

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

1. Manufactured and certified by Texas Metal Fabrication Co., A Trinity Industries Co. 7010 Old Katy Road, Houston, TX 77270
(Name and address of Manufacturer)
2. Manufactured for THE M.W. KELLOGG CO. (PHILLIPS SUMIKA POLYPROPYLENE CO.)
(Name and address of Purchaser)
3. Location of installation PASADENA, TEXAS
(Name and address)
4. Type: Vertical Heat Exchanger 9461 — 9461 1995
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)
5. ASME Code, Section VIII, Div. 1 1992, INCLUDING 1993 ADDENDA — —
Edition and Addenda (date) Code Case No. Special Service per UG-120(d)
- Items 6 - 11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.
6. Shell (a) No. of course(s): THREE (b) Overall length (ft & in.): 24' - 7 3/4"

Course(s)			Material		Thickness		Long Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter, in.	Length (ft. & in.)	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	54"	10' - 0"	SA-516Gr.70		1/2"	1/16"	1	Spot	85%	1	Spot	85%	—	—
2	54"	9' - 5 1/2"	SA-516Gr.70		1/2"	1/16"	1	Spot	85%	1	Spot	85%	—	—
3	54"	3' - 5 1/2"	SA-516Gr.70		1/2"	1/16"	1	Spot	85%	1	Spot	85%	—	—

(a) (Mat'l Spec. No., Grade or Type) H.T.-Time & Temp										(b) (Mat'l Spec. No., Grade or Type) H.T.-Time & Temp				
Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A			
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.	
(a)														
(b)														

If removable, bolts used (describe other fastening) _____

- (Mat'l Spec. No., Grade, size, No.)
8. Type of jacket _____ Jacket closure _____
(Describe as ogee & weld, bar, etc.)
- If bar, give dimensions _____ If bolted, describe or sketch _____
9. MAWP 229 15 psi at max. temp. 302 — °F Min. design metal temp. 30 °F at 302 psi.
(internal) (external) (internal) (external)
10. Impact test NO, CHARPY IMPACT TEST EXEMPT PER UCS-66(b)
(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. 408 Proof test _____
Items 12 and 13 to be completed for tube sections.
12. Tubesheet: SA-266-2 54" 4 3/8" 1/8" Welded
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Norm. thk., in. Corr. Allow., in. Attachment (welded or bolted)
- SA214 ERW 1 1/4" .110" (MW) 950 Straight
Floating (Mat'l Spec. No.) Dia., in. Norm. thk., in. Corr. Allow., in. Attachment
Mat'l Spec. No., Grade or Type O.D., in. Norm. thk., in. or gauge Number Type (Straight or U)

Items 14 - 18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s): TOW (b) Overall length (ft & in.): (6' - 1 1/4") & (14' - 7 1/4")

Course(s)			Material		Thickness		Long Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter, in.	Length (ft. & in.)	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	54"	8' - 5 5/16"	SA-516Gr.70		5/8"	1/16"	1	Spot	85%	1	Spot	100%	—	—

(a) <u>SA-516Gr.70</u> <u>NONE</u>										(b) <u>SA-516GR70</u> <u>NONE</u>				
(Mat'l Spec. No., Grade or Type) H.T.-Time & Temp										(Mat'l Spec. No., Grade or Type) H.T.-Time & Temp				
Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A			
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.	
(a)		5/8"	1/16"			30					1	Full	100%	
(b)		5/8"	1/16"			30					1	Full	100%	

If removable, bolts used (describe other fastening) _____

SA - 193-B7, 7/8", 80,
(Mat'l Spec. No., Grade, Size, No.) RR 1026.10