

**FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
 (Alternative Form for Single Chamber, Completely Shop-Fabricated Vessels Only)  
 As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

Form U1-A

1. Manufactured and certified by MISSISSIPPI TANK COMPANY 3000 W 7TH STREET HATTIESBURG, MS 39401  
 (Name and address of Manufacturer)

2. Manufactured for STEAG LLC DURHAM, NC  
 (Name and address of Purchaser)

3. Location of Installation J.M. STUART STATION ABERDEEN, OH  
 (Name and address)

4. Type HORIZ C6818A2 N/A C6818A-1-12 10933 2001  
 (Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year Built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER and PRESSURE VESSEL CODE.  
 The design, construction, and workmanship conform to ASME rules, Section VIII, Division 1 1998  
 to 1999 N/A N/A 1998  
 Addenda (Date) Code Case Nos. Special Service per UG-120 (d) (Year)

6. Shell: SA516-70N 1.0582" .0625" 10' - 10" I.D. 89' - 2.5' SM/SM  
 Mat'l. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. ID (ft. & in.) Length (overall) (ft. & in.)

7. Seams: WELDED DBL BUTT(A) FULL (B) 100 1150 1.25 WELDED DBL BUTT(A) FULL(B) 9  
 Long. (Welded, Dbl, Sngl., Lap, Butt) RT (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr.) Girth (Welded, Dbl, Sngl., Lap, Butt) RT (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mat'l. SA516-70N (C) (b) Mat'l. N/A  
 (Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	ENDS	.675"	.0625"	N/A	N/A	N/A	N/A	65.375"	N/A	CONCAVE
(b)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used (describe other fastenings) N/A  
 (Mat'l., Spec. No., Gr., Size, No.)

9. MAWP 300 psi at max. temp. 110 °F  
 Min. design metal temp. -15 °F at 300 psi. Hydro., Pneu., or Comb. test pressure 450 (HORIZONTAL) psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam or Size	Type	Material	Nom. Thickness	Reinforcement Material	How Attached	Location
MANWAY	2	28.5"	(E)	(F)	.750"	SA516-70N	(G)	SHELL
RELIEF	1	4"	(H)	SA105	.875"	SA516-70N	(G)	SHELL
AMMONIA FILL	1	2"	(I)	(J)	.438"	SA516-70N	(G)	SHELL
GAS AMMONIA	1	2"	(K)	(L)	.343"	INHERENT	(M)	SHELL
OUTLET	1	4"	(K)	(J)	.438"	SA516-70N	(G)	SHELL
IN,PRESS,OUT	3	1.5"	(N)	(L)	(N)	INHERENT	(M)	SHELL
TEMP, LEVEL	3	2"	(K)	(L)	.343"	INHERENT	(M)	SHELL
LEVEL	2	3"	(K)	(J)	.438"	SA516-70N	(G)	SHELL

11. Supports: Skirt NO Lugs NONE Legs NONE Other SADDLES Attached SHELL AND WELDED  
 (yes or no) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: N/A

(Name of part, item number, Mfg's. name and identifying stamp)  
66.342 W.G. CAPACITY ANHYDROUS AMMONIA STORAGE TANK. (A) TYPE NO.1. (B)100% RADIOGRAPHED A & B SEAMS INCLUDING SEAMS IN SEGMENTAL HEADS. (C) ENTIRE VESSEL HEAT TREATED AT 1150 DEGREES F. FOR 1.25 HOURS. CONTINUED ON FORM U-4.

**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. 236 expires NOVEMBER 7, 2003.

Date: 7/18/01 Co. Name: MISSISSIPPI TANK COMPANY Signed: David L. Jay  
 (Manufacturer) (Representative)

**CERTIFICATE OF SHOP INSPECTION**

Vessel constructed by MISSISSIPPI TANK COMPANY at HATTIESBURG, MS, 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 MISSISSIPPI and employed by H.S.B.I. & I. COMPANY have inspected the component described in this Manufacturer's Data Report on 6/11/01, 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 7/18/01 Signed [Signature] Commissions NS11523A4 NS4565  
 (Authorized Inspector) Nat'l. Board (Incl. endorsements, State, Prov. and No.)

**FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET**  
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

Form U-4

1. Manufactured and certified by MISSISSIPPI TANK COMPANY 3000 W 7TH STREET HATTIESBURG, MS 39401  
(Name and address of Manufacturer)

2. Manufactured for STEAG LLC DURHAM, NC  
(Name and address of Purchaser)

3. Location of installation J.M. STUART STATION ABERDEEN, OH  
(Name and address)

4. Type HORIZONTAL TANK C6818A2  
(Horiz., vert. or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

N/A C6818A-1-12 10933 2001  
(CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)

Data Report  
Item Number

Remarks

REMARKS - CONTINUED

(E)	300# WN FLANGE TO PIPE WELDED DOUBLE BUTT TYPE NO. 1. PIPE IS ROLLED PLATE WITH LONGSEAM 100% RADIOGRAPHED. SA105 BLIND FLANGE BOLTED TO FLANGE WITH SA193-B7 STUDS AND SA194-2H NUTS.
(F)	SA516-70N/SA105
(G)	NOZZLE TO VESSEL WELDED PER FIG. UW-16.1(e) AND PARAGRAPH UW-16(f)(2).
(H)	300# LWN FLANGE
(I)	300# WN FLANGE TO 2" (.340" THK.) x 3" (.438" THK.) SA420WPL6 CONCENTRIC REDUCER AND REDUCER WELDED TO PIPE SINGLE BUTT, TYPE NO. 1.
(J)	SA333 GR6/ SA105
(K)	300# WN FLANGE TO PIPE WELDED SINGLE BUTT, TYPE NO. 1.
(L)	SA106B/SA105
(M)	NOZZLE TO VESSEL WELDED PER FIG. UW16.1(e).
(N)	300# WN FLANGE TO 1.5" (.281" THK.) x 2" (.343" THK.), SA234-WPB CONCENTRIC REDUCER AND REDUCER WELDED TO PIPE SINGLE BUTT, TYPE NO. 1.
	VESSEL EXEMPT FROM IMPACT TESTING PER UCS-66(a), UCS-66(c), UCS-66(g), AND UCS-67(d)(1).

Certificate of Authorization: Type U No. 236 Expires NOVEMBER 07, 2003

Date 7/18/01 Name MISSISSIPPI TANK COMPANY Signed David L. Fay  
(Manufacturer) (Representative)

Date 7/18/01 Name [Signature] Commission NB11553 "A" MS4565  
(Authorized Inspector) (Nat'l. Board incl. endorsement, State, Province and No.)