							801 Dawso		
Manufactured and	certified by	Proces	ss Ind	ustrie		end address of man	Newark, I	E 1971	3
Manufactured for	Arco	Chemic	cal		lewtown	Square ress of purchaser)	, PA		
Location of install	ation				(nam	ne and address)			
Type: Vert	tank)	8840-B	<u> </u>	(CRN)		840-1 (drawing no.)	22 (Nat'i, Bd	. no.)	1989 (year built)
. The chemical and VESSEL CODE. Th	physical pro	perties of all	parts mee	the requir	ements of n	naterial specif E Code, Sectio	ications of the A	ASME BOILE	R AND PRESSUR 6 (year)
thru 1987									(year)
(addenda (Da		G.	Case no.)			1.000	cial service per UG-1		
ms 6-11 inclusive to	be comple	ted for single	wall vess	els, jacket	s of jackete	d vessels, or	shells of heat ex	cnangers.	
Shell: SA-240	TP304	3/16	ckness (in.))	No	ne (corr. allow. (in	.))	24 <sup>t1</sup> (dia. ID (ft. & in.))	1(leng	th (overall) (ft. & in.))
Seams: long		N/A	70			dbl	1	I/A	1
(long. (dbl.	, sngi.))	(RT (spot or full))	(eff. (%	)) (HT temp.		07 0	sngl.)) (RT(spot, 40 TP304	partial, or full))	(no, of courses)
Heads: (a) SA	240 TP3	(mat'l, (spec. r	no., grade))		(b	) SA Z		c. no., grade))	
Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flal Diameter	Side to Pressure (convex or concave
(a) Top	3/16*	None			2:1				Concave
(b) Bottom	3/16"	None			2:1				Concave
Type of jacket:		ribe other fas	Proof	test:	SA193	(mat'l.,	<u>ts/32 - \$</u> spec. no., gr., size, n	o.)	
. Type of jacket: . Jacket closure: . MAWP: 60FV (psi)	(describe æs og .at max. tem	ee & weld, bar, e p. 100 (*F)	Proof If to:)  Min design	test: par, give dir	nensions:	(mat'i.,	spec. no., gr., size, n	If bolted,	describe or sketo
. Type of jacket: Jacket closure: MAWP: 60FV (psi) ems 12 and 13 to be	(describe æs og at max. tem completed	ee & weld, bar, e p. 100 (*F)	Proof It because If the Items If the Items	test: par, give dir n metal tem	nensions:_ np.: <u>-20</u> (*F)	(mat'i.,	spec. no., gr., size, n	If bolted,	describe or sketo pressure <u>90</u> (psi)
. Type of jacket: Jacket closure: MAWP: 60FV (psi) . ms 12 and 13 to be . Tubesheets: (statio	(describe æs og at max. tem completed	ee & weld, bar, e p. 100 (*F)  for tube sec:	Proof It because If the Items If the Items	test: par, give dir n metal tem to pressure))	nensions: np.:-20 (*F)	(mat'i., _at60FV <sub>(psi)</sub>	spec. no., gr., size, n	If bolted, test	describe or sketo
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (float	(describe æs og at max. tem completed mary mat'l. (spec	ee & weld, bar, e p. 100 (*F)  for tube sec. c. no., gr.)) (dia	Proof If L Ic.)  Min design tions.  (in.) (subject (dia. (in	test: par, give dir n metal tem to pressure))	nensions: np.:20 (*F) (nom. thick	(mat*l.,  at 60FV (psi)	. Hydro., and (corr. allow. (i	If bolted, test	describe or sketo pressure 90 (psi)
Type of jacket: Jacket closure: MAWP: 60FV (psi) ms 12 and 13 to be Tubesheets: (statio	(describe æs og at max. tem completed mary mat'l. (spec ting mat'l. (spec	ee & weld, bar, e p. 100 (*F)  for tube sector. c. no., gr.)) (dia	Proof If to.)  Min design tions.  (in.) (subject (dia. (in.))	test:nar, give dir n metal tem to pressure)	nensions:	(mat'l.,  _at60FV (psi)  ckness (in.))  ckness (in.))	(corr. allow. (i	If bolted, test	describe or sketo pressure 90 (psi) achment (welded, bolto (attachment)
. Type of jacket: Jacket closure: MAWP: 60FV (psi) ems 12 and 13 to be . Tubesheets: (station (float) . Tubes: (mat'l. (station) ems 14-17 inclusive	(describe æs og at max. tem completed mary mat'l. (spec ting mat'l. (spec	ee & weld, bar, e p. 100 (*F)  for tube sec. c. no., gr.)) (dia	Proof If to.)  Min design tions.  (in.) (subject (dia. (in.))	test:	nensions:	(mat*i.,  at 60FV (psi)  ckness (in.))  ckness (in.))  or gauge))  or channels of	(corr. allow. (i	n.)) (atte	describe or sketo pressure 90 (psi) achment (welded, bolto (attachment) (type (straight or U))
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (float  (mat'l. (spi)  (mat'l. (spi)	(describe æs og at max. tem completed mary mat'l. (spec ling mat'l. (spec spec. no., gr.)) to be comp	ee & weld, bar, e p. 100 (*F)  for tube sec. c. no., gr.)) (dia	Proof If to.)  Min designations.  (in.) (subject (dia. (iii))  (OD (in.))  er chambe.	test:	(nom. thickness (in ted vessels	(mat*L, _at60FV(psi)  ckness (in.))  ckness (in.))  or gauge))  or channels (in.))	(corr. allow. (i  (corr. allow. (i  (no.)  f heat exchange  (dia. ID (It. & in.))	n.)) (atte	describe or sketo pressure 90 (psi) achment (welded, bolto (attachment) (type (straight or U))
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (float  (mat'l. (span)  (long (dong (span))	(describe as og at max. tem) completed inary mat'l. (specting mat'l. (spec	ee & weld, bar, e p. 100 (*F)  for tube sec: c. no., gr.)) (dia i. no., gr.))  leted for inne (nom. t	Proof If L Ic.)  Min design tions.  (in.) (subject (dia. (ii) (OD (in.)) er chambe.  (hickness (in.)	test: par, give dir n metal tem to pressure)  (not	(nom. thickness (in thickness (in thickness (in the vessels (corr. allow. (inp. (*F)) (time)	(mat*L, _at60FV(psi)  ckness (in.))  ckness (in.))  or gauge))  or channels (in.))	(corr. allow. (i  (corr. allow. (i  (corr. allow. (i)  (no.)  of heat exchange  (dia. ID (ft. & in.))	n.)) (attention)) (le	describe or sketo pressure 90 (psi) achment (welded, bolto (attachment) (type (straight or U))
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (float  (mat'l. (spi)  ms 14-17 inclusive  Shell:  (mat'l. (spi)  (long (di)  Heads: (a)	(describe æs og at max. tem) completed inary mat'l. ((specing mat'l. ((specing mat'l. (specing	ee & weld, bar, e p. 100 (*F)  for tube sec. c. no., gr.)) (dia c. no., gr.))  leted for inne (nom. t (RT (spot or fi	Proof  If L  Ic.)  Min design  tions.  (in.) (subject  (dia. (in.)  (OD (in.))  er chambe.  (hickness (in.)  util)) (eff.	test:	nensions:	(mat*l., _at60FVsi)  ckness (in.))  ckness (in.))  or gauge))  or channels (in.))  (in.))  ne) (girth (dt	(corr. allow. (i  (corr. allow. (i  (corr. allow. (i)  (no.)  of heat exchange  (dia. ID (It. & in.))  ol., sngl.)) (RT (spe	n.)) (attention)) (attention)	describe or sketo pressure 90 (psi)  achment (welded, bolte (attachment) (type (straight or U))
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (float  (mat'l. (spi)  (long (dong (spi))	(describe as og at max. tem) completed inary mat'l. (specting mat'l. (spec	ee & weld, bar, e p. 100 (*F)  for tube sec: c. no., gr.)) (dia i. no., gr.))  leted for inne (nom. t	Proof If L Ic.)  Min design tions.  (in.) (subject (dia. (ii) (OD (in.)) er chambe.  (hickness (in.)	test: par, give dir n metal tem to pressure)  (not	(nom. thickness (in thickness (in thickness (in the vessels (corr. allow. (inp. (*F)) (time)	(mat*i.,  _at60FV	(corr. allow. (i  (corr. allow. (i  (corr. allow. (i)  (no.)  of heat exchange  (dia. ID (ft. & in.))	If bolted,  If bolted,  test  (att:  n.))  ers.  (le  bt, partial, or full  bec. no., grade))	describe or sketo pressure 90 (psi)  achment (welded, bolto (attachment)  (type (straight or U))  ngth (overall) (ft. & in.))
Type of jacket:  Jacket closure:  MAWP: 60FV  (psi)  ms 12 and 13 to be  Tubesheets:  (Iloat  (mat'l. (station)  (long)  (long)  Location (top,	(describe æs og at max. tem completed inary mat'l. (specing ma	ee & weld, bar, e p. 100 (*F)  for tube sec. c. no., gr.)) (diano., gr.))  leted for inne (nom. t (RT (spot or fi (mat'l. (spec.	Proof If L  Ic.)  Min design  tions.  (in.) (subject (dia. (in  (OD (in.))  er chambe  (hickness (in.)  ull)) (eff.  no., grade))  Crown	test:	nensions:	(mat*i.,  _at60FV	(corr. allow. (i  (corr. allow. (i  (corr. allow. (i)  (no.)  of heat exchange  (dia. ID (It. & in.))  ol., sngl.))  (mat'l. (sp	n.)) (attention)  (attention)	describe or sketo pressure 90 (psi) achment (welded, bolto (attachment) (type (straight or U)) ngth (overall) (ft. & in.) )) (no. of courses)

(Nat'l. Bd. (incl. endorsements) state, prov. and no.)

## FORM U-1 (back)

.8. Nozzles, inspection and safety valve openings:

Sioned

Purpose (inlet, outlet, drain, etc.)	Number	Dia, or Size	Туре	Mat'l.	Nom. Thickness	Reinforcement Material	How Attached	Location
Inlet	2.	6"	Pipe	SA312	Sch 80	N/A	Welded	TP Hd
de Al de C	2	6"	Fla	SA182	150#	N/A	Welded	Pipe_
View Port	1	4"	Pipe	SA312	Sch 80	N/A	Welded	Tp Hd
VICE I	1	4"	S/Ofla	SA182	150#	N/A	Welded	Pipe_
SRV	1	3"	Pipe	SA312	Sch 80	N/A	Welded	TP HO
	1	3"	Fla	SA182	150#	N/A	Welded	Pipe
Drain Vlave	1	2"	Disc	304S/S		N/A	Welded	BtHd
Vent & Cage	1	13"	Pipe	SA312	Sch 80	N/A	Welded	Tp H
venin a tay	1	11"	Fla	SA182	150#	N/A	Welded	Pipe
Inlets	2	1 4 "	Pipe	SA312	Sch 40	N/A	Welded	Shel
_Lil_Linini	2	1 1 1 "	Fla	SA182	150#	N/A	Welded	Pipe

Vent & Cage		13"	Pipe	SA312	Sch 80	_N/A	Merded	- 1
	1	13"	Flq	SA182		N/A	Welded	Pipe
Inlets	2	11"		SA312	Sch 40	_N/A	Welded-	Shell
	2	11"	Flq	SA182	150#	N/A	Welded	Pipe
19. Supports: Skirt NO (yes or								
20. Remarks: Manufacturer following items of the r	eport:		· /nam/	e of part, item nu	imber mfr's name a	and identifying stam	np)	TOTOG TOT THE
*This Head h	nas a 2"	St. Flo	g. plus	an add	ditional	2" of SA	4 / 9	
gr. 304 1/4	" thk.							
	*	OLD.	TIEICATE O	F SHOP COI	MPLIANCE			
We certify that the stateme		CER	nerreal and	that all detail	ils of design, m	aterial, constru	ction and workm	anship of this
vessel conform to the ASA	ME Code for P	nis report are	els Section	VIII. Division	1 1.	<b>-1.0</b> .1.0.1		**
	TIC	1100	miros 1/6	۶ 1	992		11/11	2 1
Data 1/19/89 N	ame Proc	ess Ind	ustries	s. Inc.		Signed_\	JE Hall	the
Date 1/12/89 N	anic		(manula	cturer)			(representa	tive)
		CEF	TIFICATE O	OF SHOP IN	SPECTION			
Vessel constructed by P	rocess I	ndustri	es, Ind	C		at]	Newark, DJ	E
I, the undersigned, holding	a valid comm	ission issued	by The Nati	onal Board o	f Boiler and Pre	ssure Vessel In	ispectors and the	state or prov-
ince of PA/DE	and employ	ved by HS	BT & I	_Compan	<u>y</u>			
		of Hart	ford C	Thave inspect	ted the pressure	e vessel descrit	bed in this Manuf	acturers' Data
Report on Jan 12	, 19 8 9	, and state	that, to the	best of my l	knowledge and	belief, the man	nufacturer has co	nstructed this
pressure vessel in accorda	ance with ASN	ME Code, Sec	lion VIII, Di	vision 1.				
By signing this certificate	neither the ins	spector nor his	s employer i	makes any w	arranty, expres	sed or implied,	concerning the p	ressure vesser
described in the Manufact	urers' Data Re	port. Furthern	nore, neithe	er the inspec	tor nor his emp	loyer shall be li	able in any manin	let for any per-
sonal injury or property da	amage of a los	any kind	More	m or connec	cted with this in Commissions	$A \cap A \cap A \cap A$	endorsements) state,	DEL 426 prov. and no.)
		CERTIFIC	ATE OF FIE	LD ASSEMB	LY COMPLIAN	CE		
We certify that the field as	ssembly const	truction of all	parts of thi	is vessel con	forms with the	requirements o	of Section VIII, Di	ivision 1 of the
ASME BOILER AND PRES	SURE VESSE	L CODE.						
"U" Certificate of Authoriz	zation no	e	xpires		19			
DateNa						Signed_	(represent	alivel
		A * 1 1 A 10 A 10 A 10 A 10 A 10 A 10 A		constructed field			Пертезен	Billoy
•		CERTIFIC	ATE OF FI	ELD ASSEM	BLY INSPECTION	ON		4-4
I, the undersigned, holding	g a valid comm	nission issued	by the Nat	ional Board o	of Boiler and Pr	essure Vessel I	nspectors and th	e state of prov
ince of	and emplo	yed by						
			of		have compa	red the stateme	ents in this Manu	inacturers Date
Report with the described	pressure vess	el and state t	hat parts ref	ferred to as d	ata items		, not	included in the
certificate of shop inspec	tion, have be	en inspected	by me and	that to the	best of my kno	wledge and be	mer, the manufac	stuter has con
structed and assembled the	his pressure <b>v</b>	essel in acco	rdance with	ASME Code	e, Section VIII, I	JIVISION 1. I NE	described vessel	was inspecte
and aubicated to a hydros	static test of		nsi.					
By signing this certificate	neither the in	spector nor h	is employer	makes any v	varranty, expres	ssea or implied,	, concerning the l	pressure vesse
described in the Manufact	turers' Data Ri	eport. Further	more, neith	er the inspec	ctor nor his em	ployer shall be	nable in any man	ner tor any pe
sonal injury or property d	amage or a lo	ss of any kin	d arising fro	om or conne	cted with this i	nspection.		
Date Si	nned				_Commissions			