

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

④ 474556
 No 122/01

1. Manufactured and certified by **Smithco Amercool Canada, 7920-56TH Street S.E., Calgary, Alberta, T2C-4S9**
(Name and address of Manufacturer)

2. Manufactured for **Omnitech Energy Systems INC., 3804-93 Street, Edmonton, Alberta, T6E-5K6**
(Name and address of Purchaser)

3. Location of installation **Stock**
(Name and address)

4. Type **Vertical** **Heat Exchanger** **01C539B**
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.)
N7279.23 **97040** **N/A** **2001**
(CRN) (Drawing No.) (Nat'l. Bd No.) (Year Built)

5. ASME Code, Section VIII, Div 1 **1998 Edition 00 Addenda** **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 vessel, jacket of jacketed vessel, shells of heat exchanger, or chamber of multi-chambered vessel.

6. Shell (a) No. of Course(s): **Headers- 2** (b) Overall length (ft & in.): **1'5.687"**

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	4.5"X5"	1'5.687"	SA516-70N		***	.063"	*	N/A	1	N/A			1150°F	65Minutes
2	4.5"X5"	1'5.687"	SA516-70N		***	.063"	*	N/A	1	N/A			1150°F	65Minutes

7. Heads: (a) **SA516-70N(2) 1150°F X 65 Minutes** (b) **SA516-70N (2) 1150°F X 65 Minutes**
(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	Conical	Hemishperical	Flat	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full, Spot, None	Eff.
(a)	End	.50"	.063"			Flat	Cover		3.75"x2.75"	Flat				
(b)	End	.50"	.063"			Flat	Cover		3.75"x2.75"	Flat				

if removable, bolts used (describe other fasteners)

8. Type of Jacket **Jacket Closure** (Mat'l Spec. No. Grade, size No.)
(Describe as Ogee & weld, bar, etc) if bolted, describe or sketch.

9. M.A.W.P.: **400** psi at max. temp. **350** °F Min. design metal temp. **-20** °F at **400** psi
(internal) (external) (internal) (external)

10. Impact test **No- Exempt per UG20(f)**

11. Hydro. pneu. or comb test press. **600 PSI **** (Indicate yes or no and the component(s) impact tested) Proof test **N/A**

Items 12-13 to be completed tube sections.

12. Tubesheet: Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk. in. Corr. Allow., in. Attachment (welded or bolted)
 Floating (Mat'l Spec. No.) Dia., in. Nom. thk. in. Corr. Allow., in. Attachment
 13. Tubes: **SA179** **.625"** **14BWG** **32** **Straight**
Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge 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 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 Bottom, Ends)	Thickness		Radius		Elliptical	Conical	Hemishperical	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 fasteners)
(Mat'l Spec. No. Grade, size No.)

