

**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 44/507

1. Manufactured and certified by THERMOTECH ENERGY SYSTEMS, Div. of PREMOTALCO INC 5010 - 76 AVE. S.E., CAL, AB. T2E 2X2  
 (Name and address of Manufacturer)

2. Manufactured for POCO PETROLEUM LTD. 3700, 250-6 AVE. S.W. CALGARY, ALBERTA T2P 3H7  
 (Name and address of Purchaser)

3. Location of installation LSD 11-20-41-4-W5M GILBY  
 (Name and address)

4. Type HORIZONTAL HEAT EXCHANGER 994079  
 (Horiz. vert. or spher.) (Tank separator, jacket vessel, heat exch., etc.) (Mfg's serial No.)

L 5968.2 994079 C REV 0 N/A 1999  
 (CRN) (Drawing No.) (Nat'l Bd No.) (Year built)

5. ASME Code, Section VIII, Div. 1 1998 N/A N/A  
 Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

Items 6-11 to be completed for single wall vessels, jackets of jacketed vessels, shells of heat exchangers, or chamber of multi-chambered vessels.

6. Shell: (a) No. of course(s) HEADERS X 2 (b) Overall length (ft & in.) 7'-5.375

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
2	9.875 X 6.75	7'-5.375	SA516-70N	+	.125	1	NONE	1				1150F	75 MINS

7. Heads: (a) SA516-70N 75 MINS 1150 F (b) SA516-70N 75 MINS 1150 F  
 (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp. (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp.

	Location (Top	Thickness		Radius		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A			
	Bottom Ends)	Min	Corr	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full	Spot/None	Eff
(a)	END	!	.125						SEE			S	NONE	1	
(b)	END	!	.125						REMARKS			S	NONE	1	

If removable, bolts used (describe other fastening):

NA

8. Type of jacket NA Jacket closure NA  
 (Mat'l Spec. No., Grade, size No.) (Describe as cage & weld, bar, etc.)

If bar, give dimensions:

NA

If bolted, describe or sketch:

9. M.A.W.P.: 1350 NA psig at max. temp. 200 NA F Min. design metal temp. -20 F at 1350 ps.  
 (internal) (external) (internal) (external)

10. Impact test NO EXEMPT PER UCS 66A

11. Hydro. pneu. or test press. 2025 PSI - " (Indicate yes or no and the component(s) impact tested.) Proof test NA

Items 12-13 to be completed tube sections.

12. Tubesheet: Stationary (Mat'l Spec. No.) SA179 Dia. in. (subject to press.) 1.00 Nom. thk. in. 14 BWG Corr. Allow. in. 154 Attachment (Welded or Bolted) STRAIGHT

13. Tubes: Floating (Mat'l Spec. No.) SA179 Dia. in. 1.00 Corr. Allow. in. 14 BWG Attachment Number 154 Type (Straight or U) STRAIGHT

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

14. Shell: (a) No. of course(s) (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) (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	Thickness		Radius		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A			
	Bottom Ends	Min	Corr	Crown	Knuckle	f ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full	Spot/None	E*
(a)															
(b)															

If removable, bolts used (describe other fastening):

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

④ 441599

17 impact test:

18. Hydro pne : or co<sup>2</sup> test press

[illegible]

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):

SERVICE:	AMINE COOLER	SAFETY VALVES:	ON PIPING	CUBIC CAPACITY:	1.118 FT <sup>3</sup>
				HEATING SURFACE:	483.8 FT <sup>2</sup>
TUBE 2 PLUGSHEET (4) 2.00	WRAPPER (4) 1.250	I END (4) 1.00 X 2.75 X 7.125			
** HYDROSTATIC TEST	TUBE LENGTH 12'-0"	TAG# E-301A *** THREADED			

U. Certificate of Authorization No. 29383 Expires JANUARY 7, 2000  
Date 05/27/99 Name THERMOTEC ENERGY SYSTEMS (Manufacturer) Signed b g Money (Representative)

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 **ALBERTA** and employed by **ALBERTA BOILERS SAFETY ASSOCIATION** of **CALGARY, ALBERTA** have inspected the pressure vessel described in the Manufacturer's Data Report on May 27, 1999 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 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 09/5/12 Signed [Signature] Commissions Alberta 400  
(Authorized Inspector) (National Board and endorsements, State, Province and N.B.)

U. Certificate of Authorization No.		Expires	
Date	Name	Signed	
	(Manufacturer)		(Representative)

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 the Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items \_\_\_\_\_

not included in the certificate of 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 tested vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ ps. By signing this certificate as the Inspector, I am making any warranty expressed or implied concerning the pressure vessel described in the Manufacturer's Data Report. Furthermore, whether the Inspector and employer shall be liable in any manner for any personal injury, death, disability, loss of life, limb or loss of any kind arising from or connected with this inspection.

Date \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

Author's Signature \_\_\_\_\_  
Mr. H. B. ... .. State of ... ..