~~3517~~ SQ FT. Lot 196
3534

* 98915

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 Atlas Industrial Manufacturing Co., 81 Somerset Place, Clifton, N.J. 07012
(Name and address of Manufacturer)

2. Manufactured for Delta-T Corporation, 133 Waller Mill Road, Williamsburg, VA 23185
(Name and address of Purchaser)

3. Location of installation Altra Biofuels, Carleton, Nebraska
(Name and address)

4. Type Vertical (Horiz., vert., or sphere) | Heat Exchanger (Tank, separator, jkt. vessel, heat exh., etc.) | 11948 (Mfg's serial No.)
N/A (CRN) | D-20097-2 (Drawing No.) | 10308 (Nat'l. Bd. No.) | 2007 (Year built)

5. ASME Code, Section VIII, Div. 1 | 2004 and 2005 (Edition and Addenda (date)) | N/A (Code Case No.) | N/A (Special Service per UG-120(d))

Items 6-11 incl. to be completed for ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ shell of heat exchangers. ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~.

6. Shell (a) No. of course(s): 2 (b) Overall length (ft & in.): 15'-9 1/8"

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.	Time
1	36 1/4" O.D.	8'-0"	SA-240, 304	3/8"	0"	1	None	.70	1	None	.70	N/A	N/A
1	36 1/4" O.D.	7'-9 1/8"	SA-240, 304	3/8"	0"	1	None	.70	1	None	.70	N/A	N/A

7. Heads: (a) (or Exp. Joint) N/A (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp. (b) (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp.

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

If removable, bolts used (describe other fastening) (Mat'l Spec. No., Grade, size, No.)

8. Type of jacket Fig. 9-2, Type 1 Jacket closure Fig. 9-5, Sketch (d-1) (Describe as ogee & weld, bar, etc.)

If bar, give dimensions 3/4" Tk. X 7 1/2" Wide If bolted, describe or sketch.

9. MAWP FV&75 (internal) --- (external) psi at max. temp. 300 (internal) --- (external) °F Min. design metal temp. -20 °F at FV&75 psi.

10. Impact test No. UG-20 (f), UCS-66 (a) & UHA-51. (Indicate yes or no and component(s) impact tested) at test temperature of ____ °F.

11. Hydro., ~~XXXXXXXX~~ test press. 103 Proof test N/A

Items 12 and 13 to be completed for tube sections.

* 12. Tubesheet: SA-240, 304 (Stationary (Mat'l Spec. No.)) | 37.54" (Dia., in. (subject to press.)) | 1 3/8" (Nom. thk., in.) | 0" (Corr. Allow., in.) | Welded (Attachment (welded or bolted))
N/A (Floating (Mat'l Spec. No.)) | Dia., in. | Nom. thk., in. | Corr. Allow., in. | Attachment

13. Tubes: SA-249, TP304 (Mat'l Spec. No., Grade or Type) | 3/4" (O.D., in.) | 18 GA. (A.W.) (Nom. thk., in. or gauge) | 1127 (Number) | Straight (Type (Straight or U))

Items 14-18 incl. to be completed for ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ channels of heat exchangers.

14. Shell (a) No. of course(s) 1 / 1 (b) Overall length (ft & in.): 1'-6 13/16"/2'-2 13/16"

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	36" O.D.	1'-6 13/16"	SA-516-70	3/8"	1/16"	1	None	.70	1	None	.70	N/A	N/A
1	36" O.D.	2'-2 13/16"	SA-516-70	3/8"	1/16"	1	None	.70	1	None	.70	N/A	N/A

15. Heads: (a) SA-516-70 (Mat'l Spec. No., Grade or Type) N/A H.T. - Time & Temp. (b) SA-516-70 (Mat'l Spec. No., Grade or Type) N/A H.T. - Time & Temp.

	Location (Top, Bottom, Ends)	Thickness Min.	Thickness Corr.	Radius Crown	Radius Knuckle	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure Convex	Side to Pressure Concave	Category A Type	Category A Full, Spot, None	Category A Eff.
(a)	Top	.2283"	1/16"			2:1				---	Yes	S	None	.85
(b)	Bottom	.2283"	1/16"			2:1				---	Yes	S	None	.85

If removable, bolts used (describe other fastening) SA-193-B7, 3/4", 40 (Mat'l Spec. No., Grade, size, No.)

Form U-1 (Back)

16. MAWP FV&150 (internal) --- (external) psi at max. temp. 300 (internal) --- (external) °F. Min. design metal temp. -20 °F at FV&150 psi.

17. Impact test No. UG-20 (f), UCS-66 (a) & UHA-51. (indcate yes or no and component(s) impact tested) at test temperature of _____ °F.

18. Hydro., ~~pneumatic~~, test press. 203 Proof test N/A

19. Nozzles, inspection and safety valve openings:

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 Fig. UW-16.1	Flange Fig.	
Inlet	1	24"	Cl 150 SO	SA-240, 304	SA-182,F304L	.250"	0"		(C)	(3)	
Outlet	1	2"	Cl 150 WN	SA-312W,TP304L	SA-182,F304L	.154"	0"		(C)	(6)	
Outlet	1	6"	Cl 150 WN	SA-312W,TP304L	SA-182,F304L	.134"	0"		(C)	(6)	
PI	2	1/2"	H.C.	SA-182,F304L	----	Cl 3000	0"		(C)	---	
TI	2	3/4"	H.C.	SA-182,F304L	----	Cl 3000	0"		(C)	---	
Inlet/Outlet	2	10"	Cl 150 SO	SA-106-B	SA-105	.365"	1/16"		(C)	(3)	
Drain/Vent	2	3/4"	H.C.	SA-105	----	Cl 3000	1/16"		(C)	---	
Vent	1	1/4"	N.P.T.	-----	----	---	---		---	---	

20. Supports: Skirt No (Yes or no) Lugs No (No.) Legs 4 (No.) Others N/A (Describe) Attached Shell/Welded (Where and 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: #36-192 Product Condenser #1, Tema Type BEM.
Delta-T Corporation, P.O. No. 64000624020, Item# E-4401.
Atlas Job # 12444-1, 'UG-46 (a)'.
* Material meets all the requirements of 304 & 304L.
Pressure relief devices (UG-125) are the responsibility of the user.

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. 5027 Expires APRIL 30 20 08.

Date 9/4/07 Name ATLAS INDUSTRIAL MANUFACTURING CO. (Manufacturer) Signed Ramon Maldonado (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 NEW JERSEY and employed by HSB CT. of HARTFORD, CT. have inspected the pressure vessel described in this Manufacturer's Data Report on 9/30, 20 07, 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 9/4/07 Signed _____ (Authorized Inspector) Commissions NB10663 ABIN, NJ 7018 (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 _____, 20 _____.

Date _____ Name _____ (Assembler) Signed _____ (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.)