# 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

1. Manufactured and certified by TOMCO EQUIPMENT COMPANY, 3340 Rosebud Rd., Snellville, GA 30278 (Name and address of manufacturer)

2. Manufactured for Stock (Name and address of purchaser)

3. Location of installation _____ (Name and address)

4. Type Horizontal (Horiz. or vert., tank) | 2352 (Mfg's serial No.) | _____ (CRN) | 60T-51 (Drawing No.) | 2352 (Nat'l. Bd. No.) | 1989 (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)

to 1987 (Addenda (Date)) | 2051 (Code Case Nos.) | Low Temperature Service (Special Service per UG-120(d))

6. Shell: SA612 (Mat. (Spec. No., Grade)) | .687/.683 (Nom. Thk. (In.)) | -0- (Corr. Allow. (In.)) | 6'-6" (Diam. I.D. (Ft. & In.)) | 58'-0" (Length (overall) (Ft. & In.))

7. Seams: Wld.Dbl.Butt (Long. (Welded, Dbl., Sngl., Lap, Butt)) | Full (R.T. (Spot or Full)) | 100 (Eff. (%)) | _____ (H.T. Temp. (°F)) | _____ (Time (hr)) | Wld.Dbl.Butt (Girth (Welded, Dbl., Sngl., Lap, Butt)) | Full (R.T. (Spot, Partial, or Full)) | 8 (No. of Courses)

8. Heads: (a) Mat. SA612 (Spec. No., Grade) (b) Mat. SA612 (Spec. No., Grade)

| | Location (Top, Bottom, Ends) | Minimum Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | de to Pressure (Convex or Concave) |
|---|---|---|---|---|---|---|---|---|---|---|
| (a) | End | .677 | -0- | | | 2:1 | | | | Concave |
| (b) | End | .677 | -0- | | | 2:1 | | | | Concave |

If removable, bolts used (describe other fastenings) _____ (Mat., Spec. No., Gr., Size, No.)

9. MAWP 350 psi at max. temp. 200 °F

Min. design metal temp. -20 °F at 200 psi. Hydro., ~~pneumatic~~ test pressure 525 psi.

10. Nozzles, Inspection and safety valve openings:

| Purpose (Inlet, Outlet, Drain) | No. | Diam. or Size | Type | Matl. | Nom. Thk. | Reinforcement Matl. | How Attached | Location |
|---|---|---|---|---|---|---|---|---|
| | 2/3/2 | ½/1/1¼" | Nozzle | SA106B | Sch. 80 | Inherent | Welded | |
| | 2/6 | 1½/2" | " | " | " | " | " | |
| Safety | 1 | 3" | " | " | " | " | " | |
| Inspection | 1 | 12x16 | Manway | SA516-70 | 1½" | " | " | Head |

11. Supports: Skirt No (Yes or no) Lugs 2 (No.) Legs 0 (No.) Other 2 Saddles (Describe) Attached Welded to vessel (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: Manway Ring L.A. Boiler Works, Inc. LABW Part #14573 (Name of part, item number, Mfg's. name and identifying stamp)

For non-corrosive service MDMT (UCS-66 (b))
60-Ton Capacity $CO_2$ Storage Vessel

### 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. 16868 expires 8/10, 1990.

Date 2-17-89 Co. name TOMCO EQUIPMENT COMPANY (Manufacturer) Signed R.H.Rogers (Representative)

### CERTIFICATE OF SHOP INSPECTION

Vessel constructed by TOMCO EQUIPMENT COMPANY at Snellville, Georgia.

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 Georgia and employed by Commercial Union Insurance Company have inspected the component described in this Manufacturer's Data Report on 2/8,10,13,15,17, 19 89, 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 2-17-89 Signed Jim Evans (Authorized Inspector) Commissions PAWC2973/NB8798/OH Comm/GA104 (Nat'l Board (incl. endorsements), State, Prov. and No.)

NB# 2352

# FORM U-2 MANUFACTURERS' PARTIAL DATA REPORT

R-4815

2-2

## A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. (a) Manufactured by Los Angeles Boiler Works Inc. 707 N 20th Blackwell OK, 74631
(Name and address of manufacturer of part)

(b) Manufactured for Stock
(Name and address of manufacturer of vessel)

2. 14535 thru 14602 (68 alike) (Mfgs. Ser. No. of Part) | (CRN) | B-2777 (Dwg.) | (Nat'l Bd. No. of Part) | 1988 (Year Built)

3. (a) Constructed According to Drawing No. B2777 Drawing Prepared by _____ (b) Description of Part Inspected Manway Ring

4. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME Boiler and Pressure Vessel Code. The construction and workmanship conform to ASME rules, Section VIII, Division 1, 1986 (Year), and Addenda through 87 (Date) and Code Case No. _____.

5. Special Service per UG-120(d) _____

6. Postweld Heat Treatment: Temperature 1100 F Time 1½ hrs.

*Items 7-12 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers*

7. Shell: Material SA-516-70 PVQ (Spec. No., Grade) Nominal Thickness 1½ in. Corrosion Allowance ___ in. Diam. ___ ft. ___ in. Length 0 ft. 4 in.

8. Seams:
Longitudinal Dbl Butt Full (Welded, Dbl., Sngl., Lap, Butt) (Spot or Full) Efficiency 100 % H.T. Temp. ___ F Time ___ Girth ___ (Welded, Dbl., Sngl., Lap, Butt) R.T. ___ (Spot, Partial, or Full) No. of Courses 1

9. Heads: (a) Material N/A (Spec. No., Grade) (b) Material N/A (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) | | | | | | | | | | |
| (b) | | | | | | | | | | |

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

10. Type of Jacket _____ Proof Test _____

11. Jacket Closure _____ (Describe as ogee & weld, bar, etc.) If bar, give dimensions _____

If bolted, describe or sketch.

12. Constructed for max. allowable working pressure _____ psi at max. temp. _____ F Min. temp. (when less than −20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure _____ psi.

*Items 13 and 14 to be completed for tube sections*

13. Tubesheets: Stationary — Material _____ (Spec. No., Gr.) Diam. _____ (Subject to pressure) in.

Nominal Thickness _____ in. Corrosion Allowance _____ in. Attachment _____ (Welded, Bolted)

Floating — Material _____ (Spec. No., Gr.) Diam. _____ in.

Nominal Thickness _____ in. Corrosion Allowance _____ in.

Attachment _____

14. Tubes: Material _____ (Spec. No., Gr.) O.D. ___ in. Nominal Thickness ___ in. or gauge Number _____ Type _____ (Straight or "U")

*Items 15-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers*

15. Shell: Material _____ (Spec. No., Gr.) Nominal Thickness ___ in. Corrosion Allowance ___ in. Diam. ___ ft. ___ in. Length ___ ft. ___ in.

Seams:

16. Longitudinal _____ (Welded, Dbl., Sngl., Lap, Butt) R.T. _____ (Spot or Full) Efficiency ___ % H.T. Temp. ___ F Time ___ Girth _____ (Welded, Dbl., Sngl., Lap, Butt) R.T. _____ (Spot, Partial or Full) No. of courses _____

17. Heads: (a) Material _____ (Spec. No., Grade) (b) Material _____ (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) | | | | | | | | | | |
| (b) | | | | | | | | | | |

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

# FORM U-2 (BACK)

18. Constructed for max. allowable working pressure _____ psi at max. temp. _____ F. Min. temp. (when less than – 20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure _____ psi.

*Items below to be completed for all vessels where applicable.*

19. Safety Valve Outlets: Number _____ Size _____ Location _____

20. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Diam. or Size | Type | Material | Nominal Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

21. Inspection Openings.

Manholes No. _____ Size _____ Location _____

Handholes No. _____ Size _____ Location _____

Threaded No. _____ Size _____ Location _____

22. Supports: Skirt _____ (Yes or no) Lugs _____ (No.) Legs _____ (No.) Other _____ (Describe) Attached _____ (Where and how)

23. Remarks: No desing functions performed. Certified to material & workmanship only. The weld proceedure used on these items has been qualified in the PWHT Condition.

| | | |
|---|---|---|
| Mat: | SA-516-70 | |
| Mill | Thysen | Gulf |
| Heat No. | 051804 | 7474113 |
| Slab | 36891 | 1629 |

No Hydro Test Performed

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

Date _____ Signed Los Angeles Boiler Works Inc. (Manufacturer) by Randall K. Schaller (Representative)

"U" Certificate of Authorization No. 721 expires March 30, 19 89

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Oklahoma and employed by Delta Lloyds Insurance Company of Houston TX have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on October 26, 19 88, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturers' Partial 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 11-27-88

Signed _____ (Authorized Inspector) Commissions Okla 298 (Nat'l Board, State, Province and No.)