

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop-Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by SMITHCO Engineering, Inc., 6211 S. 39th W. Ave., Tulsa, OK
(Name and address of manufacturer)

2. Manufactured for NAT. GAS PIPELINE. CO. LOMBARD, IL 60148-5072
(Name and address of purchaser)

3. Location of installation NAT. GAS PIPELINE. CO. SAYRE, OK
(Name and address)

4. Type Horiz(Non-Cir) 93B-0221 93B-0221 4704 1993
(Horiz. or vert., tank) (Mfr's serial No.) (CRN) (Drawing No.) (Mat'l. Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 1992
Year

to 0
Addenda (Date) Code Case No. Special Service per UG-120(f)

6. Shell: Sheets: SA-516 GR-70 Fr 1.375/Bk 1.375 .1250 Fr 1' 1.7500"/Bk 1' 1.7500" 11' 6.5625"
Mat'l. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: Corner Joint 100 1100 45min. 1
Long. (Welded, Dbl., Spig., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl., Spig., Lap, Butt) R.T. (Spot, Partial, or Full) No. of Courses

8. Heads: (a) Mat'l: (a) Covers: SA-516 GR-70 (b) Mat'l: (b) Ends: SA-516 GR-70
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Fr/Bk	.500/.500	.1250					13.2500/13.2500	x 138.5625	Flat
(b)	Fr/Bk	.375/.375	.1250					13.2500/13.2500	x 7.3750/ 7.3750	Flat

If removable, bolts used (describe other fastenings)
Tubes: SA-214 WLD- 238 x 1.00" x .110-Straight (Mat'l., Spec. No., Gr., Size, No.)

9. MAWP 100 psi at max. temp. 250 °F
 Min. design metal temp. -20 °F at 100 psi. Hydro., pneu., or comb. test pressure 150 psi.

10. Nozzles, inspection and safety valve openings: UG-125 NOTE 39

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
Inlet/Outlet	1/1	12"150/80	RFWM	SA-105/SA-106B	.688	Weld Metal	Welded	Front Head
Vent/Drain	2	.75/.75	3000 CPLG	SA-105		Weld Metal	Welded	Head
Temp/Press	4	.75/.75	6000 CPLG	SA-105		Weld Metal	Welded	Fr/Bk Head

11. Supports: Skirt No Lugs 4 Legs 4 Other None Attached Welded to covers
(Yes or no) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:
(Name of part, item number, Mfr's name and identifying stamp)

Impact testing exempt per UG-20(f) Item: AC-1 Service: REFLUX COND
OAD: 2' 2 1/2"H x 11' 6 9/16" L
Tie Bar: Front(2)SA-516 GR-70 .3750 x .1250 x 13.3125 x 3.7500 Back(2)SA-516 GR-70 .3750 x .1250 x 13.3125 x 3.7500

CERTIFICATE OF SHOP COMPLIANCE

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. "U" Certificate of Authorization No. 4175 expires 02-28, 19 91.
 Date 5-19-93 Co. name SMITHCO Engineering, Inc. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by SMITHCO Engineering, Inc. at Tulsa, Oklahoma

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 Oklahoma and employed by Delta Lloyds Insurance Company - Houston, Texas

have inspected the component described in this Manufacturer's Data Report on 3-11, 19 93, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. 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 5-20-93 Signed [Signature] Commissions NB7003, A OK355
(Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov. and No.)