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**FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
(Alternate 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 SMITH INDUSTRIES, INC. FM 949 @ I-10 ALLEYTON, TEXAS 78935  
(Name and address of manufacturer)

2. Manufactured for NORTHWEST PIPE AND SUPPLY  
(Name and address of purchaser)

3. Location of installation UNKNOWN  
(Name and address)

4. Type HORIZONTAL 93-153C K9110.2 D-3-11-162 23037 1993  
(Hori. or vert., tank) (Mfr's serial No.) (CRN) (Drawing No.) (Ret'l. Sd. 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 ----- ----- -----  
Address (Data) Code Case No. Special Service per UG-129(d)

6. Shell: SA-516-70 0.375" -0- 96" OD 25'0"  
(Mat'l. (Spec. No., Grade)) (Nom. Thk. (In.)) (Corr. Allow. (In.)) (Diam. ID (In.)) (Length (overall) (In.))

7. Seams: DOUBLE BUTT FULL 100% --- --- DOUBLE/SINGLE FULL 3  
(Long (Welded, Dbl., Engr., Lap, Butt)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (F)) (Time (hr)) (Grth (Welded, Dbl., Engr., Lap, Butt)) (R.T. (Spot, Partial, or Full)) (No. of Courses)

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

| Location (Top, Bottom, End) | Minimum Vitrificase | Minimum Allowance | Drawn Radius | Knurled Radius | Embossed Profile | Conical Apex Angle | Hemispherical Radius | Flare Diameter | Note to Purchaser (Convex or Concave) |
|-----------------------------|---------------------|-------------------|--------------|----------------|------------------|--------------------|----------------------|----------------|---------------------------------------|
| (a) RIGHT                   | 0.4375"             | -0-               | 90"          | 6.125"         | ---              | ---                | ---                  | ---            | Concave                               |
| (b) LEFT                    | 0.500"              | -0-               | ---          | ---            | 2:1              | ---                | ---                  | ---            | Concave                               |

If removable, bolts used (describe other fastenings) -----  
(Mat'l., Spec. No., Gr., Size, No.)

9. MAWP 50 psi at max. temp. 300 °F  
Min. design metal temp. -20 °F at 50 psi. Hydro., pneu., or exch. test pressure 75 psi.

10. Nozzles, inspection and safety valve openings:

| Purpose (Inlet, Outlet, Drain) | N.C. | Diam. or Size | Type  | Mat'l.    | Nom. Thk. | Reinforcement (Mat'l.) | How Attached | Location    |
|--------------------------------|------|---------------|-------|-----------|-----------|------------------------|--------------|-------------|
| HANDY                          | 1    | 27"X63"       | PLATE | SA-516-70 | 0.750"    | INTEGRAL               | WELDED       | LEFT HEAD   |
| HANDY                          | 1    | 18"           | PLATE | SA-516-70 | 0.4375"   | INTEGRAL               | WELDED       | RIGHT HEAD  |
| W.C.                           | 1    | 8"            | WELDS | SA-106B   | 0.718"    | INTEGRAL               | WELDED       | RIGHT HEAD  |
| INLET, O. OUT                  | 2    | 6"            | 150MM | SA-106B   | 0.432"    | INTEGRAL               | WELDED       | SHELL/RT HD |
| W. OUT, ANODE                  | 5    | 4"            | 150MM | SA-106B   | 0.337"    | INTEGRAL               | WELDED       | SHELL       |

11. Supports: Skirt ----- Lugs 2 Legs --- Other SADDLES Attached SHELL AND WELDED  
(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: -----

(State if part, item number, Mfr's. name and identifying stamp)

|         |   |    |       |         |        |          |        |            |
|---------|---|----|-------|---------|--------|----------|--------|------------|
| GAS OUT | 1 | 3" | 150MM | SA-106B | 0.300" | INTEGRAL | WELDED | SHELL      |
| LSH OLC | 2 | 2" | CPLG  | SA-105  | 6000#  | INTEGRAL | WELDED | RIGHT HEAD |

\*FOR MORE INFORMATION SEE U-4 S/O 36856-0001

| 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. 12,882 expires 10-1-1993                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                      |
| Date: <u>4-7-93</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Co. name: <u>SMITH INDUSTRIES, INC.</u> Signed: <u>Wayne Starnes</u> |
| (Manufacturer)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (Representative)                                                     |
| CERTIFICATE OF SHOP INSPECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                      |
| Vessel constructed by <u>SMITH INDUSTRIES, INC.</u> at <u>FM 949 @ I-10 ALLEYTON, TEXAS 78935</u> . 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 <u>Texas</u> and employed by <u>OLD REPUBLIC INSURANCE CO.</u> have inspected the component described in this Manufacturers' Data Report on <u>4-7-</u> , <u>19 93</u> , and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 Manufacturers' 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: <u>4-7-93</u> Signed: <u>James D. K...</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Commissions <u>"A" TEXAS 1421</u> <u>NATIONAL BOARD 11119</u>        |
| (Authorized Inspector)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (Nat'l Board Incl. endorsements, State, Prov. and No.)               |

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FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET  
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by SMITH INDUSTRIES, INC. FM 949 @ 1-10 ALLEYTON, TEXAS 78935  
(Name and address of Manufacturer)  
2. Manufactured for NORTHWEST PIPE AND SUPPLY  
(Name and address of Purchaser)  
3. Location of installation UNKNOWN  
(Name and address)  
4. Type: HORIZONTAL HEATER TREATER 93-153C  
(Hori. or vert., sphere) (Tank, separator, heat exch., etc.) (Mfg's serial No.)  
K9110.2 D-3-11-162 23037 1993  
(C.R.N.) (Drawing No.) (Num'l Bd. No.) (Year built)

Date Report  
Item Number

Remarks

| #10<br>PURPOSE   | NO. |
|------------------|-----|
| DR. RV. LSL      | 5   |
| PREHEAT PIPE     | 2   |
| SPARE, 96        | 2   |
| TSH. THERMOSTAT  | 2   |
| THERMOMETER      | 1   |
| FLC. S. PORT. GG | 10  |

| DIAM. | TYPE | MATERIAL | THICKNESS | REINFORCEMENT | ATTACHED | LOCATION   |
|-------|------|----------|-----------|---------------|----------|------------|
| 2"    | CPLG | SA-105   | 3000#     | INTEGRAL      | WELDED   | SHELL      |
| 1"    | SMLS | SA-106B  | 0.358"    | INTEGRAL      | WELDED   | RT HEAD    |
| 1"    | CPLG | SA-105   | 6000#     | INTEGRAL      | WELDED   | HEADS      |
| 1"    | CPLG | SA-105   | 3000#     | INTEGRAL      | WELDED   | SHELL      |
| 3/4"  | CPLG | SA-105   | 6000#     | INTEGRAL      | WELDED   | RT HEAD    |
| 1/2"  | CPLG | SA-105   | 6000#     | INTEGRAL      | WELDED   | RTHD/SHELL |

96" OD X 25'0" HORIZONTAL HEATER TREATER  
FOR NON-CORROSIVE SERVICE.  
NOMT PER UG20(F).  
S/D 36856-0001

Certificate of Authorization: Type U No. 12,989 Expires 1-10-, 19 93  
Date 4-7-93 Name SMITH INDUSTRIES, INC. Signed Ray Stavinoha  
(Manufacturer) (Representative)  
Date 4-7-93 Name Robert D. Conway Commission TX 1421 NATL. BD. 11119 "A"  
(Authorized Inspector) (Nat'l. Board Incl. endorsement, State, Province, and No.)