

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
 (Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only)
 as required by the provisions of the ASME Code rules, Section VIII, Division 1

1. Manufactured and certified by Ward Tank Corporation 7001 Newell Hickory Grove Rd., Char., NC
 (name and address of manufacturer)

2. Manufactured for Ethyl Corporation P. O. Box 1028 Orangeburg, SC
 (name and address of purchaser)

3. Location of installation Hardwicke Chemical Elgin, SC
 (name and address)

4. Type: Vertical W-1217 89-W-1217 393 1989
 (short or vert., tank) (mfr'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 Code, Section VIII, Division 1: 1988
 (addenda (dates) (Code Case no.) (special service per UG-125(c)) (year)

6. Shell: SB 463-20CB 1/4" 0" 4'-11 1/2" 5'-0"
 (mat'l. spec. no., grade) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

7. Seams: Dbl. spot 85 Dbl. spot 1
 (long. (welded, dbl., angl., lap, butt)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time (hr.)) (grth (welded, dbl., angl., lap, butt)) (RT (spot, partial, or full)) (no. of courses)

8. Heads: (a) SB 463-20CB (b) SB 463-20CB
 (mat'l. spec. no., grade) (mat'l. 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) Top/Bot	.3125	0"	60"	3.75					Concave
(b)									

If removable, bolts used (describe other fastenings):

9. MAWP: EV & 100 max. temp. 366 Min design metal temp. -20 at 100 Hydro., pneu. or comb. test pressure 150
 (psi) (°F) (°F) (psi)

10. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	No.	Dia. or Size	Type	Mat'l.	Nom. Thickness	Reinforcement Mat'l.	How Attached	Location
Manway	1	16"	CL150Fg	Alloy 20	1/4"	1/4" x 18"OD	Welded	
Inlet/Outlet	4	2"	CL150L	Alloy 20	Sch 40	N/A	Welded	
Relief	1	2"	CL150L	Alloy 20	Sch 40	N/A	Welded	
Process	2	1"	ScdCplg	Alloy 20	6000#	N/A	Welded	

11. Supports: Skirt No Lugs No Legs 4 Other Attached Welded to Shell
 (yes or no) (no) (no) (describe) (where & how)

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

(name of part, item number, mfr's name and identifying stamp)

Customer P. O. No. 54577

Impact Testing Exempt - not required for non-ferrous material & UCS 66 (c)

User is responsible for Pressure Relief Device in accordance with UG 125 & Foot Note 37.

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. 18-165 Expires 2-1-90
 Date 9-28-89 Name Ward Tank Corp. Signed [Signature]
 (manufacturer) (representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Ward Tank Corp. at Charlotte, NC
 I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of NC and employed by N.C. Dept. of Labor
 of have inspected the component described in this Manufacturers' Data Report on 9-28, 19 89 and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 Manufacturers' 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 9-29, 19 89 Signed [Signature] Commissions NB 7016-NC791-Pa 3252 (B)
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsement) title, prov. and no.)