

1. Manufactured by HAPPY DIVISION - THERMA TECHNOLOGY / TULSA, OKLAHOMA
 2. Manufactured for _____
 3. Location of Installation _____ / PHILADELPHIA PA.
 4. Type HORIZONTAL 3416-3-3 C-17880 956 (Year Built) 1977
 (Horiz. or vert. tank) (Mfg'r's Serial No.) (CRN) (Drawing No.) (Nat'l Bld 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 for the following items of the report: _____
 6. Shell: Matl. No Shell Nom. Thk. _____ in. Allow. _____ in. Diam. _____ in. Lgth. _____ ft. _____ in.
 (Spec. No., Grade)
 7. Seams: Long. Welded R.T. No Efficiency _____ % H.T. Temp. 1100 F. Time 1.125 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-516-70 (b) Material SA-515-70
 (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"	1/8"	Max Span = 8 3/8" { 9 3/8" x 10 1/2" }	Flat
(b) Wrapper Sht	5/8"	1/8"	Max Span = 4 1/4" { 3 3/4" x 10 1/2" }	Flat

 If removable, bolts used (describe other fastenings) _____
 9. Constructed for max. allowable working pressure 440 psi at max. temp. 650 F. Min. temp. (when less than -20 F) _____ F. Hydrostatic or pneumatic test pressure 660 psi.
 (Material, Spec. No., Gr., Size, No.)
 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	3"	300# RFWN	SA-105	SCH 160	Weld	Welded @	Front Head
Outlet	1	3"	300# RFWN	SA-105	SCH 160	Weld	Welded @	Back Head
Vent	1	3/4"	GPLG	SA-105	6000#	Weld	Welded @	Back Head
Drain	1	3/4"	CPLG	SA-105	6000#	Weld	Welded @	Front Head
Inlet	1	3" Ø	PIPE	SA-106-B	SCH 160	Weld	Welded @	Front Head
Outlet	1	3" Ø	PIPE	SA-106-B	SCH 160	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-214
 Qty 14 O.D. 1" X 110 MW X 32'-0" Long.
 F.W. REQ. NO. 1776-1231-M
 P.G.W. EQUIP NO. 2-010-10
 Unit Service: PIPELINE GAS COMPRESSOR AFTER COOLER ITEM NO. E-224

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 Com. Union Ins. Co have inspected the pressure vessel described in this Manufacturers' Data Report on 10-5 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 Frank E. Daugh Date 10-5-77 Commissions N.B. 7935
 (Inspector) (Nat'l Board, State, Province and No.)

R. B. BILINGSLEY
 INSPECTOR
 PROCESS PLANTS DIVISION
 FOSTER WHEELER ENERGY CORP.