

MAY 22 1992

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

PO # 69771

Manufactured and certified by BRUNNER ENGINEERING & MFG., INC., 800-900 X STREET, BEDFORD, INDIANA 47421

2. Manufactured for STOCK SHIPPED TO: MERCK

3. Location of installation UNKNOWN

4. Type VERT. 46414G-46423G K4167.5 30-3726-REV.8 46414G-46423G 1992

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 1989

6. Shell: SA-455 .229 NONE 42" 93.25"

7. Seams: W/SINGLE BUTT SPOT 85% N/A N/A SINGLE BUTT N/A 1

8. Heads: (a) Matl. SA516-70 (b) Matl. SA516-70

Table with 10 columns: 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). Rows (a) TOP, (b) BOTTOM.

If removable, bolts used (describe other fastenings) N/A

9. MAWP 150 psi at max. temp. 450 Min. design metal temp. -20 F at 150 psi. Hydro., pneu., or comb. test pressure 225 HYDRO psi.

10. Nozzles, inspection and safety valve openings:

Table with 10 columns: Purpose (Inlet, Outlet, Drain), No, Diam or Size, Type, Matl, Nom Thk, Reinforcement Matl, How Attached, Location. Rows UNKNOWN.

11. Supports: Skirt 1 Lugs 2/FW/TOP Legs --- Other --- Attached FW/BOTTOM

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: BUILT IN ACCORDANCE WITH PARA. UG 90 (C) (2) EXEMPT FROM IMPACT TESTING BY UG-20(F).

FOR AIR. INSP.OPEN.(1) 11"X15" 300# MANWAY, SA106C, 3/4" TK. WELDED TO SHELL.

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. 6046 expires DEC. 31, 1992. Date 2-6-92 Co. name BRUNNER ENGINEERING & MFG., INC. Signed P. P. ...

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by BRUNNER ENGINEERING & MFG., INC. at BEDFORD, IN. 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 INDIANA and employed by KEMPER NATIONAL INSURANCE COMPANIES have inspected the component described in this Manufacturer's Data Report on 2/6/92 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 2/12/92 Signed [Signature] Commissions NB6621 IND. 134