELD PROC:	JR	4/4/2025			
MAT'L REC'D & I.D.:	SEE RECEIVING REPORT				
M.T.R. VERIFIED:	SEE RECEIVING REPORT				

(* HOLD POINT)

FABRICATION CHECK LIST

	Q.C.	DATE
LAYOUT CHECK:		
LAYOUT HEAD:	MV (TS)	6-25-25
LAYOUT HEAD:	MV (TS)	6-26-25
LAYOUT SHELL:	MR (TS)	7/22/25
LAYOUT INTERNAL:	MR (TS)	7/23/25
FITUP CHECK:	Q.C.	DATE
NOZZLES PREP:	MV (TS)	7-25-25
NOZZLES HEAD:	MV (TS)	6-26-25
NOZZLES HEAD:	MV (TS)	6-26-25
NOZZLES SHELL:	MR (TS)	7/23/25
WELDNECK QUALITY:		(MP03)

PARTIAL INTERNALS

SECOND STAGE INSPECTION:

	Q.C.	DATE
NOZZLE FITUP:		
LEGS/SKIRT:		
ATTACHMENTS:		

	Q.C.	DATE	HEAT NO:		
FIT UP R.S. & L.S.:					
FIT UP HEAD & SHELL:	MV (TS)	7-24-25	HEAD:	B3A1-2 ✓	Tmin: 1.355
FIT UP HEAD & SHELL:	MV (TS)	7-24-25	HEAD:	B3A1-2 ✓	Tmin: 1.374
FIT UP SHELL & SHELL:	—		SHELL:	B3A5-8 ✓	THK: 3.519
FIT UP SHELL L.S.:	—		NOZZLES:	—	

POST FABRICATION CHECK LIST

(* HOLD POINT)

	Q.C.	DATE			
WELD SIZE & APPEARANCE:	MV (TS)	7-25-25	INTERNAL INSP: A.I.		*
WELDER STAMPS:	R, SS, G		Q.C.	MV (TS)	7-23-25
ADDITIONAL N.D.E.:	—		N.P. STAMP: A.I.		7-31-25
PARTIAL DATA REPORT:	—		Q.C.	MV (TS)	7-25-25
S.N. Stamped in shell:	MV (TS)	7-25-25	HYDRO TEST: A.I.		7-31-25 *
FINAL INSPECTION:	MV (TS)	7-25-25	Q.C.	(TS)	7-31-25
R.T. REPORTS:	JR	7-31-25	SIGN DATA: A.I.		7-31-2025 *
			Q.C.	(TS)	7-31-25

MF09.06

RBI
River Bend Industries, LLC

Work Order #
Drawing #
Serial #

Nozzle Heat Numbers

Notes, Other

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: 24" 100% BOTTLE
DAY: THURSDAY DATE: 7/31/2025
Project #: Report #:

JOB NUMBER: 1024-2 SO#: SN-6399 PAGE 1 OF 1

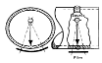
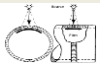
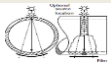
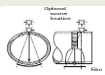
APPLICABLE CODE: ASME ACCEPTANCE CRITERIA: SEC. 8 UW51
PROCEDURE #: API-RT-002-ASME REVISION #: 18 REV. DATE: 1/1/2024 Per Diem:
TRUCK#: T-417 TRAVEL MILES: TRAVEL HRS.: WORK HRS.: STANDBY HRS.: TOTAL HRS.:
RADIOGRAPHER: SETH SKINNER LEVEL: II ASSISTANT: ADAM STIDHAM LEVEL: I

TESTING VARIABLES

IR 192 [X] CO 60 [ ] X-RAY [ ] PROCESSING: AUTOMATIC [ ] MANUAL [X] 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: FUJI
MFG.:
TYPE: 100
CLASS: II

FILM USAGE:

3 1/2" X 8 1/2"		3 1/2" X 10"	3 1/2" X 17"		70 mm X 12"	
4 1/2" X 8 1/2"		4 1/2" X 10"	4 1/2" X 17"	12	70 mm X 17"	
70mm X 8 1/2"		8" X 10"	7" X 17"		OTHER	
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: 2

	FILM I.D.	INTERVAL	IQI	RT TECHNIQUE	SHIM / BLOCK	MATL THK	WELD REIN.	TOTAL MAT. THK.	SOD	OFD	DIA.	UG	DENSITY	DISCONTINUITY	ACCEPT (√)	REJECT (X)	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	R/G	(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	R/G	(2-3)	"			"	"	"	"	"	"	"	"		X		
9		(3-4)	B			"	"	"	"	"	"	"	"		X		
10		(4-5)	"			"	"	"	"	"	"	"	"		X		
11		(5-6)	B			"	"	"	"	"	"	"	"		X		
12		(6-1)	"			"	"	"	"	"	"	"	"		X		
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	

DEFECT CODE

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

ABBREVIATED TERMS

SOD =SOURCE TO OBJECT DISTANCE		
OFD = SOURCE SIDE OF OBJECT TO FILM DISTANCE		
OD = OUTER DIAMETER	REP = REPAIR	RET = RETAKE
WT = WELD THICKNESS	RES = RESHOOT	Acc = Accumulation
WR = WELD REINFORCEMENT	BM = BASE MATERIAL	

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

FILM INTERPRETOR Print: SETH SKINNER
Sign: SETH SKINNER DATE: 7/31/2025

CLIENT REPRESENTATIVE: Print:
Sign:

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: 1024-2 SO#: SN-6399 PAGE 1 OF 1

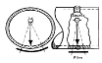
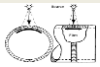
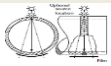
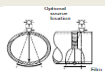
APPLICABLE CODE: ASME ACCEPTANCE CRITERIA: B31.3 NFS
PROCEDURE #: API-RT-002-ASME REVISION #: 18 REV. DATE: 1/1/2024 Per Diem:
TRUCK#: T-417 TRAVEL MILES: TRAVEL HRS.: WORK HRS.: STANDBY HRS.: TOTAL HRS.:
RADIOGRAPHER: SETH SKINNER LEVEL: II ASSISTANT: ADAM STIDHAM LEVEL: I

TESTING VARIABLES

IR 192 [X] CO 60 [ ] X-RAY [ ] PROCESSING: AUTOMATIC [ ] MANUAL [X] 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: FUJI
MFG.:
TYPE: 50
CLASS: I

FILM USAGE:

3 1/2" X 8 1/2": 12	3 1/2" X 10":	3 1/2" X 17":	70 mm X 12":
4 1/2" X 8 1/2":	4 1/2" X 10":	4 1/2" X 17":	70 mm X 17":
70mm X 8 1/2":	8" X 10":	7" X 17":	OTHER:
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: 1
TOTAL # EXPOSURES: 12

	FILM I.D.	INTERVAL	IQI	RT TECHNIQUE	SHIM / BLOCK	MATL THK	WELD REIN.	TOTAL MAT. THK.	SOD	OFD	DIA.	UG	DENSITY	DISCONTINUITY	ACCEPT (√)	REJECT (X)	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	1-2 IF		X	SS
2	N2	1-2-3-4-1	B	D		"	"	"	"	"	"	"	"		X		SS
3	N3	1-2-3-4-1	B	D		"	"	"	"	"	"	"	"		X		SS
4	N1R	(1-2)	B	D		"	"	"	"	"	"	"	"		X		SS
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	

DEFECT CODE

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

ABBREVIATED TERMS

SOD =SOURCE TO OBJECT DISTANCE		
OFD = SOURCE SIDE OF OBJECT TO FILM DISTANCE		
OD = OUTER DIAMETER	REP = REPAIR	RET = RETAKE
WT = WELD THICKNESS	RES = RESHOOT	Acc = Accumulation
WR = WELD REINFORCEMENT	BM = BASE MATERIAL	

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

FILM INTERPRETOR Print: SETH SKINNER
Sign: SETH SKINNER DATE: 7/31/2025

CLIENT REPRESENTATIVE: Print:
Sign:

American Piping Inspection, Metallurgical Lab
18501 E. Admiral Pl.
Catoosa, OK 74015
Office: 918-266-4130

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
Base Material 1: SA-516, Grade 70N (1.5")
Base Material 2: SA-516, Grade 70N (3.5")

Welder Name: Efran Lopez
Welder ID: E
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
Results	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

American Piping Inspection, Metallurgical Lab
18501 E. Admiral Pl.
Catoosa, OK 74015
Office: 918-266-4130

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

American Piping Inspection, Metallurgical Lab
18501 E. Admiral Pl.
Catoosa, OK 74015
Office: 918-266-4130

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

American Piping Inspection, Metallurgical Lab
18501 E. Admiral Pl.
Catoosa, OK 74015
Office: 918-266-4130

Test Report

Approved By: Brent Fowler Title: Technical Director

Signature:

U

CERTIFIED BY
River Bend Industries, LLC
BLANCHARD, OK

RBI

5000 PSI AT 200 °F
MAWP

-20 °F AT 5000 PSI
MDMT

63
MFG, S/N

20
YEAR BUILT

1024-2