

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

1. Manufactured and certified by Hudson Products Corporation, 9660 Grunwald Road, Beasley, Texas 77417
 (Name and Address of Manufacturer)

2. Manufactured for Sunoco., Eagle Point Refinery / Sulfolane Unit., Westville, NJ
 (Name and Address of Purchaser)

3. Location of installation Sunoco., Eagle Point Refinery / Sulfolane Unit., Westville, NJ
 (Name and Address)

4. Type Horizontal Heat Exchanger J863-11A-P-1
 (Horiz., Vert., or Sphere) (Tank, Separator, Jkt. Vessel, Heat Exh., etc.) (Mfg's Serial No.)
N/A 6A-Rev. 2 27555 2009
 (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year Built)

5. ASME Code, Section VIII, Section VIII, Div.1 2007 (A00) N/A N/A
 Div.1 (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 multichamber vessels.

6. Shell (a) No of course(s): 1 (b) Overall length (ft & in.): 6-7/8" x 10-3/4" x 6' 5"

*HEADER

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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	RT4	** 100%	N/A	N/A	N/A	1125°F.	1Hr24Min

7. Heads (a) SA-516,70 1175 ± 25°F. 1 Hr. 24 Min. (b) SA-516,70 1175 ± 25°F. 1 Hr. 24 Min.
 (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)	Top & Bottom	1/2"	0.125"	N/A	N/A	N/A	N/A	N/A	FLAT	4-5/8" x	6' 5"	N/A	N/A	N/A
(b)	Ends	1/2"	0.125"	N/A	N/A	N/A	N/A	N/A	FLAT:	4-1/8" x	0'9-1/2"	N/A	N/A	N/A

If removable, bolts used (describe other fastening) _____ Ends: Welded-Corner Joint
 (Mat'l Spec. No., Grade, Size, No.)

8. Type of jacket N/A Jacket closure N/A
 (Describe as ogee & weld, bar, etc.)

If bar, give dimensions N/A If bolted, describe or sketch.

9. MAWP 245 15 psi at max. temp. 250 250 °F Min. design metal temp. 0 °F at 245 psi.
 (internal) (external) (internal) (external)

10. Impact test NO, CHARPY IMPACT TEST EXEMPT PER UG-20(f) at test temperature of N/A °F.
 (Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. Hydrostatic 319 Proof test N/A

Items 12 and 13 to be completed for tube sections.
 12. Tubasheet: SA-516, 70 10-3/4" x 6' 5" 1-1/4" 0" Welded
 [Stationary (Mat'l Spec. No.)] [Dia., in. (subject to press.)] (Nom. thk., in.) (Corr. Allow., in.) [Attachment (welded or bolted)]
N/A N/A N/A N/A N/A

13. Tubes: SA-214 1" .120" AW 168 Straight
 (Mat'l Spec. No., Grade or Type) (O.D., in.) (Nom. 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): N/A (b) Overall length (ft & in.): _____

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

15. Heads: (a) N/A (b) _____
 (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)														
(b)														

If removable, bolts used (describe other fastening) _____
 (Mat'l Spec. No., Grade, Size, No.)

FORM U-1 (Back)

16. MAWP N/A (internal) (external) psi at max. temp. _____ (internal) (external) °F. Min. design metal temp. _____ °F at _____ psi.

17. Impact test N/A at test temperature of _____ °F.
 [Indicate yes or no and the component(s) impact tested]

18. Hydro., pneu., or comb. test press. N/A Proof test N/A

19. Nozzles, inspection, and safety valve openings: No Safety Valve Outlets Per UG-125

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Open)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet & Outlet	2	6"150#	R.F.W.N.	SA-105		Sch. 80		None	W/W		
	2	6" HPC	TRANS	SA-234,WPBS9		Sch. 80		None	W		
Vent & Drain	1	3"150#	R.F.L.W.N.	SA-105		----		None	W		

20. Supports: Skirt No (Yes or No) Lugs _____ (No.) Legs _____ (No.) Others _____ (Describe) Attached _____ (Where & How)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:
 (List the name of part, item number, mfg's. name and identifying number)
N/A

22. Remarks:
 * Two Rect. Headers : Inlet & Outlet Headers : 6-7/8" x 10-3/4" x 6' 5" Each.
 Service: Recovery Column Condenser Item No. SUE-5-16 Front # 13 Rear # 11
 OVERALL DIMENSION: 10-3/4" x 6' 5" x 34' 11" Long Customer Design Pressure 225/FV PSIG @ 250°F.
 Spot X-Ray ** Conforms To Appendix 13, Para. 13-5

CERTIFICATE OF SHOP 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.
 U Certificate of Authorization No. 8728 Expires December 31, 2009
 Date 4-8-09 Name Hudson Products Corporation (Manufacturer) Signed [Signature] (Representative)

CERTIFICATE OF SHOP INSPECTION

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 Texas and employed by HSB CT of Hartford, Conn. have inspected the pressure vessel described in this Manufacturer's Data Report on April 8, 2009, 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 this Manufacturer's 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 4-8-2009 Signed [Signature] (Authorized Inspector) Commissions NATL. BD.# 11617A TX# 1499 (Nat'l Board incl. Endorsement, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1. U Certificate of Authorization No. _____ Expires _____
 Date _____ Name _____ (Assembler) Signed _____ (Representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

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 _____ and employed by _____ have compared the statements in this Manufacturer's 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 to the best of my knowledge 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 this Manufacturer's 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 Board incl. Endorsement, State, Province and No.)