

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

(A) 437412

1. Manufactured and certified by THERMOTEC ENERGY SYSTEMS, Div. of PREMOTALCO INC 5010 - 76 AVE., S.E., CAL, AB. T2E 2X2

2. Manufactured for ANDERSON EXPLORATION C/O COLT ENGINEERING 400, 10201 SOUTHPORT RD. S.W. CALGARY, AB. T2N 4X9
(Name and address of Manufacturer)

3. Location of installation LSD 15-3-81-4 W6M DUNVEGAN
(Name and address of Purchaser)

4. Type HORIZONTAL HEAT EXCHANGER
(Horiz., vert., or sphere) (Name and address)

L 0762.2 983266 V REV 3 N/A 983266 B
(CRN) (Drawing No.) (Nat'l Bd No.) (Mfg's serial No.)

5. ASME Code, Section VIII, Div 1 1995 ADD 96 N/A 1998
(Edition and Addenda (date)) (Nat'l Bd No.) (Year Built)

Items 6-11 to be completed for single wall vessel, jacket of jacketed vessel, shells of heat exchanger, or chamber of multi-chambered vessel. Code Case No. N/A Special Service per UG-120(d) N/A

6. Shell (a) No. of Course(s): 4 (b) Overall length (ft & in.): 31'-6.5

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
1	23.5	31'-6.5	SA516-70N	.375	.063	1	SPOT	85	1	SPOT	85	NR	
7.	Heads:	(a)	MA										

7. Heads: (a) NA (b) NA
(Mat'l Spec. No. Grade or Type) H.T Time & Temp.

Material Type, H.T. Time & Temp.										(Mat'l Spec. No. Grade or Type) H.T Time & Temp.					
	Location (Top Bottom, Ends)	Thickness		Radius		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A			
		Min.	Corr.	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full	Spot, None	Eff.
(a)															
(b)															
if removable, bolts used (describe other															

If removable, bolts used (describe other fasteners)

NA

8. Type of Jacket NA (Mat'l Spec. No. Grade, size No.)
Jacket Closure NA

If bar, give dimensions NA (Describe as Ogee & weld, bar, etc.)
if bolted, describe or sketch.

9. M.A.W.P.: 375 NA psi at max. temp. 150 NA °F Min. design metal temp. -40 °F at 375 psi
(internal) (external) (internal) (external)

10. Impact test NO EXEMPT PER UG -20 F & UCS 66 A
(Indicate yes or no and the component(s) impact tested)

11. Hydro...test press. 563 P.S.I. NA
Proof test

Items 12-13 to be completed tube sections.

12. Tubesheet: SA516-70N 22.5625 2.6875 .125 WELDED
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk. in. Corr. Allow., in. Attachment (Welded or Bolted)

13. Tubes: SA179 .750 14 BWG 452 STRAIGHT
Floating (Mat'l Spec. No.) Dia., in. Nom. thk. in. Corr. Allow., in. Attachment
Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge Number Type (Straight or U)

14. Shell (a) No. of Course(s): 2 (b) Overall length (ft & in.): 3'-1"

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
1	24.75	1'-6.5	SA516-70N	1.00	.063	1	SPOT	85	1	SPOT	85	NR	
2	24.75	1'-6.5	SA516-70N	1.00	.063	1	SPOT	85	1	SPOT	85	NR	
15. Heads:	(a)		SA516-70N NONE										

15. Heads: (a) SA516-70N NONE (b) SA516-70N NONE
(Mat'l Spec. No. Grade or Type) H.T Time & Temp.

(Marl 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)	END	4.25	.063			RF	FLAT	COVER	30.75		FLAT			
	END	4.25	.063			RF	FLAT	COVER	30.75		FLAT			
If removable, bolts used (describe other														

If removable, bolts used (describe other fasteners)

SA320 L7 1.125 X 10.75 64

(Mat'l Spec. No. Grade, size No.)