

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

2. Manufactured for Worley Parsons / ConocoPhillips, North Slope, Alaska  
 (Name and Address of Purchaser)

3. Location of installation Worley Parsons / ConocoPhillips, North Slope, Alaska  
 (Name and Address)

4. Type Horizontal  
 (Horiz., Vert., or Sphere)

Heat Exchanger  
 (Tank, Separator, Jkt. Vessel, Heat Exh., etc.)

J507-11A-B-1  
 (Mfg's Serial No.)

N/A  
 (CRN)

6A-Rev. 3  
 (Drawing No.)

26721  
 (Nat'l. Bd. No.)

2006  
 (Year Built)

5. ASME Code, Section VIII, Div. 1 Section VIII, Div. 1 2004 (A05)  
 (Edition and Addenda (date))

N/A  
 (Code Case No.)

N/A  
 Special Service per UG-120(d)

Items 8-11 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" x 1'6-7/16' x 12'4-1/2"

\*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	1100°F.	2Hrs.0Min

7. Heads (a) SA-516,70N 1100 - 1200°F. 2 Hrs. 0 Min.  
 (Mat'l Spec. No., Grade or Type) (H.T.-Time & Temp.)

(b) SA-516,70N 1100 - 1200°F. 2 Hrs. 0 Min.  
 (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	N/A	N/A	N/A	N/A	N/A
(b)	Ends	1/2"	0.125"	N/A	N/A	N/A	N/A	N/A	FLAT:	3-3/4" x	0'10"	N/A	N/A	N/A

If removable, bolts used (describe other fastening)

Ends: Welded-Corner Joint

8. Type of jacket N/A

(Mat'l Spec. No., Grade, Size, No.)  
 Jacket closure N/A

If bar, give dimensions N/A

(Describe as angle & weld, bar, etc.)

If bolted, describe or sketch.

9. MAWP 267 N/A psi at max. temp. 170 N/A °F Min. design metal temp. -50 °F at 267 psi.  
 (internal) (external) (internal) (external)

10. Impact test Yes, per UG-84 Plate, Pipe, Flanges at test temperature of -50 °F.

(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. Hydrostatic 348 Proof test N/A

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: SA-516,70N 1'6-7/16" x 12'4-1/2" 1" 0.125" 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-334, Gr. 1 1" .109" MW 351 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.)

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

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

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	4	4"150#	R.F.W.N.	SA-350,LF2		Sch.160		None	W/W		
	4	4"	PIPE	SA-333,6		Sch.160		None	W		
Vent & Drain	2	1"150#	R.F.L.W.N.	SA-350,LF2				None	W/W		
	2	1"150#	R.F. BLIND	SA-350,LF2				None	Bolted		

20. Supports: Skirt No Lugs Legs Others 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 Header : 6" x 1'6-7/16" x 12'4-1/2" & Return Header : 6" x 1'1-7/16" x 12'4-1/2".  
 Service: Cooling Medium Cooler Item No. A-EF06B Front # 2 Rear # 2 Customer Design Pressure 150.0/FV PSIG @ 170°F.  
 OVERALL DIMENSION: 1'6-7/16" x 12'4-1/2" x 40'9-3/4" Long Hydrotested with Regal Oil  
 Spot X-Ray UT Nozzle To Header Welds \*\* 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 2006  
 Date 9-21-06 Name Hudson Products Corporation (Manufacturer) Signed *James D. Russell* (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 September 21, 2006, 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 9-21-06 Signed *S. J. Mabel* (Authorized Inspector) Commissions NATL. BD.# 8430A TX# 912 (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 Signed (Assembler) (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 \_\_\_\_\_ of \_\_\_\_\_ 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 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 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.)