## S/0<sub>#</sub>677965 PLT#110

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS (Alternative Form for Single Chamber, Completely Shop-Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured ar	nd certifi	ed by <u>Tl</u>	RINITY IN	DUSTRIE	S, INC.	202 ss of M	PROGRES	SS BLVD.	LONGVIEW	, TEXAS 7	5604			
2. Manufactured fo	r _KLE	ESPIE '	rank & PE	TROLEUM	3521 ME AME AND ADDR	EMOR ESS OF	IAL HIGH	WAY MAN	DAN,N.D.	58554				
3. Location of installation SAME AS ABOVE (NAME AND ADDRESS)														
·														
4. Type TORIZ 125000 (CRN) (DRAWING NO.) (NAT'L BD. NO.) (NAT'L BD. NO.) (NAT'L BD. NO.)											(YEAR BUILT)			
<ol><li>The chemical and The design, cor</li></ol>	d physic structio	al properti n, and wor	es of all parts kmanship cor	meet the required to the meet the the meet the m	uirements o IE Rules, S	f mate ection	erial specifica VIII, Divisio	tions of the n 1 $\frac{19}{7}$	ASME BOILER 95 EAR	AND PRESSU	RE VESSEL CODE.			
lo.	A95													
lo	DENDA (D	ATE.)		CODE CAS					E PER UG 120 (D)					
6. Shell: SA516-70 0.777 <sup>11</sup> 0 <sup>11</sup> 8 <sup>1</sup> -11.792 <sup>11</sup> 57 <sup>1</sup> -0 <sup>11</sup> MAII (SPEC NO. GRADE) NOM. THK. (IN.) COHR ALLOW. (IN.) DIAM. ED. (FT. & IN.) LENGTH (OVERALL) (FT. & IN.)														
7. Seams: WELD, DBL FULL 100% 1100 47 MIN WELD, DBL UW11(a(5(b) 6 LONG (WILDED, DBL SNGL, LAP, BUTT) 1100 HT. (SPOT PARTIAL, SNGL, LAP, BUTT) SNGL, LAP, BUTT) OR FULL)														
8. Heads: (a) Mail. SA516-70 HOT FORMED NORM. (b) Matl.														
			(SPEC: NO., GRAI				_			0.5%				
Seç	. Seams	s: WELI	D, DBL	_H.T.:			_R.T.:S	POT	Eff:	85%				
LOCATION (10P) BOTTOM, ENDS)	MINI	MUM (NESS /	CORROSION	CHOWN RADIUS	KNUCKLE RADIUS	_ E	LLIPTICAL RATIO	CONICAL APEX ANGLE	HEMISPHERICAL RADIUS	FLAT DIAMETER	SIDE TO PRESSURE (CONVEX OR CONCAVE)			
(A) ENDS	0.4	57"	0"						54.673"		CONCAVE			
(B)									0.D.					
If removable, bolts used (describe other fastenings)														
	(MATL., SPEC. NO., GR., SIZE, NO.)													
9. MAWP			-20	·	at 250	-	si at max. ten Hydrostatic te	-	0.7		psi.			
Min. design meta 10. Nozzles, inspect				F	at <u>230</u>	_psi. r	Tydrosianc ie	est biessoie	<del></del>		po			
		,	- T				NOM	DEM	ORCEMENT	UW-16.1				
PURPOSE (INLET, OUTLET, DRAIN)	NO.	DIAM OR SIZE	TYPE		MATL.		THK	<b> </b>	MATL.	ATTACHED	LOCATION			
MANWAY	1	15"	PTFLG		16-70N		2.50"	INI	ERGRAL	( <u>i)</u>	HEAD			
FLOAT, ROT.	$\frac{1,1}{1}$	2.5",2		SAI			3000#			(y-2) (y-2)				
TW,LL/PG LIQ, OUT	$\frac{1,1}{1}$	.75" 3"	CPLG CPLG	SA1			6000# 6000#	-		(z-1)				
VAP, RELIEF	1,2	2"	CPLG	SAI			3000#			(y-1)(z-	1)			
FILL, VAPOR	1,1	2"	CPLG	SAI			3000#			(z-1)				
11. Supports: Skirt	NO	Luas	NO	Legs NO	Other		(DESC	ar	Attached	WHE	RE AND HOW)			
12 Romarke Manu	tacturor	'e Partial I	iala Henoris r	oroberiv iden	illilea ana si	ianed i	by Commiss	Joned Inspe	ctors have bee	n furnished for	the following items			
of the report: $\underline{\mathbf{T}}$	RINIT	Y PLT#	22 PREFAB	BARREL	SER#229	7046	6 WITH A	ATTACHED	HEAD SER	#980-63 A	ND PLT# 29			
CLOSING H	EVD C	ED# 973	3-53	,	sent 6	17.9	7							
TANK, HOR	EAU S TZONT	AI. NH3	STORAGE:	109.34				M WG.						
TO BE USE							- 1							
LINE 9: M				-66 (a)	UCS-66									
				CERTI	FICATE OF	SHOP	COMPLIAN	ICE						
We certify that the to the ASME Code	stateme	nts made i	n this report a	re correct ar	nd that all de	etails o	of design, ma f Authorization	aterial, cons	truction, and wo	orkmansnip of t	this vessel conform 24, 19 <u>99</u>			
Date 6-17-97	for Pres	sure vesse	eis, Section v RTNTTY TN	IDUSTRTE:	S. INC.	PLT	#110 Sia	ned Jam		cl	, 10			
Date_6-17-97		U. INA		MANUFA	CTURER				T RE	PRESENTATIVE				
							P INSPECTI			· · · · · · · · · · · · · · · · · · ·				
Vessel constructed	l by	TRINIT	INDUSTR	RIES, IN	C. PLT#	110	at		GVIEW, TE		A CONTRACTOR OF THE PROPERTY O			
		a valid co	ommission iss	sued by the	National Bo	ard of	Boiler and D REPTIRT	Pressure Vo	essel inspector IRANCE CO.	s and/or the S	tate or Province of			
have inspected the		nent dese	ribed in this A						, 19 97	, and st	ate that to the best of			
mu kaasuladaa aad	boliaf t	ho Manula	clurer has co	nstructed this	s pressure v	resset	in accordan	ce with ASA	IE Code. Section	on VIII. Divisio	n 1. By signing this			
contilicate polither II	anena	ctor nor his	employer ma	ikas anv wai	ranty expre	ssed o	or implied co	ncernina the	e pressure vess	iel described in	the Manufacturers' age or a loss of any			
kind arising from or	connec	neuner ine ted with th	is inspection.	i ilis employ	or Stiall De II					Laborth annu				
Date 6-17.		Signed	arsi	HIZED INSPECT	OB)	_ Cor	mmissions _	NR 883	(NAT'L BOARD	INCL ENDORSEM	ENTS),			
TRI 437-CON (FI 10/93)	and the second second							to the second second	STATE	PHOV. AND NO.1				

•		A Pa	rt of a	Pres	sure Ve	ssel Fabr	ricated b	оу О	ne Ma	nufacti	urer fo	r Anothe	ATIVE FOR or Manufa I, Division	cturer	376 <u>-</u> 109'	VIVO Properties	173 tted
1. Ma	anufactured and o	certified	by	Tri	nity	Indust	ries	, I	nc.	1901	Brei	nnan,	Ft. Wo	rth	, Tx	.76°	106
2. Ma	anufactured for	Tr	init	y It	ndustr	ies,	Inc.	Dal	las		as	U14.1					
3. Lo	cation of installa	tion _		"St	ock"												
4. Ty	pe: Hemis	phe	rica	l_He	ead					uma and asdr 73–53		-					
•		[Oesc	ription of ve	ssel part (	shell, two please to 0262-0		e Trini	itv	Inc	lustr.		Inc.		íC	<sub>8М</sub> 1 <b>0 0</b>	7	
5. AS	(Nat'l Bd No SME Code, Section	•	iv. 1.		L995 A					(Crawing pre	pares by		Saec	at Service	- 199		
6. St	nell (a) No. of	course(s)	:		23		 o) Overa!! le	ingth (	(ft & in.)			<del></del>	<del></del>				
Course(s)					Atarenal	The	Trickness			ent iCat. A.		Circum	n. Jaint (Cat. A. B.	н	Heat Treatment		
No.	Diameter, in.	Length.	It & in.	Sar	es./Grade or Type	e Nom.	Corr.	1,24	Full, Spat, Name		€1:	Type	Full, Spot, Nane	Eff.	Temp	-	Time
	57 516-70																
7. He	7. Heads: (a) SA-516-70 (b)																
	Lacation (Tap.	Thick			Radius	Elignes	Conc		1	orer-cal	Fat		ta Pressure			regary A	
(a)	Battom, Ends)	. 45	Cg**.	Crown	Knuckie	Rafin	Apre A	nyle	<u> </u>	673"	Diameter	Conves	X	WDB		on Spot 85	
(b)						<u> </u>			0.1								
If rem	novable, bolts use	d (descr	ibe other	fasten	ing)					#1T		irade, Size, No.)					
10. I	internal npact test Hydro., pneu., or Nozzles, inspectio	comb. te			nings:	Ente	(Indicate	lesterns e yes ar of test		tomponentist	empait taste	si .					
<u> </u>	Purpase (Inlet,	T	Diam	eter	Flange	Ma:	grial	I	Nazze Th		Red	farcement	Haw	Attached		Lac	ation .
	Outlet, Drain, etc.1	No.	0.5		Type	Notrie	Flange	<del></del>	Nam	Corr.	<u> </u>	Material	· Notice	F1.	angs		Open.1
	ermo.	11-		4" 4"	Cplg.	SA-10 SA-10			00#		┼──		16.1 <u>Y2</u> 16.1 <u>Y2</u>	+		Top	
	oat Ga.	1	$\frac{1}{2}$ 1	/2"	Cplq.	SA-10	,		00#				16.1Y2			Top	
	nway	1	15	11	Flg.	SA-5	6-70	2	50#		Inh	erent	ent UW16.1			Top	
13. F	12. Supports: Skirt Lugs Legs Others Attached Miner and how!  13. Remarks: Head segments are hot formed @ 1650 degrees F and air cooled,  double butt welded. Spot X-Rayed seams with joint efficiency of 85%																
						CERTI	FICATE OF	SHO	P/FIELD	COMPLIA	NCE						
t!	We certify that the ne ASME Code for Certificate of August $\frac{\mathcal{F} - \mathcal{G}}{\mathcal{G}}$	r Pressur	e Vessel	s. Sect 1_1		ision 1.	Expires	. <u>M</u>	of materi	14,	ection, an	d workmans Signed	19 9 <u>9</u>	ESSURE V	ressel par	t confo	em to
l	the undersigned,	holding	a valid c Old	<sub>ommiss</sub> Rep	sion issued to	y the Nation	IFICATE OI nal Board o TANCE	f Boile	er and Pr	essure Ve		ectors and/o	r the State or as, Te	Provinc (as		<u>exa</u>	
th M	ne pressure vesse lanufacturer has o mployer makes an or his employer sl	onstruct y warran	ed this p	ressure	e vessel part r implied, cor	in accordan	pressure v	essel (	part desc	ribed in th	Division 1 is Manufa	. By signing acturer's Dai	ta Report. Furt	e neithe hermori	er the Insp e, neither	ector i	nor his

This form (£00121) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

9441-A Texas1066
(Nat'l Board Incl. andorsament, State, Province and No.)

## 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 Code Rules, Section VIII, Division 1

Ph The State of th														
1. M	nulactured and	certified	by T	cinity	y Indu	stries.	Inc. P	lant //22,	1000	N.E.	28th_St	FLLY	worth, 1	l'exas_
	nufactured for	•	Trin	ity I	ndustr	ries In	ic.						76100	5
3. Lo	cation of installe	ation _	· N	ot Kn	own			(Name and trickess	of Procluser)					
4. Ty	*	See	Rem	arks					7046		•	•		- 143. 
	pv	1000	ription of v		ell, (we-pince )	head, tulia lumifel	Trini	ty Indust	ries I	nc.		(C)	1997	
-	(Nei'l, Bd, A	lo.1		10	Lett priva				ring proporal by)				(Year bud	**
5. A:	iME Code, Suct	ion VIII, E	)iv. 1.	6	1995 -	ul Addarda Idalah		Çede	Gasa Na.	'-0"	;,jon	end Sorvice (	par (PG-120fel)	<del></del>
1. 51	<del></del>		):		Atatarlal	(1)	<u>-</u>	µh (A & lo.);			,us,sure ,howet Hint, A, H,		1	o ptyront
No.	Consected No. (Nameter, br., Langth, Is & bs., Sp.				Kleada ee Typa	N <sub>see</sub>	Com. Iyy	Ford, Speed, Mee		1,,,,,	folk, Sport, Floria	(11.	Tamp.	Time
_6_	109.346	9'-6		SA51	6-70	.777'	1_	Full	100%	1	Spot	85%	N/A	
													-	
. He	nds: (n)	SA51						(1)		······				
<del></del>	1	T				i.i.— lime & lamp				(Mat'l S	pec, No., Grada ar Type	al II. I Ton		
!	Location (Fep, Bottom, Ends)	Min.	Carr.		Anna Krançkin	(Hystical Nafiq	Comcel Apas Angl	Hamisylvarical Nashra	I tot Diameter		Sala to Frazzosa van Cancava	Type	Cotegory A Full, Spat, None	<b>E</b> 11.
(n)	End	.457'						54.67"			Х	-  -	Spot	85%
(6)	L													
tem	ovable, bolts us	ed (descr	ibe other	fastoning	y)	<del></del>			Mat'l Spec, Ho.,	Cirodo, Sara,	No.)			
3. M/	WP		(externel)	. psi a	max, tem			•F.	Min. design	motal to	.mp	•F	ət	ps
). Im	pact test		/ <u>/</u> \			(mlenne	/7 (e:							
	Ydro., pneu., o	r comb. te	et mass	_			Proof (	•	entis) in , net test	-4				
	lozzies, inspecti				·ys:									
	Purpose (Infet,	1	Dien		flange	Mater	<b>-</b>	Noselo Ildeknosa		infersement	Hara	Atteched		Location
	Juliol, Drain, etc.1	No.	- 1		Type	Notes	Florys	Num, Cm		Material	· Morris	fie	ngo fin	nep. Open.)
-			·											
		-												1
-														
·		_l	<u></u>	l_	l								J	
12. S	upports; Skirt		no rent	Lugs	(Ma.)	Lnys	Nn.)	10/5	(Pargeter)		Allached		Milano and famel	
J. 11	manui Manui							<u> s and ( 1</u>   <u>t   29.                                  </u>						
_						rial //								
; 7 - 7	·	<del></del>								······································				<u>·</u>
w	certify that the	s statome	nts made	a in this c	noort mre c			IOP/FIELD COMP s of material, com		d wasken	anatio of this ne		esal nad con	dorm to
1	ASME Code la					•		<i>-</i>			_		per con	
U	Cortificate of Au	thorizatio	n No.		913		Expires	May	14		20	00	T 0.	ı
Da	10 6-4-1	97	Namo	T	<u>rinity</u>	Indust		nc.		Signe	, will	ne Z	Sky	mer
							(Monwiecturer)		<del></del>			Mapress	mistive)	
								HOP/FIELD INSPE			A MADE AND LOST	:	n Tex	as
	ine undersigned, d employed by					ance Co		oiler and Pressure	a ol	Dal	las, Texa	S	have in	spected
	pressure vess		•				A Geral Made 4		1 . and	J state th	et, to the lest of	my knov	vindge and be	dial, the
								E Code, Section V	III, Division 1	. Dy sign	iny this certificat	a noither	the inspecto	r nor his
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				and the second second	CONTRACTOR NOT THE PROPERTY OF		el pert described ( damage or a loss						spector
i i	6-4	ups		16	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	110				9	444	٦ ٦	1001	Olu
' Di			Signad			Sustain the same	m)		miasiona	-	lat't Housel inch, probusso	renet, State,	Province and Ho.)	***************************************
1 2/9	11	716	i tum y	0012114	any ha alif	plesmed from the	e ASMC OF	dor Dopt., 22 Lav	Orive, Best	2300, Fa	irlinki, NJ 07007	-2300	nc	PHINT 9/9

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

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer \$/O H-1980
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

Special

1. Ma	nufactured and o	ertified	by T	rin	ity Ir	dust	cie	s, ]	[nc	•	1901	Bren	nan,	Ft	. Wor	th,	Te	xas	76106
2. Manufactured for Trinity Industries, Inc. Dallas, Texas																			
"Stock" (Name and address of Purchaser)  3. Location of installation																			
Hemispherical Head COO GO GO																			
4. Type:																			
S-40318-01-RA Trinity Industries, Inc. 1997  [Nat'l. Bd. No.] 1995 A 95  [Vear built] [Vear built]																			
5. ASME Code, Section VIII, Div. 1.  Edition and Addenda Idate)  Code Case No.  Special Service per UG-120(d)																			
6. She	ell (a) No. of c	ourse(s)	:		Edition 3:			erali len	ngth (f	t & in.		: No.			5340	IS SERVIC	e per UG-1;	10(6)	
Course(s) A						Trickness			Long Joint (Cat. A)				C.	rcum. Jo	oint (Cat. A, B.	Heat Treatm		tment	
No.	Diameter, in.	Length, I	ft & in.	Spe	ec./Grade or Typ.	e Nom	Co	orr. T,	voe	Fuil,	Spat, None	€!!.	Type	Ful	I. Spat, Nane	E:	Eff. Temp.		Time
ļ												<u> </u>							
												<del> </del>				-			
7. Heads: (a) SA- 516-70 (b)														ــــا					
7. Heads: (a) SA 516-/0 (b) (Mail Spec. No., Grade or Type) H.T.—Time & Temp. (Mail Spec. No., Grade or Type) H.T.—Time & Temp.																			
	Location (Top,	Thick	rugss .		Radius	Eleptical		Conical Apex Angle		Hemispherical Radius		Flat	s	de to P	ressure	Cı		egory A	
	Bottom, Ends)	Min,	711	Crown	Knuckle	Railo						Diameter	Convex		Concave	Type	<del></del>	ot, Nane	En.
(a)		.45	/				$\dashv$		$\dashv$	54.	673 <b>"</b>		+		x	WDB	SPO	T	85%
If remo	vable, bolts use	d (descri	be other	fasteni	ina)	_L					l					L			Ц
					-							Spez. No., C				_			
8. MA	(internal)		(esternal)	psi	at max. ten		ternail		esternal)		°F. Mi	in. <b>des</b> ign	metai ter	mp.		_ •	Fat .		psi.
9. lmp	act test							lindicate	723 O' M	or and the	component(s)	impact feste	di						
10. H	ydro., pneu., or o	comb. te	st press.			-		Proof	test										
11. No	ozzles, inspectio	n, and sa	afety valv	re oper	nings:			•											
	Purpose (Inlet,		Ciamo	ter .	Flenge	M	aterial			Nazzie Ti	Nickness	Reir	nfarc sment	L	How /	Attached		Loc	ation
0	utlet, Drain, etc.)	No.	or S		Type	Note's	1			Nam. Corr.		- '	Material						Open.t
-	Roto	Ga 1		2"	Cplg	. sa-	_sa-105		30	000#		UW16.		4	-1Y2			TOI	
																1			
								-											
Ļ		<u> </u>	l				<u></u>					J		L					
12. Sc	ipports: Skirt	(Yes o	r ne)	Lugs	(No.)	Legs	(No.1		thers		(D+1	oribel		Attac			(Where a	nd howi	
13. Re	marks: *I	<u>lead</u>	seg	men	ts are	hot	fo	rmed	9 E	16	50 de	gree	s Fa	and	air	COO	led		
	double l				. Spo	ot X-	Ray	ed s	sea	ms	with	<u> </u>	re er	110	ciency	y 0:	E 85	*	
-4	157"min.	_x_]	09	346	· U.D.	segm	enc	aı ı	Tem	TSP	nerro	Jar II	eau.						
					· · · · · · · · · · · · · · · · · · ·	CERT	IFICA	TE OF S	SHOP	FIELD	COMPLIA	NCE							
We	certify that the	stateme	nts made	in thi	s report are	correct an	d that	ali deta	ils of	materi	al, constru	iction, and	d workma	anship	of this pre	ssure	vessel p	art confe	orm to
the	ASME Code for	Pressure	e Vessels			sion 1.					L 11				0.0				
UC	Certificate of Aut	horizatio	n No.		1,454			xpires			h 14			, 19	99			1	,
Dat	. <u>5-28</u>	$\mathcal{L}Z$	Name	-	Trinit	ty In			<u>·</u>	In	c.		Signed		98	ar	for	<u>X</u>	
		<del>,</del>	····				(64	anufacture						-6	Z		rentative)	·	
											INSPECTI				<b>.</b>			mov-	
J	ne undersigned, l employed by	nolding a	d Re	mmiss pub	ion issued b lic II	y the Natio	nai Bo	COI	Boiler Mpa	and Pr	essur <b>e Ve</b>	ssel Inspe	alla	ior th	Texa:	rrovino S		Texa	
1	pressure vessel	part des	cribed in	this Ma	anufacturer*	s Data Rep	ort on	<u> </u>	<u>-</u> -1	28	198	1	state tha	it, to i	the best of	my kno			
	nufacturer has co	•							ME Cod	de, Sed	tion VIX, I	Division 1	. By signi	ng thi	s certificate	neith	er the In:	spector (	nor his
	oloyer makes any					-				Brown P									pector
nor	his employer sh	all be lial	ble in any	mann A	er lorsiny p	ersonal inju	in of	propert	y dam	rage or	a loss of	any kind a						stion.	
Dat	. I-US	<b>(</b> ()	igned	-JX		4	4	<u> </u>			Commiss	ions _			Texa		066		
		1		1	•	Mutherized Wa				100 (1)			144		, <del></del>	-n, 3(4)		e-e-1461	