

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 SHELL AND TUBE BUNDLES, INC., 13125 ROYAL DRIVE, STAFFORD, TX. 77477
(Name and address of Manufacturer)

2. Manufactured for MATRIX ENGINEERING/BRIDGELINE GAS LLC, 1726 W. CARDINAL DRIVE BEAUMONT, TX 77705-6416
(Name and address of Purchaser)

3. Location of Installation HENRY GAS PLANT, ERATH, LOUISIANA
(Name and address)

4. Type: HORIZNTAAL HEAT EXCHANGER STB-1334-1
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.)

N/A STB-1334-1 176 1998
(CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)

5. ASME Code, Section VIII, Div. 1 1995 A96 N/A N/A
Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

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

6. Shell (a) No. of course(s): 3 (b) Overall Length (ft & in.): 19'-5 7/16"

| 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 | 30" I.D. | 8'-0" | SA-240-304L | 5/8" | 1/16" | 1 | SPOT | .85 | 1 | SPOT | .85 | NONE | NONE |
| 2 | 30" I.D. | 3'-5 7/16" | SA-240-304L | 5/8" | 1/16" | 1 | SPOT | .85 | 1 | SPOT | .85 | NONE | NONE |
| 3 | 30" I.D. | 8'-0" | SA-240-304L | 5/8" | 1/16" | 1 | SPOT | .85 | 1 | SPOT | .85 | NONE | NONE |

7. Heads: (a) SA-182-F304L; H.T. = NONE (b) SA-240-304L; H.T. = NONE
(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 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 | -- | 1/16" | 42 7/8" O.D. x 30" I.D. BODY FLANGE (#6) | -- | -- | -- | -- | -- | -- | -- | N/A | NONE | N/A |
| (b) | END | 9/16" | 1/16" | -- | -- | 2:1 | -- | -- | -- | -- | X | N/A | NONE | N/A |

If removable, bolts used (describe other fastening) CHANNEL-TO-SHELL; SA-193B8CL1; 2"Ø; (28)

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

8. Type of Jacket N/A Jacket closure N/A
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions N/A If bolted, describe or sketch.

9. MAWP 464 N/A psi at max. temp. 150 N/A °F Min. design metal temp. -200 °F at 464 psi.
(Internal) (external) (Internal) (external)

10. Impact test YES, WELD METALS-MATERIALS EXEMPT PER UHA-1(d1a).

(Indicate yes or no and the component(s) Impact tested)

11. Hydro., pneu., or comb. test press. 795 Proof test N/A

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: SA-182-F304L 31 15/16" 5 3/8" 1/4" BOLTED
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)

N/A N/A N/A N/A N/A
Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: SA-249TP-304L 3/4" .060" (MIN) 270 -U-
Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge Number Type (Straight or U)

Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s): 1 (b) Overall Length (ft & in.): 2'-2 3/4"

| 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 | 30" I.D. | 2'-2 3/4" | SA-240-304L | 1 3/8" | 1/16" | 1 | FULL | 1.0 | 1 | FULL | 1.0 | NONE | NONE |
| -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

15. Heads: (a) SA-182-F304L; H.T. = NONE (b) SA-182-F304L; H.T. = NONE
(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 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 | -- | 1/16" | 42 7/8" O.D. x 30" I.D. BODY FLANGE (#4) | -- | -- | -- | -- | -- | -- | -- | N/A | NONE | N/A |
| (b) | END | -- | 1/16" | 42 7/8" O.D. x 30" I.D. BODY FLANGE (#5) | -- | -- | -- | -- | -- | -- | -- | N/A | NONE | N/A |

If removable, bolts used (describe other fastening) CHANNEL COVER-TO-CHANNEL; SA-183B8CL1; 2"Ø; (28)

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

FORM U-1 (Back)

16. MAWP 1267 N/A psi at max. temp. 150 N/A °F Min. design metal temp. -200 °F at 1267 psi.
 (internal) (external) (internal) (external)

17. Impact test YES, WELD METALS-MATERIALS EXEMPT PER UHA-1(d1a).
 (Indicate yes or no and the component(s) impact tested)

18. Hydro-, pneu-, or comb. test press. 2035 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 | Flange | |
| Inlet & Outlet | 1-1 | 12" | 900# WN | SA-312TP304L | SA-182-F304L | SCH. 100 | 1/16" | SA-240-304L | (A) | (B) | |
| INLET | 2 | 8" | 300# WN | SA-312TP304L | SA-182-F304L | X-HVY | 1/16" | SA-240-304L | (A) | (C) | |
| OUTLET | 2 | 10" | 300# WN | SA-312TP304L | SA-182-F304L | X-HVY | 1/16" | SA-240-304L | (A) | (C) | |
| VENT | 1 | 1 1/2" | 900# Lwn | SA-182-F304L | N/A | .63" | 1/16" | WELD | UW-16.1 (e) | N/A | |
| DRAIN | 1 | 1 1/2" | 900# Lwn | SA-182-F304L | N/A | .63" | 1/16" | WELD | UW-16.1 (e) | N/A | |
| VENT | 1 | 1" | 300# Lwn | SA-182-F304L | N/A | .56" | 1/16" | WELD | UW-16.1 (e) | N/A | |
| DRAIN | 1 | 1" | 300# Lwn | SA-182-F304L | N/A | .56" | 1/16" | WELD | UW-16.1 (e) | N/A | |
| CHEM INJ. | 1 | 1" | 900# Lwn | SA-182-F304L | N/A | .56" | 1/16" | WELD | UW-16.1 (e) | N/A | |

20. Supports: Skirt NO Lugs N/A Legs N/A Others 2-SADDLES Attached SHELL & WELDED
 (Yes or no) (No.) (No.) (Describe) (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)

NONE

22. Remarks: (A) UW-16.1 (q) F/P. (B) C, SPOT .85 EFF.. (C) C, NONE .70 EFF..

15. (c END; 6 3/4" THK. W3/16" C.A.; SA-182-F304L. FLAT DIA. 42 7/8".

ITEM NO.: HBC 8825. P.O. NO.: BL 7578. TYPE: AHU. SIZE: 30-240. SERVICE: DEMETHANIZER SIDE REBOILER

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. 28,014 Expires AUGUST 28, 20 00

Date 6-16-98 Name SHELL AND TUBE BUNDLES, INC. Signed Harold Lawrence
 (Manufacturer) (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 TEXAS and employed by COMMERCIAL UNION INS. CO. of BOSTON MASS. have inspected the pressure vessel described in this Manufacturer's Data Report on 6-16, 19 98, 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 6-16-98 Signed Chris J. Powell Commissions 118758204
 (Authorized Inspector) (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 _____, 19 _____

Date _____ Name _____ Signed _____
 (Assembler) (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 _____ Commissions _____
 (Authorized Inspector) (Nat'l Board incl. endorsement, State, Province and No.)