

**FORM U-1-A 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.

A-601541

1. Manufactured by TRINITY INDUSTRIES, INC.  
 (Name and address of the manufacturer)

2. Manufactured for MOORE ENGINEERING CO POBOX 746 WATERLOO, IOWA 50704  
 (Name and address of the purchaser)

3. Type HORIZ Vessel No. 393508 (Mfrs. Serial) (State & State No.) Nat'l. Bd. No. Yr. Bld. 1973

4. SHELL: Mfr's SA-612-B T.S. 81,000 Nom. 6733 In. Corr. 0 in. Diam. 9 ft 0 in. Length 65 ft 11 in. 375 in.  
 (Kind and Spec. No.) (Fig. or P.E. & Spec. Min. T.S.)

5. SEAMS: Long DBL BUTT H.T. NO R.T. \*COMP Section NO Efficiency 100 %  
 (Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

6. HEADS: (a) Material SA-455-B T.S. 73,000 (b) Material SA-455-B T.S. 73,000

| Location<br>(Top, bottom, ends) | Thickness    | Crown<br>Radius | Knuckle<br>Radius | Elliptical<br>Ratio | Conical<br>Apex angle | Hemispherical<br>Radius | Flat<br>Diameter | Side to Pressure<br>(Convex or Concave) |
|---------------------------------|--------------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|---|
| (a) <u>END</u>                  | <u>.436"</u> |                 |                   |                     |                       | <u>54" I.S.</u>         |                  | <u>CONCAVE</u>                          |
| (b) <u>END</u>                  | <u>.436"</u> |                 |                   |                     |                       | <u>54" I.S.</u>         |                  | <u>CONCAVE</u>                          |

If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
 (Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. Constructed for max. allowable working press. 250 psi. at max. temp. 125 °F. Min. temp. (when less than -20°) \_\_\_\_\_ °F. Hydrostatic Pneumatic or Combination } Test Press. 375 psi.

8. SAFETY OR RELIEF VALVE OUTLETS: Number 1 Size 4" Location SHELL TOP CTR LINE

9. NOZZLES:

| Purpose, (Inlet Outlet, Drain) | Number   | Diam. or Size | Type        | Material    | Thickness    | Reinforcement Material | How Attached  |
|--------------------------------|----------|---------------|-------------|-------------|--------------|------------------------|---------------|
| <u>LIQ. OUT</u>                | <u>1</u> | <u>3"</u>     | <u>CPLG</u> | <u>F.S.</u> | <u>6000#</u> |                        | <u>WELDED</u> |
| <u>LEV. GA</u>                 | <u>1</u> | <u>2.5"</u>   | <u>CPLG</u> | <u>F.S.</u> | <u>3000#</u> |                        | <u>WELDED</u> |
| <u>FILL VAPOR</u>              | <u>3</u> | <u>2"</u>     | <u>CPLG</u> | <u>F.S.</u> | <u>3000#</u> |                        | <u>WELDED</u> |
| <u>THERMO</u>                  | <u>1</u> | <u>5"</u>     | <u>PIPE</u> | <u>C.S.</u> | <u>XXHVY</u> |                        | <u>WELDED</u> |
| <u>LL &amp; PG</u>             | <u>2</u> | <u>.25"</u>   | <u>CPLG</u> | <u>F.S.</u> | <u>6000#</u> |                        | <u>WELDED</u> |
| <u>ROTARY</u>                  | <u>1</u> | <u>1"</u>     | <u>CPLG</u> | <u>F.S.</u> | <u>3000#</u> |                        | <u>WELDED</u> |

10. INSPECTION Manholes, No. 1 Size 18" Location SHELL TOP CTR LINE  
 OPENINGS Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

11. SUPPORTS: Skirt NO Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached \_\_\_\_\_  
 (Yes or No) (Number) (Number) (Describe) (Where & How)

12. REMARKS: 108" Ø 30,000 W.G. LPG BULK STORAGE TANK PER DWG#60134-1 TANK TO BE USED IN NONCORROSIVE SERVICE

(Brief description of purpose of the vessel, as Air Tank, Water Tank, L.P.G., Etc.—State contents)

1 If postweld heat-treated.

2 List other internal or external pressures with coincident temperature when applicable.

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.

Date JULY 25 19 73 Signed TRINITY INDUSTRIES, INC. By Paul Cameron  
 (Manufacturer)

Certificate of Authorization Expires JAN. 7, 1974

**\*HEADS ARE SPOT R.T.**

**CERTIFICATE OF SHOP INSPECTION**

VESSEL MADE BY TRINITY INDUSTRIES, INC. at AMARILLO, TEXAS

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 JULY 25 19 73, and state that to the best of my knowledge and belief the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

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 JULY 25 19 73

Ralph Long  
 RALPH LONG

Commissioner

TEXAS  
 Nat'l. Board, State, or Province and Ins.

Form No.