

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

Alternate For. or Single Chamber Completely Shop-Fab. ated Vessels Only

1. Manufactured by Wyatt Industries, Inc. Dallas, Texas **#95732**
(Name and address of Manufacturer)

2. Manufactured for Celanese Chemical Company
(Name and address of Purchaser)

3. Type Vert. Vessel No. (60-D-2484) (Mfr. Serial) (State & State No.) Nat. Bd. No. Yr. Built 1960
(Hori. or Vert.)

4. SHELL: Matl. A-240 T-316 Mod 75000 Nom. 2 Cor. 1/16 in. Allow. 3 Ft. 0 in. Lgth. 5 Ft. 0 in.
(Kind and Spec. No.) (Fig. or F.R. & Spec. Min. T.S.) (Thk. in. Allow.)

5. SEAMS: Long Dbl. Butt s.r. None X.R. None Sectioned no Efficiency 70 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)
Girth Dbl. Butt s.r. No X.R. No Sectioned no No. of Courses 1
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

6. HEADS: (a) Material A-240 T-316 Modrs 75000 (b) Material A-240 T-316 Modrs 75000

Location (Top, bottom, ends)	Thickness	Crown Section	Knuckle Radius	Elliptical Ratio	Conical Apex angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Concave or Convex)
(a) <u>Top</u>	<u>1/4" Min.</u>	<u>28.8</u>	<u>2.16</u>					<u>Concave</u>
(b) <u>Bottom</u>	<u>1/4" Min.</u>	<u>28.8</u>	<u>2.16</u>					<u>Concave</u>

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

7. Constructed for (Int.) pressure of 128 psi. Max. Temp. 400 °F. Subsea -20 °F. Hydrostatic Test 225 psi.

8. SAFETY OR RELIEF VALVE OUTLETS: Number Size Location

9. NOZZLES: See attached "Schedule of Openings"

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

10. INSPECTION Manholes, No. Size Location
OPENINGS Handholes, No. Size Location
Threaded, No. Size Location

11. SUPPORTS: Skirt no Legs 2 Supportings Other Attached Welded to Shell
(Yes or No) (Number) (Number) (Describe) (Where & How)

12. REMARKS: 3'0" x 5'0" Seam to Seam Higher Acrylate Unit Item # V-357
DWG. # E-11697

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

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 Unfired Pressure Vessels.

Date August 15, 1960 Signed Wyatt Industries, Inc. By W.H. Hare
(Manufacturer)

Certificate of Authorization Expires December 31, 1961

CERTIFICATE OF SHOP INSPECTION

Inspection Agency's Serial No. 54743

VESSEL MADE BY Wyatt Industries, Inc. at Dallas, Texas

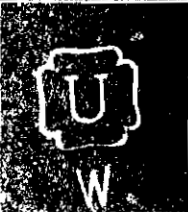
I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in THE STATE OF Texas and employed by Hartford Steam Boiler I & I of Conn., inspected internally and externally, the vessel described in this report on 1960, and certify that the statements made in this report are correct corresponding with mill test reports of materials furnished by the builders, and measurements made of the vessel and that this vessel is constructed in accordance with the ASME Code for Unfired Pressure Vessels.

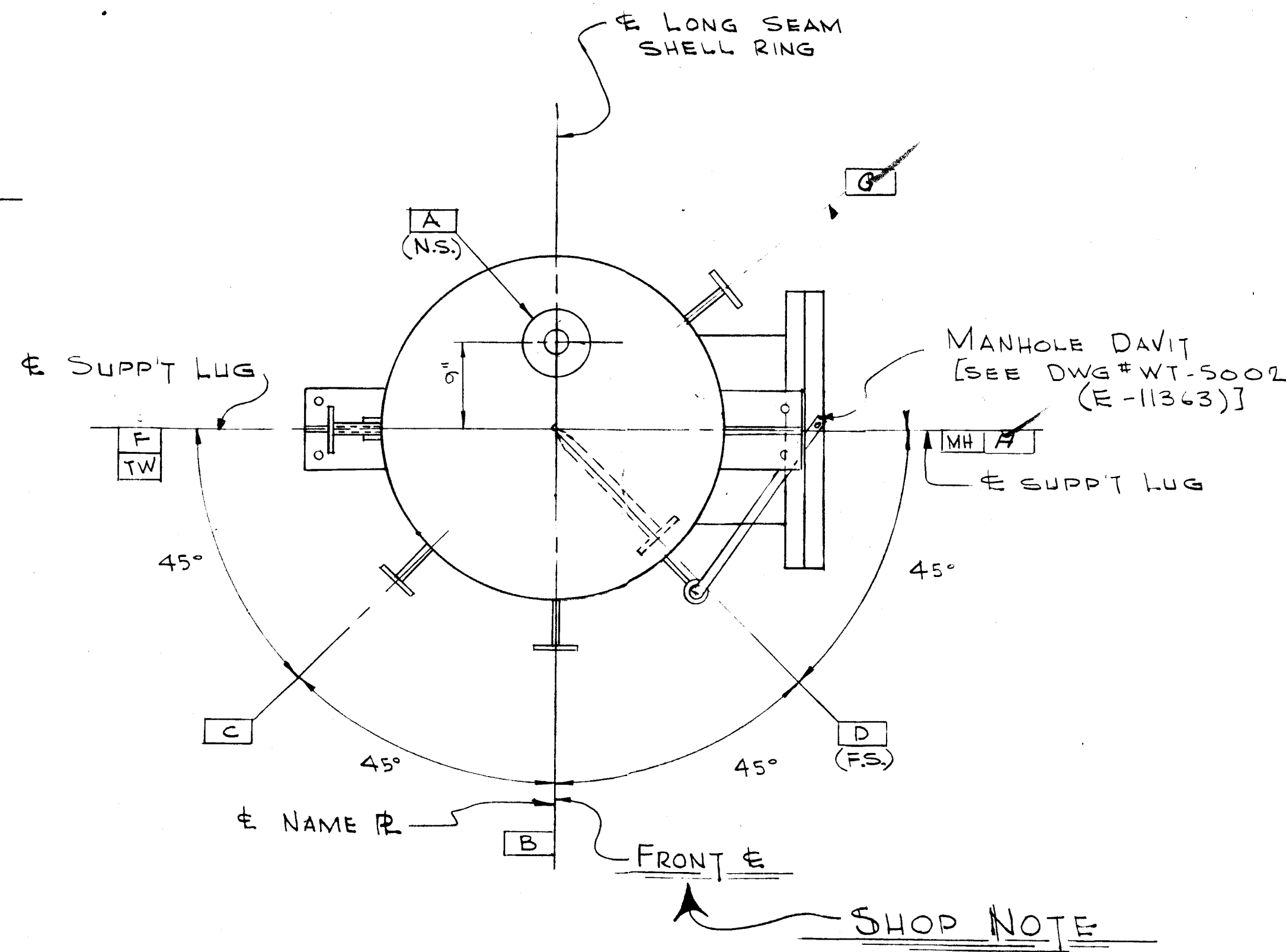
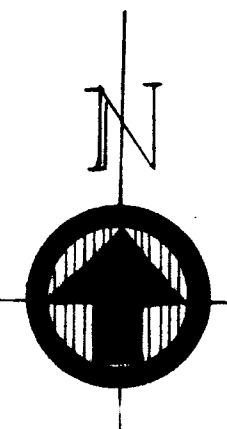
Date August 15, 1960

Inspector's Signature

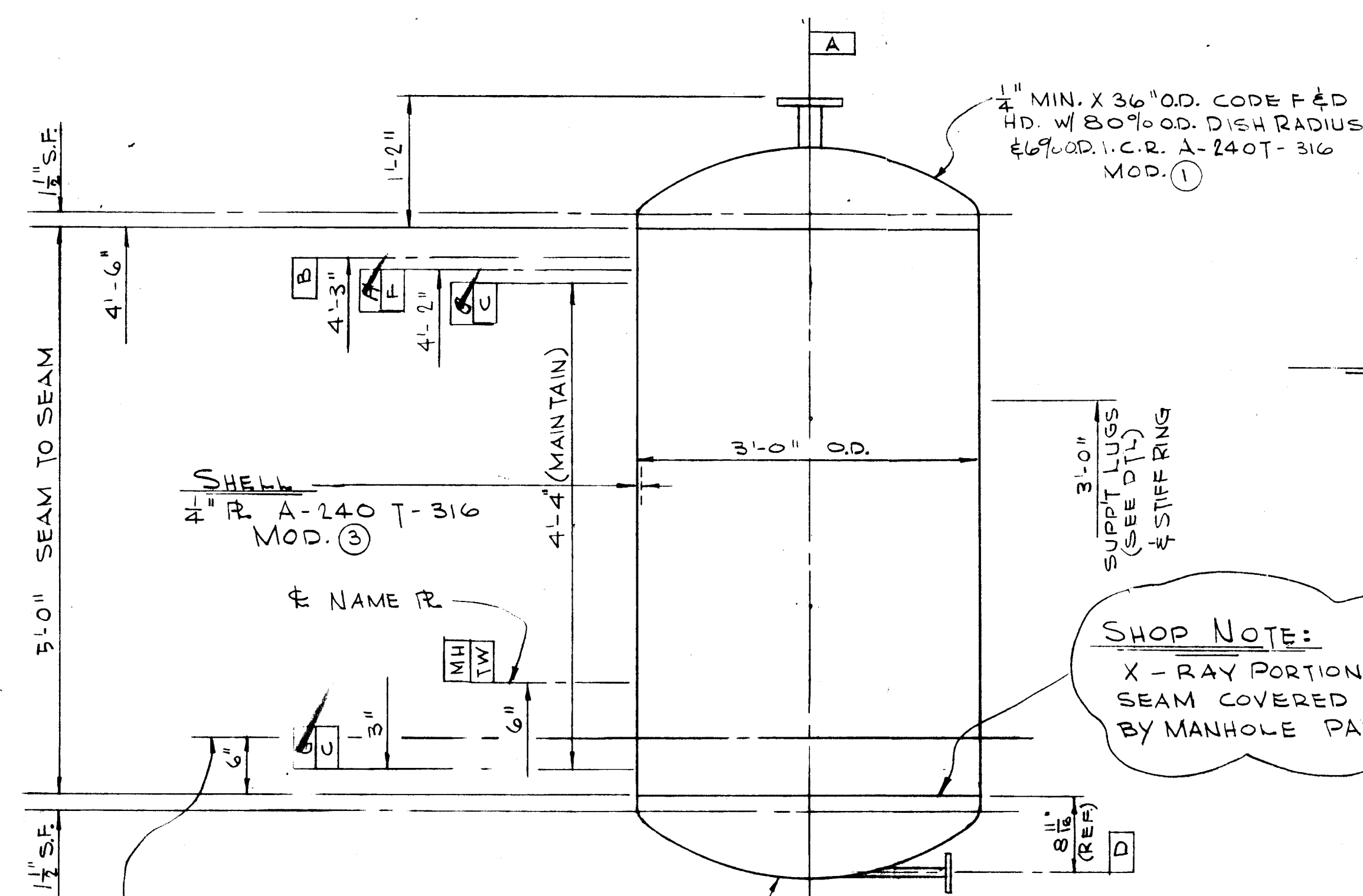
Commission Texas Comm. # 248
State or Natl. Bd. & Number

95732

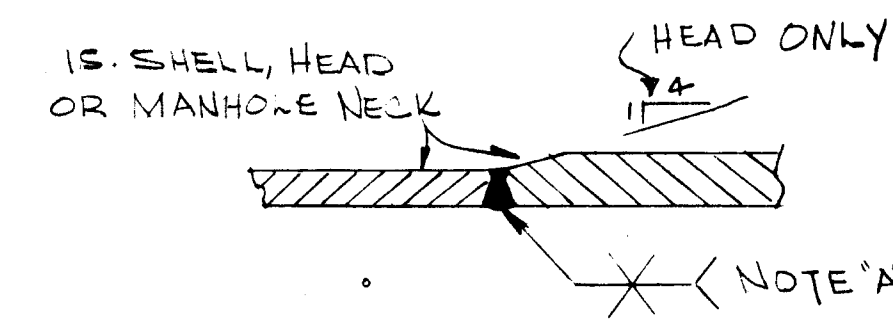
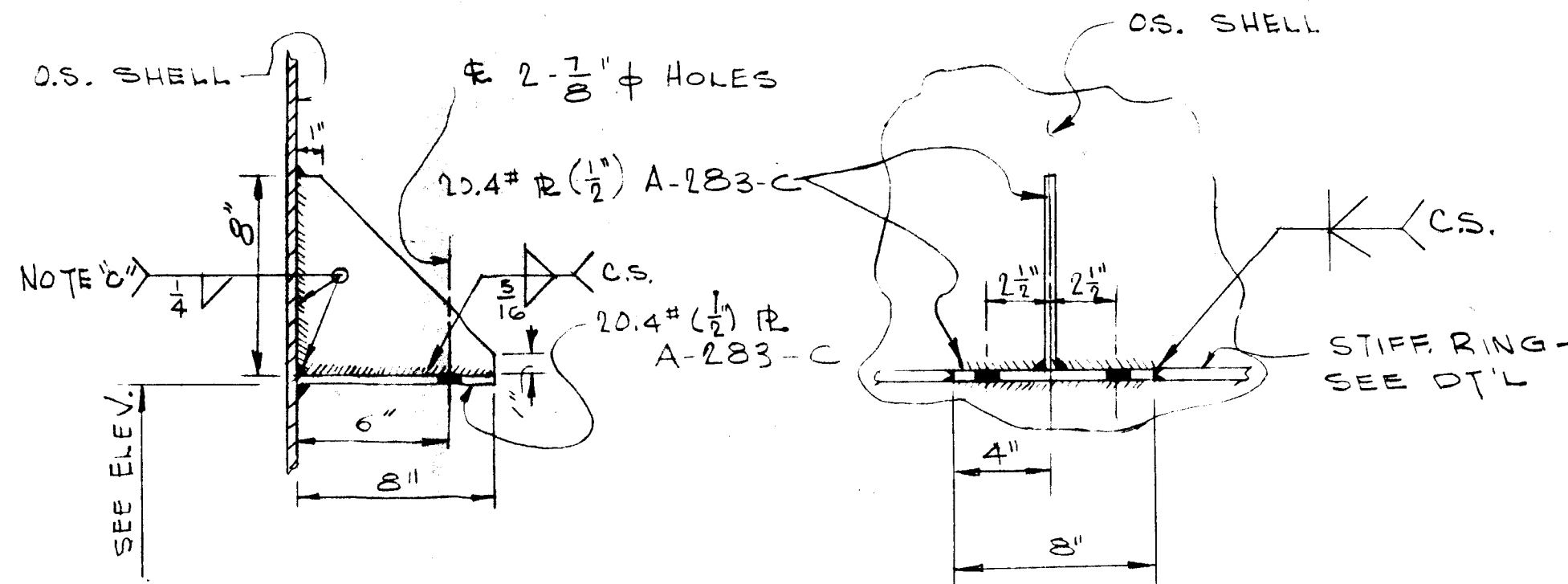
MANUFACTURED BY	
WYATT INDUSTRIES, INC.	
HOUSTON	CORPUS CHRISTI DALLAS
	
	MAX. WORKING PRESSURE
	128 # P.S.I.
	MAX. TEMP.
	400° F.
	MANUFACTURER SERIAL NO.
	60-D-2484
	H.S.B. NO.
	54743
	P.O. # 21-829-0
	ITEM # V-357



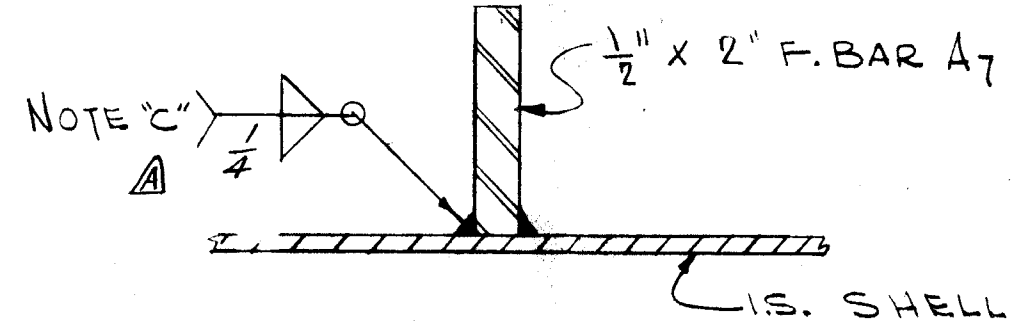
PLAN



ELEVATION

BUTT WELD DETAIL
(TYPICAL)DETAIL OF SUPPORT LUGS
(2 REQ'D)

SHOP NOTE: CUT STIFFENER @
WELD TO SUPPT LUGS AS SHOWN
AT DETAIL OF SUPPT LUGS

DETAIL OF STIFFENER RING
(ONE REQ'D)

SCHEDULE OF OPENINGS									
MARK	QUAN	SIZE	FLANGE	NOZZLE	SERVICE	REMARKS			
A	1	2"	WNFF 150"	SS. 160 SS.	SAFETY V.				
B	1	2"	WNFF 150"	SS. 160 SS.	FUEL GAS				
C	2	2"	WNFF 150"	SS. 160 SS.	INHIB. OUT	BLIND			
D	1	2"	WNFF 150"	SS. 160 SS.	INHIB. IN	BLIND			
F	1	2"	WNFF 150"	SS. 160 SS.	L.G.				
G	2	2"	WNFF 150"	SS. 160 SS.	MANHOLE	S-1412			
H	1	2"	WNFF 150"	SS. 160 SS.	T.W.	TW #47 FURNISHED BY CELANESE			

DESIGN DATA

- ASME Code for Unfired Pressure Vessels, Section VIII, Edition 1959
- Additional Specifications: Celanese Purchasing Specs.
- Code Symbol to be Applied per Par UG 116
- Design Pressure 12.5 psig plus necessary stiffening rings for full vacuum at 200 psig
- Design Temperature 400 °F.
- Corrosion Allowance 1/16 inches.
- Type of Heads: CODE F & D.
- Stress Relief Required NONE
- Radiograph Required NONE (EXCEPT WHERE MH. PAD COVERS SEAM)
- Joint Efficiency: head 100% Shell Longitudinal 70%
- Maximum allowable Working Pressure (no corrosion allowance) Limited by MANHOLE 150 psi @ 1000 °F. Limited by MANHOLE 150 psi @ 400 °F.
- Hydrostatic Test Pressure 225 psi
- Weight Empty 1385 lbs.
- Weight full of Water 2960 lbs.
- Design Wind Velocity 100 mph.
- Shipping Weight 1385 lbs.
- Inspection by Hartford S.B.I. & I. & Customer
- H.S.B. # 54743 Mfg. Serial # 60-D-2484

MATERIAL SPECIFICATIONS

- Shell ASTM A-240 TYPE 316 MOD.*
- Head ASTM A-240 TYPE 316 MOD.*
- Flanges ASTM A-182 F-316 MOD.*
- Nozzle Necks ASTM A-240 TYPE 316 MOD. & A-312 TP 316 MOD.*
- Nozzle Reinforcing ASTM A-285-C F. 80X
- Pressure Bolting ASTM A-193-B7 Stud Nuts A-194 CL 2H
- Internals ASTM
- Skirt and Base ASTM A-283-C (SUPPT LUGS)
- Stiffener Rings ASTM A-283-C
- Gaskets & W.L.M. #60 (UNGRAPHITED)
- Paint CS PARTS ONLY APPLY 1/2 RED METAL PRIMER JB-92
- Weld Rod ASTM SEE WELD ROD NOTES BELOW

* MODIFIED TO : — 17.0% MIN. CR.
2.25% MIN. MO
0.07% MAX. C.

GENERAL NOTES

- All bolt holes shall straddle center line.
- Protect all machined surfaces and threaded connections with rust preventive immediately after machining.
- All nozzle flanges shall be ASA standard except for manhole flanges.
- Sandblast all CS surfaces only, before painting.
- Item No. V-357 P.O. No. 21-824-0
- To be stamped on Name Plate
- Tolerances per Celanese Spec. Page # 13
- Name plate to be placed on a CS bracket that extends 2-1/2" from SHELL.

For additional general notes see Dwg. #A-2060 (FABRICATION ONLY)

WELD ROD NOTES:

- NOTE A: 1/8" A-298 CL E-317-15 OR 16 COATED MANUAL ELECTRODES
- NOTE B: 3/8" A-298 CL E-317-15 OR 16 COATED MANUAL ELECTRODES
- NOTE C: 1/8" A-298 CL E-310 MO-15 OR 16 COATED MANUAL ELECTRODES

REFERENCE DRAWINGS

MISC DETAILS WT-6870 (E-11698)
MANHOLE DAVIT WT-5002 (E-11363)
GENERAL NOTES CONT'D (FABRICATION ONLY) — A-2060

ONE	QUAN.	DESCRIPTION	WT.	REMARKS
ONE	3'-0" O.D. X 7'-0" O.A. LENGTH VESSEL		1385	TOTAL WT.

SHIPPING LIST

SHIPPING WT: 1385#

ONE ONLY REQ'D S/D-2484

Celanese CHEMICAL COMPANY
A DIVISION OF CELANESE CORPORATION OF AMERICA

AREA VIII HIGHER ACRYLATE UNIT
VESSEL
3'-0" O.D. X 5'-0" S.T.P.S.
PLAN & ELEVATION

V-357

DATE 7-5-60
BY G.M.
DATE 7-29-60
BY G.M.
DATE 8-1-60
BY G.M.

WT. 6870