FORM U-1 MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS

As required by the Provisions of the ASME Code Rules

210849

1. Manufactured by Whiting Corp., - Pioneer Division, Attalla, Ala.
(Name and address of Manufacturer)

2. Manufactured for The Austin Co. - For Abbott Laboratories, Barceloneta-Puerto Rico
(Name and address of Purchaser)

3. Type Vert. (Horiz. or Vert.) Kind Surface Cond. (Tank, Jacketed, Heat Exch.) Vessel No. (17) (Mfrs. Serial) (Ala.) (State & State No.) Natl. Bd. No. 17 Yr. Built 1967

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL: Material SA-515 Gr. 70 (Kind and Spec. No.) T.S. 70,000 (Fig. or F.B. & Spec. Min. T.S.) Nominal Thickness 3/8 Corrosion Allowance 1/16 In. Diam. 3 Ft. 6 In. Length 28 Ft. 4 In.

5. SEAMS: Long Welded - Butt (Welded, Dbl., Single, Lap, Butt) H.T. No (Yes or No) X.R. Spot (Spot or Complete) Sectioned No (Yes or No) Efficiency 85 %

Girth Welded - Butt H.T. No X.R. Spot Sectioned No No. of Courses 2

If riveted describe seams fully on reverse side of form.

6. HEADS (a) Material SA-515 T.S. 70,000 (b) Material SA-515 T.S. 70,000

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) Top	3/8	3'-6"	2 5/8					Concave
(b) Bottom	3/8	3'-6"	2 5/8					Concave

If removable, bolts used SA-325-120,000-3/4-4½ (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)

7. STAYBOLTS: (Material) If hollow (Size of Hole) Attachment (Threaded, Welded) Pitch (Horiz.) X (Vert.) Diam. (Nominal)

8. JACKET CLOSURE: (Describe as ogee & weld, bar, etc. If bar, give dimensions. If bolted, describe or sketch)

9. Constructed for max. allowable working press. 90 psi at max. temp. 120 °F. Min. temp. (when less than -20°) °F. Hydrostatic / Pneumatic / Combination Test Press. 153 psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA-240 T-304 S. S. (Kind & Spec. No.) Diam. 42 (Subject to Pressure) In. Thickness 1 In. Attachment Welded (Welded, Bolted)

Floating. Material (Kind & Spec. No.) Diam. In. Thickness In. Attachment

11. TUBES: Material SA-249 (Kind & Spec. No.) O.D. 1½ in. Thickness 17 Gage Number 288 Type Straight (Straight or U)

Items 12–15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL Material (Kind and Spec. No.) T.S. (Fig. or F.B. & Spec. Min. T.S.) Nominal Thickness Corrosion Allowance In. Diam. Ft. In. Length Ft. In.

13. SEAMS: Long (Welded, Dbl., Single, Lap, Butt) H.T. (Yes or No) X.R. (Spot or Complete) Sectioned (Yes or No) Efficiency %

Girth H.T. X.R. Sectioned No. of courses

If riveted describe seams fully on reverse side of form.

14. HEADS (a) Material T.S. (b) Material T.S. (c) Material T.S.

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) Top, bottom, ends								
(b) Channel								
(c) Floating								

If removable, bolts used (a) (Material, Spec. No., T.S., Size, Number) (b)

(c) Other fastening (Describe or Attach Sketch)

15. Constructed for max. allowable working press. psi at max. temp. °F. Min. temp. (when less than -20°) °F. Hydrostatic / Pneumatic or Combination Test Press. psi.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number In Line Size Location

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Inlet	1	10"	Flanged	SA-53	Sch. 40	None	Welded
Outlet	1	10"	Flanged	SA-53	Sch. 40	None	Welded

FORM U-1 (Back)

18. INSPECTION OPENINGS: Manholes, No. _____ Size _____ Location _____
Handholes, No. 1 Size 11 Location _____
Threaded, No. 7 Size 1" Location Top & Bottom Head

19. SUPPORTS: Skirt No (Yes or No) Lugs 4 (Number) Legs _____ (Number) Other _____ (Describe) Attached Side-Weld (Where & How)

20. REMARKS: This sheet describes the water boxes for surface condenser. Req'n. 80778

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc; State contents of each part.)

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 Unfired Pressure Vessels.

Date 11-10 19 67 Signed Whiting Corp., Pioneer Div. (Manufacturer) By J. D. Triplett

Certificate of Authorization Expires December 31, 1970

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Whiting Corp., Pioneer Div. at Attalla, Ala.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Tenn. and employed by Hartford Steam Boiler of Hartford, Conn. have inspected the pressure vessel described in this manufacturer's data report on 12-28-67 19 ___, 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 12-28-67 19 ___

E. J. Pucik Commissions NB-5114
Inspectors Signature Nat'l Board or State and No.

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 of _____ and employed by _____ of _____ 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 the applicable sections of the ASME Boiler and Pressure Vessel Code. 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 _____ 19 ___

_____ Commissions _____
Inspector's Signature Nat'l Board or State and No.

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