APR-24-2001 03:24P FROM: 99634 2/373657 TO:19084757 FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

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1	/(0	413

			100 to 120 to 120212		ACC						
	Manufactured and certified by Robert Mitchell Co., Inc. Douglas Bros. Div. 1039 Riverside St. (Name and address of manufacturer) Portland, ME 04103										
	Manufactured for										
3.	Location of insta	Hoff	mann-LaRo	che, Inc	, 233 Ro	che Drive	, Belvide	re, N.J.	07823		
	TypeVert.	(Or yerl , (ank)					37E-0014 Rev. 2 65			1988 (Year budt)	
5.	The chemical and	d physical prop d workmanship	erties of all parts conform to AS	ts meet the req ME Rules, Sec	uirements of mation VIII, Divi	naterial specification 1	ations of the A	SME Boiler and	Pressure Vess	ol Code, The design,	
2	12/31/87	nda (Asie)		Code Case No.				Special service per UG 17	20(4)		
			-1	inchair of iacket	ad vessels of the	eers of heat excl	hangers .				
ems 6.	s 6-11 incl. to be co Shell: <u>SA-2</u> 0	Mult (Spec No. Gr	gie wali vessels. j	250	Non		2'5 1/2) 		6 1 1 1/211 Length (Oversill)(II & in.)	
7.	Seams: St	ngl, with	backing		Non	C (Spot or full)		65 EII, (%)		H.Y. Temp (F)	
		(o	ng (Ulu, Singi)						3		
		fime		Dbl.	in (Db1 , Sogl.)		NOT RT. (S ₁	pot, Partial, or Fulli		Na. of Courses	
8.	Heads: (a) Matl.	SA-240		n. 0. 1.	(b) Ma			(Spec)	No , Grade)		
	Location (Top.	Minumum	Corrosion Allowance	Crown Radius	Knuckle Padius	Elliptical Ratio	Contest Apex Angle	Hemisphorical Radius	Flat Diameter	Side to Pressure (Convex or Concave)	
(a)	Bottom, Ends)	.1628	None			2:1				Concave	
(b)	BOLCOM	.1020	None								
10. 1. Item	Type of Jacket Jacket Closure MAWP Hydro., pneu., c	Bar & To	op F1g. e as ogce & weld, ba psì at ma ress. 220	x, temp. 3	f bar, give dim	ensions500)" x 1.000)'' n less than -20°		od, describe or sketch.	
12.	·	Stationary Mail (S								attitud Dalladi	
	3 - 1		100-100-00-000 - Nedicinitis	Dram (m) (Subje		Nom The f		Corr Allow (in)		noch (Welded, Botted)	
		Floating Mail (Sp	100-100-00-000 - Nedicinitis	Drain (in) (Subje		Non Tok t		Corr Allow (in)		nach (Welded Rolled)	
13.	Tubes:	N/A	100-100-00-000 - Nedicinitis			Nom Tok I		Curr Allow (in)			
	Tubes:	N/A Mail (S	Spec No. Grt	Diam	(m) OD (m)	Nom Tok (n Thk (m or Gauge	Corr Allow (in)		Attach Type (Straight or U)	
ltem	Tubes:	N/A Mail (Secompleted for N/A) 40-304L	Spec No. Gr I	Diam I jacketed vesse .625	(m) OD (m) Is or channels of	Nom Tilk I Nom The I	m Thk (in a Gauge	Cuir Allow (in) Number		Attach Type (Straight or U) 6 1 1 1/211	
ltem	Tubes:	N/A Mail 49 Recompleted for 140-304L Mail 15pec No. 6	Spec No. Gr I	D _{ia} m I jacketed vesse	OD (m) Is or channels of No.	Nom Tok (Nom The text exchanger The at exchanger Allow (a) 1	m Thk (in a Gauge	Corr Allow (in) Number 1/411		Attach Type (Straight or U) 6 1 1 1/2 11 Legth (Oresill 1 & 1)	
ltem 14.	Tubes:	N/A Mail (5) completed for 1 40-304L Mail ISPEC No. C Db1.	Spec No. Gr I Spec No. Gr I Inner chambers o	Diam I jacketed vesse .625	(m) OD (m) Is or channels of	Nom Tick to Nom Ti	m Thk (in a Gauge	Cuir Allow (in) Number		Attach Type (Straight or U) 6 1 1 1/211	
ltem 14.	Tubes:	N/A Mail 15 completed for 14 40-304L Mail 15pec No. 6 Db1.	Spec No. Gr I	fjackeled vesse	OD (m) Is or channels of No.	Nom Tok (Nom The text exchanger The at exchanger Allow (a) 1	n Thi (in gr Gauge	Corr Allow (in) Number 1/411 10.0(16.6)		Attach Type (Straight or U) 6 1 1 1/2 11 tegin (Ormillit & in)	
ltem 14.	Tubes:	N/A Mail 15 e completed for 140-304L Mail 15pec No. 6 Db1.	Spec No. Gr I Spec No. Gr I Inner chambers o	Jacketed vesse625Nom Thi. in	OD (m) Is or channels of Nor	Nom Tick to Nom Ti	n Thk (in or Gauge	Corr Allow (in) Number 1/411 10.0(16.6)		Attach Type (Straight or U) 6 1 1 /2 11 Liegth (Ornall) [1 5 m)	
ltem 14.	Tubes:	N/A Mail 15 e completed for 1 40-304L Mail 15pec No. 6 Db1.	Spec No. Gr I Spec No. Gr I Inner chambers of Gradel Long IDM, Seg11	Jacketed vesse625Nom Thi. in	OD (m) Is or channels of No.	Nom Tok (Nom Nom I heat exchanger Me Allow (as) 188 BT (Spotar Full)	n Thk (in or Gauge	Corr Allow (in) Number 1/411 10.0 (t; & a.) 70		Altach Type (Straight or U) 6 1 1 1/2 11 Leogth (Ormill [1 & to]) H.T. Teop (F)	
ltem 14. 15.	Tubes:	N/A Mail 45 completed for if 40-304L Mail 15 pec No. 6 Db1.	Sper No. Gr 1 Inner chambers of Gridel Long IDM, Segl 1 40-304L	Jacketed vesse625Nom Thi. in	OD (m) Is or channels of Nor	Nom Tick to Nom Ti	n Thk (in or Gauge	Corr Allow (in) Number 1/411 10.0 (t; & a.) 70		Altach Type (Straight or U) 6 1 1 1/2 11 Leogth (Ormill [1 & to]) H.T. Teop (F)	
ltem 14. 15.	Tubes: os 14-17 incl. to be Shell: SA-2 Seams: Heads: (a) Matl	N/A Mail 15 completed for 14 40-304L Mail 15pec No. 6 Db1. 1art SA-24	Sper No. Gr 1 Inner chambers of Gridel Long IDM, Segl 1 40-304L	Jiacketed vesse625Nom Thk.i.n Db1.	OD (m) Is or channels of Nor	Nom Tok (Nom Nom I heat exchanger Me Allow (as) 188 BT (Spotar Full)	n Thk (in or Gauge	Corr Allow (in) Number 1/41 10. (r.s.a.) 70 Ell (s)		Altach Type (Straight or U) 6 1 1 1/2 11 Leogth (Ormill [1 & to]) H.T. Teop (F)	
14. 15.	Tubes: os 14-17 incl. to be Shell: SA-2 Seams: Heads: (a) Matl Location (Top. Bottom, Ends)	N/A Mail 15 completed for 14 40-304L Mil 15pec No. 6 Db1. 1016 SA-24 Min.mum Thickness	Spec No Gr I Spec No Gr I Innor chambers of Gradel Long (DM, Seal) (Spec No Gr I Corrosion	Diani / jacketed vesse625Nom Thi. i.n. Db1. Gir o, Grade) Crown	OD (III) Is or channels of No. No. No. No.	Nom Tisk (Nom f heat exchanger IDE Allow (as) LE BT (Spotar Foll) (b) Matt,	None	Corr Allow (in) Number 1/411 70 Ell (XI (Spec. No., Gr	ade)	Attach Type (Straight or U) 6 1 1 1/2 11 Liegth (Ornall life 5 in) H.T. Teep (F) 2 No of Courters	
14. 15.	Tubes: os 14-17 incl. to be Shell: SA-2 Seams: Heads: (a) Mati Location (Top. Bottom	N/A Mail 15 completed for 14 40-304L Mail 15pec No. 6 Db1. 1art SA-24	Spec No Gr I Inner chambers of Gridel Long (DM, Segl I) 40-304L (Spec No Gr I) Corrosion Allowance	Diam / jacketed vesse .625 Non Thi. in Db1. Gr o. Grade) Crown Radius	OD (ur) Is or channels o. No Corr NOT	Nom Tisk (Nom Theat exchanger DIE Allow (as) LE RT (Spatar Fell) (b) Mati, Elliptical Ratio	None Conical Apex Angle	Curr Allow (in) Number 1/4!! 70 Ell (st	ade) Flat Diameter	Attach Type (Straight or U) 6 1 1/2!! Legith (Origin) [1 & in) H.T. Texp (F) 2 No of Courter Side to Pressure (Convex or Concave)	
14. 15.	Seams: Heads: (a) Mati	N/A Mail 15 completed for 140–304L Mail Spec No. 6 Db1. Tene SA-24 Min.mum Thickness .585	Spec No. Gr 1 Inner chambers of Gradel Loca (DM. Seg1) 40-304L (Spec No. Allowance None	Diam f jacketed vesse625Nom Thi. i.n Db1. Gu c, Grade) Crown Radius	OD (ur) Is or channels o. No Corr NOT	Nom Tick (Nom Ti	None Conical Apex Anglo	Corr Allow (in) Number 1/4! 70 EITXI Spot, Parint, or Full) (Spec. No Gr Hemispherical Radius	ade) Flat Diameter	Attach Type (Straight or U) 6 1 1/2!! Legith (Origin) [1 & in) H.T. Texp (F) 2 No of Courter Side to Pressure (Convex or Concave)	
14. 15.	Seams: Heads: (a) Mati	N/A Mail (5) 2 completed for 40–304L Mail 15)xc No. 6 Db1. 1etr SA-24 Min.mum Thickness .585	Spec No Gr 1 Spec No Gr 1 Inner chambers of Gradel Long (DM, Seg1) 40-304L (Spec No Grosion Allowance None	Diam f jacketed vesse625Nom Thi. i.n Db1. Gu c, Grade) Crown Radius	OD (ur) Is or channels o. No Corr NOT	Nom Tisk (Nom Ti	None Conical Apex Anglo	Corr Allow (in) Number 1/4!1 70 EITKI (Spec. No., Gr. Hemispherical Radius	ade) Flat Diameter	Altach Type (Straight or U) 6 1 1/2!! Lieith (Orrall) [R & in) H.T. Temp (F) 2 No of Counts Side to Pressure (Convex or Concave) CONVEX	
14. 15.	Tubes: os 14-17 incl. to be Shell: SA-2: Seams: Heads: (a) Matl Location (Top. Bottom Ends) Bottom If removable, b	N/A Mail (1) c completed for 140–304L Mail 15, pcc No. 6 Db1. 1016 SA-24 Min.mum Thickness .585 polits used (desc	Spec No. Gr 1 Inner chambers of Gradel Loca (DM. Seg1) 40-304L (Spec No. Allowance None	Diam / jacketed vesse625Nom Thi. i.n Db1. Gu c. Grade) Crown Radius	OD (ur) Is or channels o. No Corr NOT	Nom Tisk (Nom Ti	None Conical Apex Anglo	Corr Allow (in) Number 1/4! 70 EITXI Spot, Parint, or Full) (Spec. No Gr Hemispherical Radius	ade) Flat Diameter	Attach Type (Straight or U) 6 1 1/2!! Legith (Origin) [1 & in) H.T. Texp (F) 2 No of Courter Side to Pressure (Convex or Concave)	
14. 15. 16.	Tubes: os 14-17 incl. to be Shell: SA-2: Seams: Heads: (a) Matl Location (Top. Bottom) If removable, b	N/A Mail (1) completed for it 40-304L Mail 15pec No. 6 Db1. 1017 SA-24 Min.mum Thickness .585 polits used (desc. See	Sper No. Gr 1 Inner chambers of Gradel Long (DM. Segl 1) 40-304L, (Spec No. Allowance) None Cribe other faster Remarks	Diam / jacketed vesse625Nom Thh. i.n Db1. Gr O, Grade) Crown Radius mings) ax. temp3	Is or channels of Nor Nor Nor Shirt Radius	Nom Tick (Nom Theat exchanger DIE Allow (at) LE BT (Spatar Fell) Ch) Mati, Elliptical Ratio 2:1	None Conical Apex Anglo Mail, Spec No. Gi	Corr Allow (in) Number 1/411 10. (18 a.) 70 Ell (Si) (Spec. No., Grill Hemispherical Radius 7, Site, No.) n less than -20°	ade) Flat Diameter	Altach Type (Straight or U) 6 1 1/2!! Lieith (Orrall) [R & in) H.T. Temp (F) 2 No of Counts Side to Pressure (Convex or Concave) CONVEX	

Form U-1 (Back)

18. Nozzles, Inspection and Safety Valve Openings:

No.	or Site	Type	Med.	Nom, Thk.	Reinfestement Mad.	How Attached	Location
A	6"	Pipe	SA-312-304L	Sch.80	SA-240-304L	Welded	Shell
В	10"	11	11	Sch.40		"	11
C	7 1/2"	Pad	SA-240-304L		11	11	11
D	2"	11	11		None	11	11
t E	211	Pipe	SA-312-304L	Sch.40	n	li ii	Jacket
t F	1"	R	11	Sch.40	11	11	81
t G	2"	13	11	Sch.40	11	11	11
t H	1"	11	11	Sch.80	11	n	11
1	B C D E E t F t G	B 10" C 7 1/2" D 2" t E 2" t F 1" t G 2"	B 10" " C 7 1/2" Pad D 2" " t E 2" Pipe t F 1" " t G 2" "	B 10" " " " " " " " " " " " " " " " " " "	B 10" " " Sch.40 C 7 1/2" Pad SA-240-304L D 2" " " " t E 2" Pipe SA-312-304L Sch.40 t F 1" " Sch.40 t G 2" " " Sch.40	B 10" " " Sch.40 " " C 7 1/2" Pad SA-240-304L " D 2" " "	B 10" " " Sch.40 " " " " " " " " " " " " " " " " " " "

Outlet	В	10"		1	Sch.40			
Sightglass	s C	7 1/2"	Pad	SA-240-304L		u	11	11
Drain	D	2"	ш	11		None	11	11
Steam Inlo	et E	211	Pipe	SA-312-304L	Sch.40	ii	11	Jacket
Cond.Outle		1"	11	11	Sch.40	11	11	11
Steam Inle		2"	11	11	Sch.40	11	11	11
		1"	11	11				- 11
Cond.Outle	et H				Sch.80			
			L					
	(Yes Nanufactu	OLugs_4_ or no) (No rer's Partial (Other (Describe) s properly identified and	signed by Comm	nissioned Inspectors ha		ed for the following
13.12.11.17.41.31.23				Want of pa	a, item number, mly i na	ne and identifying Itamp)	3.1319.115.	
The in	ner ch	amber of	the is	cketed vessel	s designed	in accordance	e with the	9.
				er the intended				
				<u>ted in the vert</u>	ricar posit	ion a safety	varves 100	cated
elsewh	ere in	system.						
		•		CERTIFICATE OF S	HOP COMPLIAN	ICE		
We certify that i	the statem	ents made in	this report	are correct and that all	details of design,	material, construction,	and workmansh	ip of this vessel con-
				n VIII, Division 1.	•			
WIW Caraldiana	of Amabasi	7	16779		6-29	10 90		A
"O" Certificate o	C C	zation No	Dohove	Mitchell Co.,	Tna	1 7 4	11 16.11	()
Date		Co, nam	o VoneTr	(Manufactures) DOL	iglas Bros.	Signad States of the	(Hepresentating)	<i>p.</i>
				CERTIFICATE OF	CHOO INCORCE	7/1		1 MD 0/100
Vessel constructi	ed by R	oberr Mi	tchell.	Co., Inc.	at 10:	39 Riverside S	t. Portla	nd, ME U41U3
'. the undersign	ed, holdir	ougras 1	mmission iss	V. ued by the National Boa	ard of Boiler and	Pressure Vessel Inspect	ors and/or the	State or Province of
Maine_			and em	ployed by Lumberme	ens Mutual	Casualty Co.	Long Grove	e, IL 60049
of				· · · · · · · · · · · · · · · · · · ·		ted the pressure vessel d		
Report on	5/9		. 19_	PS and coase that to		nowledge and belief, th		
						. 8 2		
				tion VIII, Division 1, By				
				e vessel described in the				
ployer shall be li	able in any 8	manner for Signed	any personal	Injuryor property dama	ge or a loss of any	kind arising from or conissions ME- 53	nnected with the 3, N.B. 96	nis Inspection. 255 and No.1
			2000200					
			CE	RTIFICATE OF FIELD	ASSEMBLY COM	IPLIANCE		
We certify that t	the field a	ssambly con	struction of	all parts of this vessel con	nforms with the r	equirements of Section	VIII, Division 1	of the ASME Boiler
and Pressure Ves	sel Code,		ŭ					
"U" Certificate of	of Authori	zation No.		expires _				
		Co. nam						
			(Ass	embles that exclined and constructed for	eld assembly)	orgrico	(By Representative)	
I, the undersign	ad, holdin	g a valid co	CE mmission iss	RTIFICATE OF FIELD ued by the National Boa	ASSEMBLY INS	PECTION Pressure Vessel Inspect	ors and/or the	State or Province of
Microscope and State Control of the				and emp				
								suror's Dava Banaci
with the Jan-1				s referred to as data item				
				by me and that, to the be				
bled this pressur	e vessel in	accordance	with ASME	Code, Section VIII, Divi	sion 1. The descri	bed vessel was inspected	s and subjected	to a hydrostatic test
of	psi. By s	igning this ce	rtificate neit	ner the Inspector nor his	employer makes a	any warranty, expressed	or implied, car	cerning the pressure
		500 00 0		. Furthermore, neither t				23
				a from or connected wit				

(12/82)

Signed.

(Authorited Inspector)

[Nat 1 Board fine) endorsements), State, Prov., and No.]

. Commissions _