Form No. 1 for Manufacturers' Report on an Unfired Pressure Vessel as Required by the Provisions of the API-ASME Code Equpt. No. 6776-M102-D

(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. CD 7077

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. 1546 (Mfrs. Serial No.) To be installed in Kentucky (State and State No.) Date built April, 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. 5-3/8 in. Length over all 117 ft. 4-3/8 in. (or width) Gr. B FBx

6 Stamps on Shell Plates or seamless forgings A212,70000 Rivets Nuts - A194 Cl. 2H Bolts A193 Gr. B7 (Brand and lowest tensile strength) (A.S.T.M. or Other Specifications Carbon Steel or Alloy)

7 W—Shell Plates 0.312 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 No Vessel Stress Relieved (Yes or No) Efficiency of Joint 80 per cent
R—Diameter of Rivet Holes — in. Pitch of Rivets — X — Efficiency of Joint 80 per cent (Vessel as built)

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

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. 6-11/64 in. 9 ft. 4-21/16 in.

11 Heads: (thickness) 0.437 Min in. Radius of dish — in. Radius of knuckle 6-7/8"
Flat, dished, elliptical, integral Dished Ratio of ellipse axis —
Conical, Hemispherical — Included angle if conical — Side to pressure { Top or one end Concave / Bottom or opposite end Concave
If removable, head bolts used — or method of fastening — (Number and size) (Describe or sketch on separate sketch sheet)

12 W—Radiographic Inspection

	All or Per Cent	Thickness
a Longitudinal Joints	0	— in.
b Circumferential Joints	0	— in.

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:[2] No. 3 Size 3/4, 1, 2-1/4" Material of Nozzle or Reinforcement *Steel How attached Welded
Nozzle Outlets in Shell: No. 8 Size 3/4, 2, 6" Material of Nozzle or Reinforcement Steel How attached Welded (Riveted, Welded, etc.)

14 ~~Handholes or Sight Holes~~: Nozzles - Pipe A53 Gr. A or B, Flange A181 Gr. 1 (Number, size, and location)

15 Manholes: In Heads Manway - A285 Gr. C Flgs. Reinforcement
In Shell 1-18" I.D. @ 27" From Head Seam Reinforcement 28" 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 6'2" From Head Seam (Lugs, skirt, or ring if on end, or saddles or lugs if horizontal)

17 a[1] Allowable working pressure at atmospheric temperature (See W-, R-, and F-525) 76 psi
b Hydrostatic test pressure 114 psi
c Hydrostatic test pressure when hammer tested 95 psi
d Proof test pressure if applied 114 psi
e Location of yield if yielding occurred None
f[3] Hydrostatic test stress in longitudinal joints (W vessels only) 20,700 psi
g Allowable operating stress (Two-thirds stress obtained in f) 13,750 psi

18 Constructed for pressure of 75 psi. With specified operating temperature of 105 F. With corrosion allowance of 0 in.

Remarks: Vessel used for Butane Storage Tank; 3 Internal Stiffening Rings and 3 (7" wide x 7/16" Thk.) Cir. Welded Reinforcement Bands at Saddles

[1] W—Welded, EW—Welded External Pressure, R—Riveted, F—Seamless Forged.
[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, 19 51 Signed Bethlehem Steel Company (Manufacturer) By O. G. Johnson O. G. Johnson

April 4, 19 51 Checked by W. O. Toney (Inspector) For Travelers Indemnity Co. N.B. 1492, Pa. 1375, Ohio 794

T-460-51-61