

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

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

2 Made and for **ANDERSON EXPLORATION C/O COLT ENGINEERING CORP. 400, 10201 SOUTHPORT RD. S.E. CALGARY, ALBERTA T2W 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** **983265 B**
(Horizontal, vertical or sphere) (Drawing No.) (Year Built)

5 ASME Code Section VIII Div. 1 **1995 ADD 96** **N/A** **N/A** **N/A**
(CRN) (Drawing No.) (Material Specification) (Design Code) (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.

6 Shell (a) No. of Courses (b) Overall length ft & in **3** **23'-8"**

Course(s):													
No	Diameter in	Length (ft & in)	Material	Thickness		Long Joint (Cat A)			Circum Joint (Cat A B & C)			Heat Treatment	
				Nom	Corr	Type	Full Spot	None	Eff	Type	Full Spot		None
1	20 X 37	2'-8"	SA516-70N	.500	.063	1	SPOT	85	1	SPOT	85	NR	
2	37"	18'-4"	SA516-70N	.500	.063	1	SPOT	85	1	SPOT	85	NR	
3	20 X 37	2'-8"	SA516-70N	.500	.063	1	SPOT	85	1	SPOT	85	NR	
Heads (a)			NA			NA							

7 Heads (a) **NA** (b) **NA**

Location (Top Bottom Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius		Flat Diameter		Side to Pressure Convex Concave		Category A Type Full Spot None		E*
	Min	Corr	Crown	Knuckle											
(a)															
(b)															

(If removable bolts used (describe other fasteners))

8 Type of Jacket **NA** Jacket Closure **NA** (Material Spec No. Grade or Type, H T Time & Temp)

(If bar give dimensions) (Describe as Open, Weld bar, etc.) (Indicate design of jacket)

9 M.A.W.P. **260** **NA** psi at max temp **150** **NA** external **NA** internal **NA** Min design metal temp **-40** **260** psi

10 Impact test **390 PSI** **NO EXEMPT PER UCS 66 (A)** (Indicate yes or no and the component(s) impact tested)

11 Hydro test, press

Items 12-13 to be completed tube sections.

12 Tubesheet **SA516-70N** **18.875** **1.9375** **.125** **WELDED**
Stationary (Material Spec No.) Dia. in (Subject to press.) Nom. thk. in or gauge Corr. Allow. in Attachment

13 Tubes Floating (Material Spec No.) **SA179** **.750** **14 BWG** **284** **STRAIGHT**
Dia. in Nom. thk. in or gauge Corr. Allow. in Number Type (Straight or U)

Items 14-17 Incl. to be completed for inner chamber of jacketed vessels or channels of heat exchangers.

14 Shell (a) No. of Courses (b) Overall length ft & in **2** **3'-8"**

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
1	20"	1'-10"	SA516-70N	.750	.063	1	FULL	1	1	1	*SPOT	1	NR
2	20"	1'-10"	SA516-70N	.750	.063	1	FULL	1	1	1	*SPOT	1	NR
15. Heads (12)			SA516-70N NONE				(10)		SA516-70N NONE				

15 Heads (a) **SA516-70N NONE** (b) **SA516-70N NONE**

(Material 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 Convex Concave		Category A Type Full Spot None		E*
	Min	Corr	Crown	Knuckle											
(a)	ENDS	3.5	.063			FLAT	COVER	COVER	24.875	24.875	FLAT	FLAT			
(b)	ENDS	3.5	.063			FLAT	COVER	COVER	24.875	24.875	FLAT	FLAT			

SA320 L7 1' X 10" 56

