

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
 (Alternate 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 by HAPPY DIVISION, THERMA TECHNOLOGY / TULSA, OKLAHOMA
 2. Manufactured for PHILADELPHIA GAS WORKS / PHILADELPHIA, P.A.
 3. Location of Installation PHILADELPHIA GAS WORKS / PHILADELPHIA, P.A.
 4. Type HORIZONTAL 3416-4-4 --- C-17898 959 (Year Built) 77
 (Horiz. or vert. tank) (Mfg'r's Serial No.) (CRN) (Drawing No.) (Nat'l Brd No.)
 5. 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 Rules, Section VIII, Division 1 1974 and Addenda to 12-31-76 and Code Case Nos. ---
 (Year) (Date)
 Special Service per UG-120(d) ---
 Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished the following items of the report: ---

6. Shell: Matl. No Shell Norm. Thk. --- in. Corr. Allow. --- in. Diam. --- in. Lgth. --- ft
 (Spec. No., Grade)
 7. Seams: Long. Welded R.T. No Efficiency --- % H.T. Temp. --- F Time --- hr
 (Welded, Dbl, Sngl, Lap, Butt) (Spot or Full)
 Girth Welded R.T. No No. of Courses ---
 (Welded, Dbl, Sngl, Lap, Butt) (Spot, Partial, or Full)
 8. Heads: (a) Material SA-240-304L (b) Material SA-240-304L
 (Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, Ends)	Min. Thk.	Corr. Allow.	Flat Diam.	Side to Pressure (Convex or Concave)
(a) T & P Sht	1 1/8"	1/20"	Max Span = 8.225 (9 3/8"x1'-1")	Flat
(b) Wrapper Sht	5/8"	1/20"	Max Span = 4.1 (3 3/4"x1'-1")	Flat

If removable, bolts used (describe other fastenings) ---
 (Material, Spec. No., Gr., Size, No.)

9. Constructed for max. allowable working pressure 330 psi at max. temp. 420 F. Min. temp. (when less than -20 F) --- F. Hydrostatic test pressure 747 psi.

10. Safety Valve Outlets: Number --- Size --- Location ---

11. Nozzles and Inspection Openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Inlet	1	4"	RFWN	SA-182-F304L	SCH80S	Weld	Welded @	Front Head
Outlet	1	3"	RFWN	SA-182-F304L	SCH80S	Weld	Welded @	Back Head
Vent	1	1"	RFLWN	SA-182-F304L	---	Weld	Welded @	Back Head
Drain	1	1"	RFLWN	SA-182-F304L	---	Weld	Welded @	Front Head
Inlet	1	4" Ø	PIPE	SA-312-TP-304L	SCH80S	Weld	Welded @	Front Head
Outlet	1	3" Ø	PIPE	SA-312-TP-304L	SCH80S	Weld	Welded @	Back Head

12. Supports: Skirt --- Lugs 4 Legs --- Other --- Attached Welded to Tube Sht
 (Yes or no) (No.) (No.) (Describe) (Where and how)

13. Remarks: Box Header at Tube Ends 4 Row, 1 Pass, Tubes; Mat'l SA-249-304
Qty 18 O.D. 1" X13 BWG AW X32'-0" Long.
 F.W. REQ. NO. 1776-1231-F
 PGW EQUIP NO. 2-154-06
 Unit Service: RECYCLE GAS COOLER ITEM NO. E-215

CERTIFICATE OF COMPLIANCE

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.
 Date 8-31-77 Signed Happy Div. Therma-Tech. by Charles P. Latvala
 (Manufacturer) (Representative)
 "U" Certificate of Authorization No. 10,491 expires May 11, 1980

CERTIFICATE OF SHOP INSPECTION

Vessel made by Happy Div. Therma-Technology at Tulsa, Oklahoma
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Arkansas and employed by Coml. Union Ins. Co have inspected the pressure vessel described in this Manufacturers' Data Report on 9-29 1977, 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.
 Signed Derek E. Jaught Date 9-29-77 Commissions N.B. 7935
 (Inspector) (Nat'l Board, State, Province and No.)

PROCESS PARTS DIVISION
 W. B. BILLINGSLEY
 INSPECTOR

U.S. DEPARTMENT OF ENERGY
NATIONAL BUREAU OF STANDARDS
NIST
100 BUREAU DRIVE
GAITHERSBURG, MARYLAND 20899

U

N. B. NO. 959

FW
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MANUFACTURED BY

HAPPY DIVISION-THERMA-TECHNOLOGY INC.

P.O. BOX 2739 TULSA, OKLA. 74101

MAX. DESIGN PRES. 330 P.S.I. @ 420 °F.

TEST PRES. 747 P.S.I.

MFR. SER. NO. 3416-4-4 YR. BLT. 1977

CUST. P.O. PP6-115-1776 ITEM F-215

F.W. REQ. NO. 1776-1231-F

SERVICE: RECYCLE GAS COOLER

P.G.W. EQUIP. NO. 2-154-06

