

103307

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 Evans & Sons Process Tank Co., Inc. 1851 Shop Road, Columbia, SC 29201
(Name and address of manufacturer)
2. Manufactured for Great Lakes Chemical Corp., P.O. Box 1958, El Dorado, Arkansas 71730
(Name and address of purchaser)
3. Location of installation Great Lakes Chemical Corp., Hwy 167 South, El Dorado, Arkansas
(Name and address)
4. Type Vertical C-87-1539A --- C-87-1539(R1) 259 1987
(How or vent, tank) (Mfg's serial No.) (CRN) (Drawing) (Nett. 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 1986
Year
- 12-31-86 None None
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, or sheets of heat exchangers

6. Shell: SA-516-70 .25 0 3'-8" OD 3'-0" S/S
(Matl. Spec No. Grade) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
7. Seams: DBL BUTT Spot 85 ---
(Long. (Dbl., Sngl.)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (F))
- DBL BUTT Spot 1
(Time) (Grth. (Dbl., Sngl.)) (R.T. (Spot, Partial, or Full)) (No. of Courses)
8. Heads: (a) Matl. SA-516-70 (b) Matl. ---
(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)	BTM	.1875	0	---	---	2:1	---	---	---	Concave
(b)										

If removable, bolts used (describe other fastenings) None
(Matl. Spec No. Gr. Size, No.)

9. Type of Jacket Conventional --- --- ---
Proof Test
10. Jacket Closure Bar --- --- --- ---
(Describe as cage & weld, bar, etc.) If bar, give dimensions 3/4" x 2 1/2" If bolted, describe or sketch.
11. MAWP 150 --- 400 --- --- ---
psi at max. temp. °F. Min. temp. (when less than -20° F) °F.
Hydro., pneu., or comb. test press. psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary Matl. (Spec No. Gr.) Diam. (in.) (Subject to pressure) Nom. Thk. (in.) Corr. Allow. (in.) Attach (Welded, Bolted)
Floating Matl. (Spec No. Gr.) Diam. (in.) Nom. Thk. (in.) Corr. Allow. (in.) Attach
13. Tubes: Matl. (Spec No. Gr.) OD (in.) Nom. Thk. (in. or Gauge) Number Type (Straight or "U")

Items 14-17 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

14. Shell: SA-240-316L 0.625 0 3'-4" OD 3'-0" T/T
(Matl. Spec No. Grade) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
15. Seams: DBL BUTT None 70 ---
(Long. (Dbl., Sngl.)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (F))
- DBL BUTT None 1
(Time) (Grth. (Dbl., Sngl.)) (R.T. (Spot, Partial, or Full)) (No. of Courses)
16. Heads: (a) Matl. SA-240-316L (b) Matl. SA-240-316L
(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)	Top	0.250	0	---	---	2:1	---	---	---	Concave
(b)	BTM	0.6875	0	---	---	2:1	---	---	---	Both

If removable, bolts used (describe other fastenings) None
(Matl. Spec No. Gr. Size, No.)

17. MAWP 150 --- 400 --- --- ---
psi at max. temp. °F. Min. temp. (when less than -20° F) °F.
240
Hydro., pneu., or comb. test press. psi.

18. Nozzles, Inspection and Safety Valve Openings:

[illegible]

19. Supports: Skirt No Lugs 4 Legs -- Other ---- Attached Welded to JKT
(Yes or no) (No.) (Yes) (Describe) (Where and how)

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

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. 15,018 expires 3-13 19 66
 Date 12-17-57 Co. name Evans & Sons Process Tank Co. Signed Felix Krenner
Manufacturer (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Evans & Sons Process Tank Co., Inc. at 1851 Shop Road, Columbia, SC 29201

1, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Pennsylvania and employed by Lumbermens Mutual Casualty Company of Long Grove, Illinois have inspected the pressure vessel described in this Manufacturer's Data

of Long Grove, Illinois have inspected the pressure vessel described in this Manufacturer's Data Report on 12-17, 1987, 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 the 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 12-17-87 Signed *James A. Withers* Commissions NBIC043 Pa 2428
(Not Board, State, Province and Nat.)

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

"UP" Certificate of Authorization No. _____ expires _____, 19____.

Date _____ Co. name _____ Signed _____ (By 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 _____, do hereby certify that _____ and employed by _____

I, _____, 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 that, 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 _____
(Not based on actual endorsements, state, local, and national)