						M U-1 MANUF									Correcte	ed Conv	Page 1	of 3	
1 1/	anufactured	and ce	artified			ell & Tube, L												_	
						G, LLC., 1940		DUCTS	BLVI	me and D, AL	LENTOWN, I	Penn:	1101)						
						Y, PARAMO		(Na	ame ai	nd add	ress of Purchas	er)							
											e and address)				004 400	E0 6		9	
4, T	ype	H	IORIZ.	, or sphe	re)		(Tank, sepa		FEXH essel.		xch., etc.)			(Manufa	S21-132 acturer's s	əa-o erial numb	er)		
	(110112	.ontal, v	y Of LICCI	, or spire	10)				,		,		- Jan	70			2023		
		(CF					21-13258-6- (Drawing nu					(Nat	111 ional Bo	ard number)			Year buil	t)	
5	ASME Code,		,	I. Div. 1		20	21/ N/A	8			1	N/A				N/A			
						Edition and Add		cable (dat	te)]		(Code Ca		mber)	[S	pecial Ser	rvice per U	G-120(d)	)]	
	Items 6-11 ir	ncl. to	be coi	mpletea	for singl	e wall vessels	, jackets of	jacketed	vess	els, sl	nell of heat ex	chang	ers, or	chamber of m	ulticham	ber vess	els,		
6. SI	nell: (a) Num				2	-		rall length					5625"						
	Cours	se(s)			Ma	iterial	Thickness				ong. Joint (Cat. A			m. Joint (Cat. A,		_	Treatmen		
No.	Diameter		Lengt	th	Spec./Gra	ade or Type	Nom.	Соп		Туре	Full, Spot, None		Type F	ull, Spot, None	Eff.	Temp.	Tin	_	
1	21" ID		8'		SA-5	16-70N	1/2"	3/16	$\rightarrow$	1	SPOT	1.00	1	SPOT	1.00	N/A	N/		
1	21" ID		6' 0.56	25"	SA-5	16-70N	1/2"	3/16		1	SPOT	1.00	1	SPUT	1.00	N/A	N/	<u> </u>	
								ody Flan	ges or	n Shell	s								
No.	Туре		ID	OD	Flange Thk					Washer	er (OD, ID, Washe thk) Materia								
1	N/A	21		26 5000	" 4 5/16"	N/Δ	SA-350LF2	PCI 1	WEL	DED	END	44 - 3	/4"	SA-193-B7	3/4" O.	D.	F-436-1		
	Heads: (a)	21		20.5000		16-70N	ON-SOULI E	021			(b)			N/A	nds-				
		(Mate	erial sp	ec. numi		or type) (H.T	time and tem	np.)			(Ma	aterial :	spec. nu	mber, grade or	type) (H.7	r time an	d temp.)		
	Location (Top	), [	Ti	hickness		Radiu	ıs	Elliptica		nical Ap	41		Flat	Side to Pressure		Catego		1 = "	
	Bottom, Ends	5)	Min.	(	Corr_	Crown	Knuckle	Ratio		Angle	igle Radius		Diameter Convex		-	_	oot, None	+	
(a)	END		3/8"		/16"	N/A	N/A	2:1	_	N/A	N/A	-	N/A	X	S		one	1.00	
(b)	N/A		N/A		N/A	N/A	N/A	N/A		N/A	N/A		N/A		N/A		N/A	N/A	
							В	ody Flang	ges or	n Head	s				Bolting				
	Location	Тур	oe	ID	OD	Flange Thk	Min Hub Thk	Mate	erial		How Attached	Nu	m & Siz		Was	Macher (OD)			
(a)	N/A N	V/A		N/A	N/A	N/A	N/A	N/A		N/A	A			N/A	N/A		I/A		
	pe of jacket					N/A		·		_Jack	et closure	***	,,	Describe as oge	N/A	har etc.)			
lf	bar, give dim	ensior	ns; if b	oolted, d	lescribe o	or sketch						N/A		Describe as oge	e a weid,	Dai, cto./			
э. М <i>л</i>	AWP	265 psi	<u> </u>	_	15 psi	at max, tem		00 °F			10 °F		_	tal temp.	32 °F	at	265 p	si	
10. lı	npact test	nternal <b>ON</b>	, EXE	MPT P	EXTORNAL) ER UCS-	66(a,c, g), FI	TEST	S @ -40°l	F			IBESI	IEET II	MPACT	it test ter	nperature	of	N/A	
11::H	ydro., pneu., or	comb.	test pr	ressure	HYDR	[Indicate yes O at 449/345	or no and the Proof to		ent(s) i	impact <sub>i</sub>	tested]			1/A					
I	tems 12 and	13 to b	be con	npleted	for tube	sections.													
	ubesheet		SA	4-240S3	1803/3220 terial spec	15		23.5000" (subject to	o pres	is.)]	2" (Nominal thick	ness)		3/16" Corr. allow.)	Attac	BOLTED Attachment (welded or bolted)			
	-		[Float		/A erial spec.	no.)]		N/A (Diameter)		_	N/A (Nominal thick	ness)		N/A Corr. allow.)			nment)		
13. T	ubes	(1	SA	-789S31	803/\$322	05	(Diameter) - 3/4" (O. D.)				(Nominal thickness)  (Nominal thickness)			104			U [Type (Straight or U)]		

Manut	factured by	Fabsco	Shell	& Tube,	LLC, Plant	Two, 2410	Industri	al Roa	id, S	apulpa, Okla	ahom	a, 7400	66, US	A				
Manut	facturer's Seria	al No. \$2	1-13258-6			CRN N	I/A				Nati	onal Bo	ard No	. 11170	)			
	tems 14-18 ind nell: (a) No. of				er chambers	of jacketed v (b) Ove	essels or erall lengt	chann th		f heat exchar 1' 11.3750"	gers.							
	Course	(e)	M	aterial								n. Joint	(Cat. A, E	3, & C)	Heat	Treatme	ent	
No.	Diameter	Leng	ıth		ade or Type	Nom.	Corr	T		Full, Spot, None		Type F	ull, Spot	, None	Eff.	Temp	Т	ime
1	21" ID	1' 11.3			16-70N	1/2"	1/8"		1	SPOT	1.00	1	SPO	T	1.00	N/A	1	V/A
							ody Flang	nes on	Shell	s								
		1		Flange				Ho							olting	OD ID	Mod	obor
No.	Туре	ID	OD	Flange Thk	Willi Hub Ti	Hub Thk Material Attached L		Location		& Size	Ma	olting iterial	Washer (	()	Mat	sher erial		
2	N/A	21"	26.5000	0" 4 1/8"	N/A	SA-350LF2	2CL1	WELD	ED	ENDS	44 - 3	/4"	SA-19	93-B7	3/4" O.D		F-436-	_
15. H	leads: (a)	(Material s	nec num	SA-5	16-70N or type) (H.T.	- time and tem	np.)			(b)(Ma	iterial :	spec. nu	mber, gr	N/A rade or t	ype) (H.T.	- time ar	d temp.	.)
	Location (Top,		hickness		Rad		Elliptica	Conic	cal Ap	ex Hemispheric	al	Flat	Side to I	Pressure		Catego	гу А	
	Bottom, Ends)	Min.		Corr.	Crown	Knuckle	Ratio	A	Ingle	Radius	Di		Convex	Concave	Type	Full, S	pot, Non	ne Eff.
(a)	END	2 1/4"		1/8"	N/A	N/A	N/A		N/A	N/A	2	6 1/2"			S	) N	one	1.00
						В	Body Flang	ges on l	Head	5	_				S 141			
	Location Type ID OD Flange		Flange Th	hk Min Hub Material			F	low Attached	Nu	m & Size	Bolt	Bolting Material Was		er (OD, thk)	Vasher			
N/A	N/A N/	A	N/A	N/A	N/A	N/A	N/A		N/A		N/A		N/A		N/A	_	V/A	
17. l	,	ternal)		R UCS-		G. UCS-66 (	GENERA	L NOT	E(c),	, UCS-67. TU	BESH	EET IN	IPACT	at —	test temp	erature	of	N/A
				[I	ndicate yes													
18.	Hydro., pneu.	, or comb	o, test p	ressure	Hyd	ro. at 206/1	95	Proof	test					N/A				
19. I	Vozzles, inspe	ction, and	d safety	valve op	enings:													
	se (Inlet, Outlet, Dra	in	Diam			Mate	erial		Noz	zle Thickness		forcemen	_	Attachment [		nt Details		tion
	elc.)	"' No.	or S	ize	Туре	Nozzie Flange Nom. Con.		_	/laterial		Nozzle	Flang	-	(Insp. C				
	INLET	1	10"-3		RF WN	SA-106B	SA-350LI		XI			516-70N	_	JW16.1	WELDE		SHE	
	OUTLET	1	8"-3		RF WN	SA-106B	SA-350LI		XI		SA	-516-70	-	JW16.1	WELDI	_	SHE	
	AUX	2	2"-3		RF LWN	0.1.4000	SA-350LI		0.6		64	-516-70N	_	JW16.1 JW16.1	WELDI	_	CHAN	
	ILET/OUTLET	1/1	4"-3		RF WN	SA-106B	SA-350LI SA-350LI		0.6		SA.	-510-70F	_	JW16.1	WELDI	_	CHAN	
	/ENT/DRAIN	1/1	2"-3 2"-3		RF LWN RF LWN		SA-350LI		0.6					JW16.1	WELDI	_	CHAN	
20.	AUX Supports: Sk				ONE Le	gs <u>NONE</u>		ners	0.0	2 SADDL			1	ached	WEL	DED T		ELL
Man	Manufacturer's Pa ufacturer's name, CYLINDER, IT	and identify	eports pro ying numb	operly iden per): S BAYO	U PIPE MII	.L, SN: 958	oned Inspec	ctors hav	ve bee	(Describe	,	wing iten	ns of the	report (li		Where ar		nber,
22. F	Remarks	מ אואמסר	ECOVE	Y COM	PRESSOR T	NTERSTAGE	COOLE	R II	EM:	18-X-370	A.							

#### FORM U1

Manufactured by Fabsco Shell & Tube, LLC, Plant Two, 2410 Industrial Road, Sapulpa, Oklahoma, 74066, USA

Manufacturer's Serial No. \$21-13258-6 CRN N/A National Board No. 11170

We certify that the statements in this I	CERTIFICATE OF SHOP report are correct and that all details of design, SSEL CODE, Section VIII, Division 1. U Certifi	material, construction, and we	orkmanship of this vessel conform to the  30112 Expires December 30, 2024								
Date 11/30/2023 Name	Fabsco Shell & Tube, LLC, Pla (Manufacturer)	nt Two Si	(Representative)								
	CERTIFICATE OF SHOP	INSPECTION									
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 In	surance Company, of Lynn, MA		T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
have inspected the pressure vessel d	escribed in this Manufacturer's Data Report of	November 9, 2023	and state that,								
VESSEL CODE, Section VIII, Division	ef, the Manufacturer has constructed this press n 1 By signing this certificate neither the Insp iibed in this Manufacturer's Data Report. Furth perty damage or a loss of any kind arising fror	ector nor his/her employer mai nermore, neither the Inspector	nor his/her employer shall be liable in any								
Date11/30/2023 Sig	ned	Commissions: (National Board Au	16613 uthorized Inspector Commission number)								
We certify that the statements made in of ASME BOILER AND PRESSURE V	CERTIFICATE OF FIELD ASSI this report are correct and that the field asser ESSEL CODE, Section VIII, Division 1. U Cer	nbly construction of all parts o	f this vessel conforms with the requirements er Expires								
DateName_	(Assembler)	S	igned(Representative)								
	(Addembler)										
		WELV INCREATION									
	CERTIFICATE OF FIELD ASSE										
	ommission issued by The National Board of										
have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items, not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. The described vessel was inspected and subjected to a pressure test of											
from or connected with this inspection  Date Signification	gned(Authorized Inspector)	Commission (National Boar	d Authorized Inspector Commission number)								

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)

Page 1 of 2

## Λ Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1.	Manufa	. Manufactured and certified by Greens Bayou Pipe Mill 13935 Industrial Road Houston, Texas 77015													d Hous						
2.	Manufa	cture	d for				N	lorthsi	nore Su	pply 139	(Nam	o and add	ress of	Manufac	turer)	as 7701			-		_
							7 7 7			(Name	e and a	ddress of	Purcha:	ser)	, I CA	33 1 1 0 1			-		
Э.	LUCALIOI	11 10 11	ารเอก	ation							(N:	Unkno ame and		;)	-			_			
4.	Тура	scriptio	in of w	naral par	1 Shell	pioco haad, tul					497-2										
				osaei pari	ranun, two-p	noco nesa, tul		9497-		Manufactu	ror's sq	rial numb	er)					(C	RN)		
	(Nation	al Boar	d num	ber)			(Orawin						-		(Drawin	ng prepare	ad hv)	_		202	
5.	ASME C	Code,	Sect	ion VIII	, Div. 1 _		202	1								·B p.opur	,			(Year b	uiit)
	Shell:					[Edition and	d Addenda,	if applic					Case no			_		pecial s	ervice pe	or UG-120(d	)1
0.	Silen:		urse(s)		ourse(s)		1 Material		_	(b) Over		ngth_	_			23.375					
No.	Di	ameter		1	ength	Spec.	/Grade or Ty	m) e		Thickno		+-	l c.	Joint (Ca ill, Spot.		Circum.			$\overline{}$	Heat Trea	tment
1		21°ID		+	.375*		4516-70N	pa		0.5°	Corr.	Typ 1		None	Eff.	Тура	Nic	Spot, one	Eff.	Temp.	Time
										-		1	+	Full			-	-			
				L.,																	
-	1								Body Fla	nges on St	nells										
o. Type ID OD Flange Thk Min Hub Thk Ma													ting Washer								
		1	7	- 00	rrange ink	WIN HUB IN	Ma	terial	-   H	ow Attache	ad Lo	ocation	Num	& Size	Baltín	g Materia	-	(OD, ID		Washer	Mater
											+				-		┢			-	_
-	-	-	+								$\blacksquare$										
	leads: (a							_													
	10003. (8	·/ =				ber, grade or	type) (H.T.	time .	and temp	)	_ (b)	-	(Ma	terial spe	c. numb	er, grade	or type	) (H,T	time a	nd temp.)	
	Location (Top, Thickness  Bottom, Ends) Min, (			Corr.	Radius Elli					Conical Hernis.			Flat		Side to Po				Category A		
a)						Crown	F.nu	:kla	Ratio	Apex Ar	ngla	Radius	<b>┤</b>	Diameter	Co	nvex	Conca	ve	Type	Full, Spat, None	Eff.
ol						+		-		├	-		+	_	+-			4			
									Rody E	anges on l	Manda							_			_
								1	oody r	anges on	neags						Boltin	g			-
-	Location	Ту	ре	1D	00	Flange Thk	Min Hub Thi		Materia		How At	tached	Num 8	& Size	Battin	g Materia	1	Washer (OD, ID, thk) Washe			Materi
2)		+	-					-													
_	1AWP _				al	may tem		_			_				1						
i c	npact te	(Inter	nall	(Ext	ornal)	max. tem	(1	nternal)		(Externa	al)	Min. c	lesign	metal	temp.			8	et		
	iipaci ie.	a( =			[In	dicate yes or	no and the c	отроп	ent(s) imp	act tested	-		-	at t	est ter	nperati	are of	_			
						е		е		Proof t	est _		-								
. No	ozzles, ir	rspec	tion,	and sa	fety valve	openings	:														
(Inle	Purp ot, Outlet, C		tc.i	No.	Diame or Si		,  -		terial		_	hicknass	4	Reinforc			lachmor		_	Location	
				140.	5	1,7,	,	ozzle	Flang	e No	m.	Corr.	+	Mate	rial	Noz	zlo	Flan	ge	(Insp. Ope	ın.)
													士								
lde	entificati	ion of	part	(s)																	
	Nar	me of P	art		Quant	tity Line No	. Mír's	. Idantil	ication No	o.	Mír's.	Drawing	No.		CR	N	Nat	ional Bo	oard No.	Your	Built
_					-																
_			_					_	_	l											
Su	pports:	Skirt	(Yes	or na)	Lugs _	Number)	.egs	ımbər)	_ Othe	r —	(Des	scribe)	-	Attacl	hed 🖵		r	Where a	and how	)	_

<sup>\*</sup>No Design Functions by GBPM: WPS qualified with/without PWHT. Formed In Accordance with UG 79, UG 80 and UCS 79.

### FORM U-2A

Page 2 of 2

Manufactured by	Greens Bayou Pipe Mill											
Manufacturer's Serial No.	9497-2			oard No								
	(	CERTIFICATE OF SHOP/F	ELD COMPLIANCE	-								
We certify that the statements mad vessel part conform to the ASME B U or PRT Certificate of Authorization Date Name	de in this report BOILER AND PRI I no5 Green	are correct and that all of ESSURE VESSEL CODE, 59125	details of material, constr Section VIII, Division 1 1/13/2024	June (Regresentative)								
	(	CERTIFICATE OF SHOP/F	ELD INSPECTION									
I, the undersigned, holding a valid Authorize	d commission i	ssued by the National I	Board of Boiler and Press	sure Vessel Inspectors and employed by								
mave inspected the pressure vessel	part described in	n this Manufacturer's Da	ta Roport on	10/11/2022								
ASME BOILER AND PRESSURE VE makes any warranty, expressed or in	nowledge and SSEL CODE, Se nolled, concerning shall be liable in	belief, the Manufactur ection VIII, Division 1. By	er has constructed this properties of the second se	pressure vessel part in accordance with reither the Inspector nor his/her employer acturer's Data Report. Furthermore, neither amage or a loss of any kind arising from or								

# FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM) A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII.

Page \_1\_ of \_2\_

1) Manufactured a		d by							dustrial Roa					on 1		
2. Manufactured fo	(Name and address of Manufacturer)  Manufactured for Northshore Supply 13935 Industrial Road, Houston, Texas 77015  [Name and address of Purchaser)															
3. Location of insta	llation						me and	Unknow								
4. Type	1	Shell			NAMES OF THE OWNER.		9589-									
(Description of	viissot part (s)	hall, two pieci	head, tube p			danufac	turar's s	erial number	13				(CRN)			
(National Boat Louis	mbert			(Drawing min		_								20:	22	
5. ASME Code, Sec	ction VIII, [	Div. 1				Mrawin	O DEPOACE	l hyl		lYuar	builti					
		ree(s)		•	licable (date)				ase number)		68.562"	[Special	al service p	or UG-1206	d)	
Course	(5)		Ma	terial		Thick	iness	ι	ang. Joint (Ci	it. A)	Circum, .	loint (Cat.	A. B & C)	Hoat Tre	atmen	
to Diameter	Leng		Spect/Gr.	ade or Type	N/	חומ	Corr	Туре	Full, Spot, None	EII.	Туре	Full, Spo None	t. Eff.	Temp	Tim	
1 2170	90			G-70N	0.	.5"	•	1	Full		1	Full				
1 21°ID	72.56	25*	SA51	6-70N	0.	.5"		11_	Full	•						
					D. J. Fl.					Щ			1			
					Body Flan	ges on	Shells					Bolting				
o Type ID	Type IO OD Flange Ink		this Min Hoti This Material			w Attac	ched [	ocation.	Num & Size	Boltin	Bolting Material		Vasher J. ID, thki	Washe	r Mater	
Heads: (a)	Material	en er er ert					(b	)}								
Location (Top	Thicknes			e) (H.T. — tim dius	100000000000000000000000000000000000000				(Material s)	-			T time i			
	Men	Care	Crown	Knuckle	Elliptical Ratio		nical Angle	Henns. Radius	Flat Diameter		Side to Pre	Concave	Туре	Full, Spo		
0.0				1		-	$\neg$			+				None	-	
															+	
					Body Fla	inges o	n Heads								_	
												Bolting				
Location Type	۵i	OD FI	Tanga Tilk Min Hub Thk		Material		How A	Mached	Num & Size	Bulting Material		Washer (OD, ID, thk)		Washer Mater		
MAWP		at m	ax. temp.							J						
Impact test	(Exteri	nan		Untere No and the comp					esign meta				at			
Hydro,, pneu., or o Nozzles, inspection		pressure														
Purposo		Dameter			latenal		Nozzie	Thickness	Reinfor	tement	Attr	ichment D	etails	Locatio		
(Intot. Outlet, Drain, etc.)	No	or Size	Tynii	Nozela	Flange	+	Nesm	Con	Mate	mat	Nozz	le F	lange	finsp. Op	om.)	
						+		1			+-	-				
Identification of pa	rt(o)	•						1			1					
Name of Past		Quantity	Line No.	Mir's liter	telication No	Т	Mfr	s. Drawing N	No.	CR	N	Nationa	al Board No	Year	Built	
														_		
Supports: Skirt	No L	.ugs	Leg	)s	Other			250	Attac	hed =			ere and hos			

### FORM U-2A

Page 2 of 2

Manufactured by		Greens Bayou Pipe Mill									
Manufacturer's Serial No. 9	589-1 CRN	National Board No									
LL on BRT Constitute A 1	in this report are correct and ILER AND PRESSURE VESSI										
Date Name	Greens Bayou Pipe M	Expires 1/13/2024  Signed Edundo Huma (Representative)									
	CERTIFICATE OF	F SHOP/FIELD INSPECTION									
	repositori Associates, LLC	National Board of Boiler and Pressure Vessel Inspectors and employed by  of									
have inspected the pressure vessel pa	rt described in this Manufact	turer's Data Report on 10/10/2022									
ASME BOILER AND PRESSURE VESS makes any warranty, expressed or impl	owledge and belief, the Ma SEL CODE, Saction VIII, Divi- lied, concerning the pressure III be liable in any manner fo	nufacturer has constructed this pressure vessel part in accordance with sion 1. By eigning this contificate neither the Inspector nor his/har employer vessel part described in this Manufacturer's Data Report. Furthermore, neither rany personal injury or property damage or a loss of any kind arising from or									