## FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

				u • u	,						-,											
1. N	lanufactured an	d certif	ied by _		FABSCO	SHELI	. & TU	BE,	LLC., 2410 (Name and add	IND	USTF	RIAL F	ROAD, SAPL	JLPA,	OK 74066							
2. IV	lanufactured for					;	SOUT		COMPAN	Y GI	ENE		N									
									eme and address of EMPER CO		,	MS				4.						
					KEMPER COUNTY, MS   (Name and address)   HEAT EXCHANGER   S11-10279-7   (Tank, separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.)																	
			oriz., vert.,	or sphere)	- 04		(Tank,															
_		N/A CRN)			S1	(Drawing N	9-7-1 o.)			(Na	7538 at I Bd. N	0.)	<del></del>		(Year built)	*						
5. A	SME Code, Sec	ction VI	III, Div. 1		2010	ED.	e/l		(Co	N/A	A se No 1			necial Se	N/A	· · · · · ·						
Items	6-11 incl. to be	comple	eted for s	single wal	l vessels, ja	ackets of	iacketed						hamber of multi	ichamb	er vessels.	71						
6. S	hell (a) No. o	f cours	e(s):		1/1			(b) C	verall length (f	ft & in	ı.):	16	'-5 3/8" / 1'- <sub>4</sub>	4 1/4"	<u>.</u>							
	Course(				Material	Th	ickness		Long. Joint (C	at. A)		Circu	ım. Joint (Cat. A, E		Heat Treat	tment						
No.	Diameter, in.		h (ft & in.)	+	/Grade or Typ			Туре		one	Eff.	Туре		<del>                                     </del>		Time						
1*	18" O.D. 24" O.D.		-5 3/8" 4 1/4"		-312TP304L -312TP304L	1/4		S	NONE		0.85	1 1	FULL(RT-4) FULL(RT-4)	1.0		N/A N/A						
<u> </u>	* ANNULAR DIS	L		J 0A	31211 3042				HORE		0.00		TOLL(ICT 4)	1	1.07							
7 · H	leads: (a)			SA-	240-304L				(b)				NA		1.							
	leads: (a)		(Mat'l Spe	c. No., Grad	e or Type) (H.T	Time & T	emp.)				(N	lat'l Spec	No., Grade or Type)	(H.T T	ime & Temp.)							
	Location (Top,	Thic	kness	Ra	dius	Elliptica	Cor		Hemispherical	F	-lat	Sid	e to Pressure		Category A							
(-)	Bottom, Ends)	Min.	Corr.	Crown	Knuckle NA	Ratio 2:1	Apex		Radius		meter NA	Conv		Type S	Full, Spot, None	Eff.						
(a) (b)	END	3/16		INA	INA	2.1		^	NA .	<del> </del>	NA .	INA	<del>-   ^  </del>	-	HONE	1.00						
	ovable, bolts us	ed (de:	scribe ot	her faster	ning)	<u> </u>					N	Α										
	, ,	•			NA				(/)	Mat'l Sp	ec. No.,	Grade, si	ze, No.)	ΙΛ								
	ype of jacket _			· · · · · · · · · · · · · · · · · · ·	INA				_ Jacket clo	Sule .			(Describe as oge	e & weld	bar, etc.)							
	bar, give dimer	sions						NΔ						If bol	ted, describe or							
9. M	(interna	al)	NA (extern	lal) p	si at max. te	emp. <del>(i</del>	1290 nternal)		NA °F N (external)				emp. 10		at <u>180</u>	psi.						
10. In	npact test <b>N</b> lydro. Test pres	O,Ex	empt F	er ug-	20(f), ucs	-66(a)(	c), Fig	ucs	-66 Note(c	)&(	ucs-6	5 <b>7</b>	at test temperat	ure of_	NA	°F.						
11. H	vdro. Test pres	.) 3. × ×	10,76	Įina	icate yes of no	234	nponent(s	Impaci	Proof test				NA									
	12 and 13 to be								-		-				**							
	ubesheet:	SA-2	40-304	łL	19	9 1/8"			1 3/8" (Nom. thk., in.)				).1875"		Bolted [Attachment (welded or bolted)]							
						NA	ess.)]		NA			(00	orr. Allow., in.)	NA								
		loating (	Mat'l Spec.	No.)]	(I	Dia., in.)			(Nom. thk., in.)			(Co	orr. Allow., in.)	(Attachment)								
13. T	ubes: (Ma	SA-21	No., Grade	or Type)	(Combers of is	<b>1</b> D.D., in.)		<u> </u>	0910 THK a	avg uge)		51 "U" (Number) [Type (Strait or U)]										
	14-10 IIICI. 10 DE	, σοιπρ	icteu ioi	IIIII GI GIIC	annocio di je	ICHETER A	essels c	r chan	nels of heat ex	xchan	ngers.											
14. S	hell (a) No. o	f cours	e(s): _		. 1			(b) C	verall length (f	ft & in	ı.): <u>.</u>		1'-10"		<u></u>							
	Course(	<del></del>			Material		ickness	ļ	Long. Joint (C	<del></del>			ım. Joint (Cat. A, E	<del></del>		_						
No.		_	h (ft & in.) -10"			e Non		Type	Full, Spot, None	one	0.85	Type 1	Full, Spot, None	1.00	<del></del>	Time N/A						
1	18" O.D.	1	-10	SA.	-312TP304L	1/4	+-	+ *	NONE		0.05		FOLL	1.00	N/A	IN/A						
,	<u> </u>			·				-l						<u> </u>	<del></del>							
15. H	leads: (a)				240-304L				(b)				NA									
•	· · · · · · · · · · · · · · · · · · ·		(Mat'l Spe	c. No., Grad	e or Type) (H.T	- Time & T	emp.)						at Spec. No., Grade or Type) (H.T Time & Temp.)									
	Location (Top, Bottom, Ends)		kness		dius	Elliptica	Cor Apex		Hemispherical Radius		Flat meter	<u> </u>	e to Pressure	Timal	Category A	.						
(a)	END	Min. 1 3/4"	Corr.	Crown	Knuckle Ratio		Apex		NA	Diameter 22 5/8"		Conv		Type S	Full, Spot, None	Eff.						
(b)		. 31-4	<del>                                     </del>				† <u>"</u>			† <u></u>						1						
_ · ′																						
If rem	ovable, bolts us	ed (de	scribe of	her faster	nina)	(20)7	8"Dia	&(20	)7/8"Dia.S/	<u>۱</u> -19	3B7	Studs	W/SA-194-2	2H He	avv Hex Nu	ıts						

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						۲	-ORM U-1 (B	ack)						
16.	. MAWP _	150		NA psi	at max. te	.emp	200		NA	°F Min. design r	netal temp	<b>10</b> °F at	t <b>_150</b>	psi.
17	. Impact tes	(internal)	(ext		) Ever	pt Per ucs-6	(internal)		kternal)				NA	۰۰
17.	Impact tes	Si		140	Indicate	yes or no and the cor	mponent(s) impact te	sted)				-	NA	_ °F.
18.	. Hydro., pr	neu., or c	omb. Te	est pres:		195		P	roof te		NA	١	·	
19.	Nozzles, i	inspectio	n, and sa	afety valve op	enings:									
Г	Purpose	e		Diameter	Flange	Ma	nterial	Nozzie Th	nickness	Reinforcement	How Atta	ached	Locatio	n
(In	nlet, Outlet, Dr		No.	or Size	Туре	Nozzle	Flange	Nom.	Corr.	Material	Nozzle	Flange	(Insp. Ope	
-	INLET	-	1	6"-300#	RF-WN	SA-312TP304L	SA-182F304L	0.4320"	0"	NA	UW16.1	NONE,0.7	NA	
	OUTLE	T	1	8"-300#	RF-WN	SA-312TP304L	SA-182F304L	0.5000"	0"	NA	UW16.1	NONE,0.7	NA NA	
	INLET/O	טע	1	4"-150#	RF-WN	SA-312TP304L	SA-182F304L	0.2370"	0"	NA	UW16.1	NONE,0.7	NA	
	INLET		1	4"-150#	RF-WN	SA-312TP304L	SA-182F304L	0.2370"	0"	NA	UW16.1	NONE,0.7	NA	
	VENT		1	2"-150#	RF-WN	SA-312TP304L	SA-182F304L	0.2180"	0"	NA	UW16.1	NONE,0.7	NA	
	DRAIN	1	1	2"-150#	RF-WN	SA-312TP304L	SA-182F304L	0.2180"	0"	NA	UW16.1	NONE,0.7	NA	
	VENT		1	3/4"-6000#	CPLG	SA-182F304L	NA	6000#	0"	NA	UW16.1	NA NA	NA	
	DRAIN		1	3/4"-6000#	CPLG	SA-182F304L	NA	6000#	0"	NA	UW16.1	NA	NA NA	
					7	1		<del>                                     </del>			-			
								<b>—</b>		·		† †		
20	Supports:	Skirt	NO L	ugs NONE	E Legs	NONE	Others	12	)Sadd	lles Attached	w	elded to	Chall	
20.	Опрропо.		es or no)	(No.)	Legs	(No.)	_ Ouleis		(Describe			(Where and		
21.	Manufactu	urer's Par	rtial Data	a Reports prop	erly iden	tified and signed	by Commission	ned Inspe	ctors ha	ave been furnished	for the follo	wing items	of the repo	ort:
	(List the na	name of p	oart, item	number, mfg'	ı's. name a	and identifying n	number)					-		
	SHELL,	CHAN	NEL &	NOZZLES	, ITEM	#6, #7, #14,	#15, #19, J 8	k M WE	LDING	G, LLC., SN: 9	3057.1, 93	3057.2		
								<del></del>						
22.	Remarks:	SERV	ICE: A	GR FLASH	I GAS (	SOOLER	ITEN	/ NO.: H	<u>1X106</u>	5	·			
			<del></del>					R			<del> </del>			
	STRAIG	HT TU	BE LE	NGTH = 16	<u>"0-'ز</u>									
							ATE OF SHOP				-			
							details of design	ı, material	l, const	ruction, and workn	nanship of th	nis vessel (	conform to	the
	J Certificate			ssels, Section	1 VIII, DIVI:		Expires	D	acem	ber 30 ,2: 12	2			
	1	f	_ '		-		· ·				<del>///</del>		A -i	Λ_
D	Date <u>4/2</u>	<u> 17/10</u>	Nam_	ne	FAB:	SCO SHELL		<u>C.</u>		Signed <u> </u>	Lugar	o a	chive	0
			<del>`</del>			(Manufacti	ATE OF SHOP	INSPECT	TION		(Repye	esentative)		
1.	the unders	ianed, he	olding a v	valid commisi-	on issued					essel Inspectors ar	adior the Sta	eta or Provi	ince	
0				ployed by		NEBEACON				of ,		NN, MA	.nce	
-				· · · —		s Manufacturer's				9/19/12-		414,	. 2	nd
							•		ressure	vessel in accorda	ance with AS	SMF Code		
D	Division 1. B	3y signing	g this ce	ertificate neith	er the Ins	spector nor his	employer make:	s any war	rranty,	expressed or impl	lied, concern	ning the pr	essure ves	sel
de	escribed in	this Man	nufacture	er's Data Repo	ort. Furthe	iermore, neither i	the Inspector no	or his emp	oloyer s	shall be liable in ar	ny manner fo	or any per	sonal injury	or
	0/0	nage or a			ig from o	or connected with	ı this insoégtion.			10 -	/	1 01	4	
D	ate <u>4/2</u>	1/12	Sign	ned//	urs	(A) Harizard De	ight		Com	mission N37	<u>935/1</u>	L OK	657	
						ERTIFICATE OF	F FIELD ASSEN	JBLY CO	MPLIA	(Nati Board	1 inci. endorsem	ents, State, M	rovince, and No	).)
V	ve certify th	at the sta	atements	s on this repor						rts of this vessel co	onforms with	the		
re	quirements	s of ASM	E Code,	Section VIII,	Division 1	1. U Certificate o	of Authorization I	No.	w p.c	10 01 4110 10000	Jilioiii.o	1110		
	Certificate						Expires			,20				
_			Non				-	_						
, ט	ate		Nam	16		(Assembl	ler)			Signed	(Renre	esentative)	<u> </u>	
		-			c	CERTIFICATE O		MBLY IN:	SPECTI	ON	(Ivabio	semanve)		
Ì,	the undersi	igned, hc	lding a vد	valid commisio						essel Inspectors an	nd/or the Sta	te or Provi	nce	
of				oloyed by										1
of	i			, hav	ve compa	red the stateme	nts in this Manu	facturer's	Data R	eport with the des	cribed press	ure vessel		_
				o as data item					incl	uded in the certific	ate of shop	inspection,	, have been	
in	spected by	me and	to the be	est of my knov	vledge ar	nd belief, the Ma	nufacturer has c	onstructe	d and a	ssembled this pre	ssure vesse	I in accord	ance	i
						ribed vessel was							psi.	.
By	y signing th	is certific	cate neith	ner the Inspec	tor nor h	is employer mal	kes any warrant	y, express	sed or it	mplied, concerning	the pressu	re vessel c	lescribed in	.
								yer shall h	oe liable	e in any manner f	or any perso	onal injury	or property	,
	-	ioss of a	-	=	r connect	ted with this insp	ection.		_					
1):	ate		Sign	-ea					Com	miccion				

## FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT

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, Division 1

1.	Manufacture	ed and	d certified	d by			J8	kM V	Veldir	ng, LLC	7862 Sout	h Reg	ency	Drive,	Tulsa, O	K 741:	31						
2	Manufacture	d for						Fal	bsco.	LLC P	Name and addr O. Box 988	3, Sapu	ılpa,	<b>OK 74</b>	067								
				-							(Name	and add	iress c	f Purcha	ser)								
3.	Location of	install	ation							(1	unkr Name and addr	nown" ress)											
4.	Type:						CHANNE			LES				057.1,									
		[	Description					ad, tu	be bur	idle)]	FABSCO, L	ıc	(Mfg':	s serial N	0.)		2012	(CRN)					
	(National Board	inumb	er)		11-1027 (Drawl)	9-//8-1 ng numb		_		(	Drawing prepar					(Y	ear bu						
	SME Code S			v. 1	Per lui	201		11			(Code Case n	umbar)			ΓSne	rial San	ilco no	er UG-120(d	1)1				
<b>-</b> .	ns 6-11 incl.				-		enda (date		iaaka	tad wan		•	vaha	NGAWE A	- '			•					
						u vesse		s oj j					acmi	ngers, c				.number i	COOCIO				
6. S	Shell (a) Nu	mber	of course	e (s):			1			o) Ove	rall Length			16′ 5-3/8″									
No.	Cours		ength	Snor	Material c./Grade o		Nom.	cknes	s Corr.	Type	Long. Joint (C		Eff.	Circum. Type	Joint (Cat. Full, Spot			Heat Tre Temp.	atment Time				
1	1' 6" Od		5-3/8"		312TP3		.25"		0"	S	NONE		0	1	FUL		100						
1		-																					
				1				1_			ļ <u>.</u>	-+				<del></del>	<u> </u>						
<u>.                                    </u>			<del></del>	1			<u> </u>			1	·				ļ			l					
7. F	leads: (a)				SA-965	-F304L	<u>-</u>			_(b)					-240-304								
			aterial spec	. numb	er, grade	or type)	(H.T. – ti	me &	temp)		(Material spec.					or type) (H.T. – time & temp)							
	Location (Top, Bottom, Ends) Thickne		ess Radius			Ellipt			nical Apolo	Hemispherical Radius	Flat	~ -	Side to Pressure		Type Full, S		itegory A						
		Min.		Corr.	Crown	Knuck	uckle Ratio		Apex Angle		Raulus	Diameter		Convex Concav			Spot, Non	e Eff 100					
<u>(a</u>			3.9375"	0								22.62	5"			S		NONE					
(b	<u> </u>		.1875"	0		l	2:1	<u> </u>				L			X		<u> </u>	NONE	100				
If re	emovable, b	olts u	sed (des	cribe	other fa	stenin	gs)				/Matoria	l spec r		/A	size, numb	er)							
8.Tv	ype of jacke	t								Jacke	et closure	n spec. r	IUITIDE	a, grade,	, size, manne	,,							
										_				(Desc	ribe as oge			etc.) scribe or	akatah				
,	If bar, give o	ılmen	Sions	-							<del></del>		<u>:</u>			DOILEO	, ues	scribe or	Sketti				
9. N	1AWP 1	80PSI		is i	at m	ax tem	ър	290	°F			Min. d	esigi	n meta	l temp1	LO°F	at	180	psi				
10		nternal)	(Ex	ternal)	_	'. NI	ONE	(Inter	nal)	(E)	cternal)	· toct t	homn	erature	of.								
10.	Impact Test			Indicat	e yes or n		ne compon	ent(s)	) impa	ct tested		. test t	emp	ciatuit									
11	Hydro., pne	u or	comb to	ect në	occ		NONE		Dr.	oof Te	et												
		•					INOINE		' ' ''	001 10													
	ns 12 and 13 Tubesheet	io ve c	:отрієїец -	i jor u	uve secii	vns.		_						_				_					
12.	lubesileet	[Sta	tionary (mate	erial spe	c. no.)]	(Dia	meter, (sub	ject to	pressur	re)]	(Nominal thick	ness)	_	(Corr. Al	ow,)	[Att	chmer	it (welded or	boited)]				
	_	Floati	N/A ng (material	enoc ne	- 11		(Diame	tor\			(Nominal thicknes			Corr. Allov	low.) (Attachment)								
13.	Tubes		-				`-	(GI)			·	•		-			·	<u> </u>					
		•	l spec. no., g				(O.D.)			•	ominal thickness)			(Numb	er)		[Туре	(straight or I	U)]				
Iten	ıs 14-18 incl.	To be	complete	ed for	inner ch	amber	s of jack	eted	vessei	ls or ci	hannels of h	eat exc	hang	ers.									
14.	Shell (a) No	o. of c	ourse(s)	:		1			<u>       `                             </u>	) Over	all length:					1′ 10							
No	Cour		enath	Sner	Material /Grade or	Type	Thickness Nom. Corr.			Туре	Long, Joint (Cat. A) Full, Spot, None		Eff.	Circum. Type	Joint (Cat. /	A, B, & C) t, None   Eff							
No. 1	Diameter 1' 6" Od		' 10"		7Grade or 312TP3(		.25"		)"	S	NONE		100	1	FUL		100	-	-				
				7.0														.:					
									1		1						1						

## Form U-2 (Back)

15. H	eads: (a)			SA965-			(t	)				- <del></del>				_
	(					H.T. – time	& temp)		(Ma	terial spec.			oe) (H.T.	- time & ter		_
	Location (10p,		Thickness		ilus	Elliptica				Flat	<b></b>	Pressure	<del></del>	Category		_
	Bottom, Ends)	Min.	Corr.	Crown	Knuckle	Ratio	Apex Ang	le Radi	us	Diameter	Convex	Concave	Type	Full, Spot,		
(a)	(2) ENDS	3.9375"	0"							22.625"			S	NON	E 10	)0
	20					<u> </u>				Ĺ		<u>.                                    </u>				
If rem	ovable, bolts	used (de	escribe	other fa	stening	s)					N/A					_
						2	2005			al spec. nun				. 45	n	
16. M	AWP	) psi _	/France	_ at m	ax temp	)	00°F ternal)	(External)		⁄lin. desig	gn metai	temp. 1	.U°F 8	at <u>150</u>	0 ps	il
17. In	16. MAWP 150 psi at max temp. 200°F Min. design metal temp. 10°F at 150 psi (Internal) (External) (External) at test temperature of Indicate yes or no and the component(s) impact test.															
				te yes or i	no and the	component	(s) impact to	ested]				•				
18. H	<u>ydro.</u> , pneu.,	or comb.	. test p	ress			Proof	Test _								_
19. No	ozzles, inspec	tion, and	safety	valve o	penings	:										
	Purpose		No.		eter or F	lange Type	Mate			zzle Thickr		inforcemer		Attached	Location	
(1	niet, Outlet, Drain	ı, etc)			ize		Nozzie SA-312TP304L	Flange	No 42		Corr O"	Material	Nozzle	(c) TYPE		_
ļ	INLET		1		300#		SA-312TP304L	<u> </u>		5"	0"			(c) TYPE		
	OUTLET		1		300#		SA-312TP304L	<del></del>		37"	0"			(c) TYPE 1		_
<u> </u>	INLET		1 1		150# .50#		SA-312TP304L	<del></del>		37"	0"			(c) TYPE		
	OUTLET		1 2			RFLWN	34-31211-3040	SA182F304L	.2.	<del>"</del>	0"			(c) FLT		-
	Vent/drain			_	100#	KLTAAN		3A1021 304L			<del></del>		04410.1	(C) ILI	Cinc	-
			<del> </del>	_				<del> </del>	· · · · ·						+	-
20 To	lentification o	f Darte:	1					J	l	<u>-</u>		·			<u></u>	
20. 10	lentification o Name of Part	raits.	Quantity	/ Lin	e No.	Mfr's Identif	ication No.	Mfr's	Drawing	a No.	CR	N T	National E	Board No.	Year Built	-
	N/A		<b>Q</b>							2.1101						
																$\neg$
																$\neg$
21. St	upports: Skirt	N	10	Lug	js	-	Legs	·		<u>O</u> thers		·	Attach		-	_
		(Yes	or No)			(No.)		(1	No.)		(Desc	ribe)		(Whe	ere and hov	V)
22. K	emarks		A .	CD EI	STI CC	OI FD	PO# MP	C17001	TTTT	M # UV	1065/20	6E		<del></del>		
							PPLIED									—
			, K	MEL			GN BY J&				G-123(	a).				
				<del>·</del>									<del> </del>		-:	
WPS QUALIFIED WITH AND WITHOUT PWHT.														—		
				CEI	RTIFIC	CATE O	F SHOR	/FIELD	CO	MPLIA	NCE					٦
We	certify that th	e stateme	nts mac	le in this	report ar	e correct a	and that all	details of	materi	ial, constr	uction ar	id workm	anship o	f this pres	sure	
	sel part confor													-		
	U Certificate	of Autho	rizotic-	Number		11 020	Funia	-c	r	07/18/201	Δ	,				ļ
	O Certificate	of Aunio	nizatioi	i Nullibei		+1,727	Expire			77/10/201	7					į
Da	te 8.30	/2	Name		J&N	4 Welding	, LLC		Signed	i A	/ * B.	M				ì
			-			_(Manufact	urer)					<i></i>	(Represer	ntative)		
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I, t	he undersigned	l, holding	a valid	commiss	sion issu	d by the l	Vational B	oard of Bo	iler an	ld/Pressui	re Vessel	Inspector	rs and/or	the State	or Provin	ce
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	ve inspected th										8/30					
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AS	ME BOILER AI	ND PRESS	URE VI	ESSEL CO	DDE, Sec	tion VIII,	Division I	. By signi	ng this	s certifica	te neithe	r the Insp	ector noi	his/her er	nployer	
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