

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 Air-X-Changers, A Harsco Company, 5215 Arkansas Road, Port of Catoosa, OK 74015
(Name and address of manufacturer)

2. Manufactured for WILLISTON BASIN INTERSTATE PIPELINE COMPANY, P.O. BOX 131, GLENDIVE, MT 59330
(Name and address of purchaser)

3. Location of installation WILLISTON, BASIN, WYOMING
(Name and address)

4. Type Heat Exchanger 008026.1 ---- HDR-1 REV 0 37500 2000
(Horiz. or vert. tank) (Mfg'r's. serial No.) (CRN) (Drawing No.) (Nat'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 1998
Year

To A99 ----- None
Addenda (Date) Code Case Nos. Special Service per UG-120 (d)

Tube & Plug

6. Shell: SA516 70N 0.875" 0.125" 5.5" 7' - 11.875"
Mat'l., (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I. D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: Corner Joint ---- C=.20 ---- ---- ---- ----
Long (Welded, Dbl., Singl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp (F) Time(Hr.) Girth (Welded, Dbl. Singl., Lap, R.T. (Spot, Partial, or Full) No. of Courses

8. Heads: (a) Mat'l. SA516 70 (b) Mat'l. SA516 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)	Top, Btm	0.375"	0.125"	---	---	---	---	---	4"	X 95.875"
(b)	Ends	0.375"	0.125"	---	---	---	---	---	4"	X 4.75"

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

Header Volume _____ cu. ft.

9. MAWP _____ psi at max. temp _____ 300 °F.
 Min. design metal temp. -10 °F at _____ 150 psi, Hydro., pneu., or comb. test pressure _____ 225 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. Or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
IN, OUT	1	2" ANSI	150#RF	SA106 B/SA105	SCH160	PIPE & WELD	Welded	Header
IN, OUT	1	2" ANSI	150#RF	SA105	SCH160	FLANGE & WELD	"	"

11. Supports: Skirt --- Luqs --- Legs --- Other Structure Attached Bolted
(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, Mfg'r's. Name and identifying stamp)

Tubes 173 0.75" OD STRAIGHT 144" Length 16AW Gauge SA179 ROLLED TUBE SHEET
 Insp. 346 0.875"UNF THD'D SA105 PLUG SHEET
IMPACT EXEMPT PER: UG 20(f) **(Constructed in conformance with Appendix 28.)**

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. 4241 expires, 12-31 20 02
 Date 7/26/00 Co. Name Air-X-Changers Signed Julie Casper
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Air-X-Changers 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 Commercial Union Insurance Company
 have inspected the component described in this Manufacturer's Data Report on 7/20 20 00, 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 7/26/00 Signed [Signature]  Commissions N.B. # 11472A/DIC # 765
(Authorized Inspector) (Nat'l Board (incl. Endorsements), State, Prov. And No.)