

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

as required by the provisions of the ASME Code rules, Section VIII, Division 1

#103353

- Manufactured and certified by HEAT TRANSFER EQUIPMENT COMPANY 1515 No. 93rd E. Ave Tulsa, OK 74115
(name and address of manufacturer)
- Manufactured for H.W. KELLOGG P.O. BOX 4557 HOUSTON, TX 7710-4557
(name and address of purchaser)
- Location of installation TENNECO NGL CORP. LA PORTE, TX
(name and address)
- Type: HORIZ. AET 91-2173-A 91-2173-A-1 1355 1991
(horiz or vert tank) (mfr's serial no) (CRN) (drawing no) (Nat'l Bd no) (year built)
- The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction and workmanship conform to ASME Code, Section VIII, Division 1: 1989
(year)

1989

(addenda (Date))

(Code Case no)

UG-20(f)

(special service per UG-120(d))

Items 6-11 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

- Shell: SA-516-70 7/16" 1/8" 2'-11" 23'-5 9/16"
(mat'l (spec no, grade)) (nom thickness (in)) (corr allow (in)) (dia ID (ft & in)) (length (overall) (ft & in))
- Seams: DBL. BUTT SPOT 85 NONE DBL. BUTT SPOT 4
(long (dbl, singl)) (RT (spot or full)) (eff (%) (HT temp (°F)) (time) (grth (dbl, singl)) (RT (spot, partial or full)) (no of courses)
- Heads: (a) SA-516-70 (b) SA-516-70
(mat'l (spec no, grade)) (mat'l (spec no, grade))

	Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	END	3/8"	1/8"			2:1				CONCAVE
(b)										

If removable, bolts used (describe other fastenings): a) SA-193-B7 3/4" - 36 CH/SH) SA-193-B7 3/4" - 44
(mat'l, spec no, gr, size, no)

- Type of jacket: _____ Proof test: _____
- Jacket closure: _____ If bar, give dimensions: _____ If bolted, describe or sketch: _____
(describe as ogee & weld, bar, etc)
- MAWP: 155 at max. temp. 550 Min design metal temp.: 10 at 155 Hydro. prev. or comb. test pressure 312
(psi) (°F) (°F) (psi) (psi)

Items 12 and 13 to be completed for tube sections.

- Tubesheets: SA-516-70 36 5/8" 2 1/8" 5/16" BOLTED
(stationary mat'l (spec no, gr)) (dia (in)) (subject to pressure) (nom thickness (in)) (corr allow (in)) (attachment (welded, bolted))
- SA-516-70 31 1/4" 2 1/8" 5/16" BOLTED
(floating mat'l (spec no, gr)) (dia (in)) (nom thickness (in)) (corr allow (in)) (attachment)
- Tubes: SA-214 1" .074" MIN 384 STRAIGHT
(mat'l (spec no, gr)) (OD (in)) (nom thickness (in) or gauge) (ing) (type (straight or U))

Items 14-17 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers

- Shell: SA-516-70 7/16" 1/8" 2'-11" 1'-4 1/8"
(mat'l (spec no, gr)) (nom thickness (in)) (corr allow (in)) (dia ID (ft & in)) (length (overall) (ft & in))
- Seams: DBL. BUTT SPOT 85 1125 1 HR DBL. BUTT SPOT 1
(long (dbl, singl)) (RT (spot or full)) (eff (%) (HT temp (°F)) (time) (grth (dbl, singl)) (RT (spot, partial or full)) (no of courses)
- Heads: (a) SA-516-70 (b) SA-516-70
(mat'l (spec no, grade)) (mat'l (spec no, grade))

	Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	END	2 11/16"	3/16"						36 5/8"	FLAT
(b)	FLTG HD	3/4"	1/4"					28"		CONVEX

If removable, bolts used (describe other fastenings): a) SA-193-B7 3/4" - 44 b) SA-193-B7 3/4" - 44
(mat'l, spec no, gr, size, no)

- MAWP: 155 at max. temp. 550 Min design metal temp.: 10 at 155 Hydro. prev. or comb. test pressure 265
(psi) (°F) (°F) (psi) (psi)

18. Nozzles, inspection and safety valve openings:

[illegible]

19 Supports: Skirt **NO** Lugs _____ Legs _____ Other **2-SADDLES** Attached **WELDED TO SHELL**
(yes or no) (no.) (describe) (where and how)

20. **Remarks:** Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

P.O. NO.: 6636-02D1-C210-01

ITEM NO.: 08E-102

We certify that the statements made in this report are correct and that all details of design, material, construction and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1

"U" Certificate of Authorization no **12,197** expires **JULY 15**, 19 **92**

Date 9-25-91 Name HEAT TRANSFER EQUIPMENT COMPANY

Signed Billy A. Walker
(representative)

1515 N. 93 E. AVE.

Vessel constructed by HEAT TRANSFER EQUIPMENT COMPANY

at TULSA, OK 74115

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of **OKLAHOMA** and employed by **COMMERCIAL UNION INSURANCE COMPANY**

Report on 9-25, 19 91, of BOSTON, MA have inspected the pressure vessel described in this Manufacturers' Data and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with ASME Code Section VIII, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in the Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9-25-91 Signed William J. Meadows Commissions 11150 OK # 646
(Authorized Inspector) (Nat'l Bd. Incl. endorsements) state, prov. and nat'l

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME BOILER AND PRESSURE VESSEL CODE.

"U" Certificate of Authorization no _____ expires _____, 19____

Date _____ Name _____
(assembler that certified and constructed held assembly)

Signør: _____

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of _____ and employed by _____

I, _____, of _____, have compared the statements in this Manufacturers' Data Report with the described pressure vessel and state that parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief, the manufacturer has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of _____ psi.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in the Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ (Authorized Inspector) _____ Commissions _____ (Nat'l Bd. (incl. endorsements) state prov. and reg.) _____