Form No. 1 for Manufacturer's Report on an Unfired Pressure Vessel as Required by the Provisions of the API-ASME Code Equpt. No. 6776-M113-A

(For Vessels having parts built under different sections (W, EW, R, and F), use appropriate item headings for each part.)

1 Manufactured by Bethlehem Steel Co., Bethlehem, Pa. (Name and address of the manufacturer) Mfrs. Shop Job No. CD7077

2 Manufactured for Mathieson Hydrocarbon Chem. Corp., Baltimore, Md. (Name and address of the purchaser) Purchaser's Order No. 6776M-1 Item 12

Type Horizontal (Horizontal or vertical—when in service) Vessel No. 1534 (Mfrs. Serial No.) To be installed in Kentucky (State and State No.) Date built Feb., 1951 (Month and Year)

4 Have mill test reports been checked on all the plates or seamless vessel forgings entering this unfired pressure vessel? Yes
Do the chemical and physical properties of all plates or seamless vessel forgings meet the requirements of the Code? Yes (See Forms Nos. 2 and 3 and chemical and physical reports)

5 Shell or Drums: No. 1 I.D. Diameter 9 ft. 6 in. (or width Cr.) Length over all 118 ft. 7-11/16 in. B FBx

6 Stamps on Shell Plates or seamless forging A212, 70000 (Brand and lowest tensile strength) Rivet Nuts A-194 Cl. 2H (A.S.T.M. or Other Specifications Carbon Steel or Alloy) Bolts A193 Gr. B7

7 W[1]—Shell Plates 0.562 in.
EW—Shell Plates ____ in.
R—Shell Plates ____ in. Butt Strap Thickness
F—Shell ____ in. (Thickness) Inside ____ in. Outside ____ in.
Style of Seams: Longitudinal Fusion Welded Double-Welded Butt Joint (Riveted or Fusion-Welded and Type)

8 W—Joints Radiographed[2] Intersections Vessel Stress Relieved No (Yes or No) Efficiency of Joint 80 per cent
R—Diameter of Rivet Holes ____ in. Pitch of Rivets ____ × ____ × ____ Efficiency of Joint 80 per cent (Vessel as built)

9 W—Girth joints 13
R—Girth Joints ____ Diameter Rivet Holes ____ in. Pitch of Rivets ____ in. No. of Courses 12
(Riveted or Fusion-Welded and Type)

10 Outer Shell ____ in. (If jacketed, thickness) Style of Seams: Longitudinal ____ Girth ____ (Riveted or Fusion-Welded and Type) Length of Section or Course 9 ft. 6-5/64 in. 9 4-5/64

11 Heads: (thickness) 0.437 Min. in. Radius of dish ____ in. Radius of knuckle ____
Flat, dished, elliptical, integral. Ell. Ratio of ellipse axis 2:1
Conical, Hemispherical ____ Included angle if conical ____
Side to pressure: Top or one end Concave; Bottom or opposite end Concave
If removable, head bolts used ____ (Number and size) or method of fastening ____ (Describe or sketch on separate sketch sheet)

12 W—Radiographic Inspection

	All or Per Cent	Thickness
a Longitudinal Joints	*15%	0.562 in.
b Circumferential Joints	5%	0.562 in.

*17" Radiograph Center of Longitudinal Seams

W—Stress Relieving

	Heads	Ring Nos.	Controlling Thickness	Temp of Vessel	Time Temp Is Held
a If part of vessel only	____	____	____ in.	____ F	____ Hr
b If entire vessel	____	____	____ in.	____ F	____ Hr

13 Nozzle Outlets in Heads:[3] No. 3 Size 3/4, 1, 2-1/4" Material of Nozzle or Reinforcement *Steel How attached Welded
Nozzle Outlets in Shell: No. 2 Size 3/4, 2, 3, 6" Material of Nozzle or Reinforcement Steel How attached Welded (Riveted, Welded, etc.)

14 ~~Handhole or Sight Hole~~ *Nozzles — Pipe A53 Gr. A or B; Flange A181 Gr. 1 (Number, size, and location)

15 Manholes: ~~Air Heads~~ Manway A285 Gr. C Flg. Reinforcement ____
In Shell 1-16" I.D., 30-1/2" from Head Seam Reinforcement 30"Ø x 3/8" Thk. Welded Pad
(Number) (Size and location of each, distance off center of head) (Riveted, welded, etc., outside only or also inside)

16 Method of supporting vessel 3 Saddles, Center and 6'-1-1/2" From Head Seams (Lugs, skirt, or ring if on end, or saddles or lugs if horizontal)

17 a[4] Allowable working pressure at atmospheric temperature (See W-, R-, and F-525) *134 psi
b Hydrostatic test pressure 205 psi
c Hydrostatic test pressure when hammer tested 172 psi
d Proof test pressure if applied ____ psi
e Location of yield if yielding occurred ____
f[4] Hydrostatic test stress in longitudinal joints (W vessels only) 20,800 psi
g Allowable operating stress (Two-thirds stress obtained in f) 13,900 psi

18 Constructed for pressure of 125 psi. With specified operating temperature of 105 F. With corrosion allowance of 0 in.

Remarks Vessel used for a Propane-Butane Blending Tank.
3 Internal Stiffening Rings & 3 (9" x 1/4" Thk.) External straps welded to shell

[1] W—Welded, EW—Welded External Pressure, R—Riveted, F—Seamless Forged. *Heads govern Max. All. W.P.
[2] Indicate location and size on Form 2 or 3.
[3] When there are shell sections of different thicknesses, each section shall be treated separately.

WE CERTIFY the above data to be correct and that all details of material, construction, and workmanship on this unfired pressure vessel conform to the API-ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases.

Date May 1, 1951 Signed Bethlehem Steel Company (Manufacturer) By O. G. Johnson O.G. Johnson

Feb. 23, 1951 Checked by W O Tomey (Inspector) W.O. Tomey For Travelers Indemnity Co. N.B. 1192, Pa. 1375, Ohio 791

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