



**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 MINNESOTA VALLEY ENGINEERING, 407 7th ST., NW; NEW PRAGUE, MN 56071  
 (Name and address of manufacturer)

2. Manufactured for STOCK  
 (Name and address of purchaser)

3. Location of installation STOCK  
 (Name and address)

4. Type VCS 9000 NP 513 H9709.5123467890 L.24960K 49984 1995  
 (Horiz. or Vert. Tank) (Mfr'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 1992  
 to A-93 NA LOW TEMP. SVC. UW2B UH76  
 Addenda (Date) Code Case Nos. Special Service per UG-120(d) (Year)

6. Shell: SA553 T1 .544" 0 8'.375" 22' 6"  
 Mat'l (Spec No., Grade) Nom. Thk (in.) Corr Allow (in.) Diam ID (ft & in.) Length (overall) (ft & in.)

7. Seams: TYPE 1 FULL 100 NA NA TYPE 2 SPOT 2  
 Long (Welded, Double, Single, Lap, Butt) R T (Spot or Full) Eff (%) H T Temp (F) Time (hr) Girth (Welded, Double, Single, Lap, Butt) R T (Spot, Partial or full) No of courses

8. Heads: (a) Mat'l SA353 (b) Mat'l SA353  
 (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	.541"	0	NA	NA	2:1	NA	NA	NA	CONCAVE
(b)	BOTTOM	.541"	0	NA	NA	2:1	NA	NA	NA	CONCAVE

If removable, bolts used (describe other fastenings) NONE  
 (Mat'l, Spec No., Gr., Size, No)

9. MAWP 250 psi at max. temp. 100 °F

Min. design metal temp. -320 °F at 250 psi Hydro., pneu., or comb. test pressure 425 psi

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diameter or Size	Type	Mat'l	Nom. Thk	Reinforcement Mat'l	How Attached	Location
AL, GU, BF, PBR, V, TF	6	2.25"OD	W.E.	SA479 T304	.454"	NA	UW16.1E	NA
FT, AV	2	1.25"OD	W.E.	SA479 T304	.314"	NA	UW16.1E	NA
GP	1	0.75"OD	W.E.	SA479 T304	.258"	NA	UW16.1E	NA
HYDRO	1	2.88"OD	CPLG.	SA479 T304	.500"	NA	UW16.1E	NA
LP	1	1.00"OD	W.E.	SA479 T304	.305"	NA	UW16.1E	NA
XRAY	2	2.38"OD	W.E.	SA479 T304	.436"	NA	UW16.1E	NA

11. Supports: Skirt NA Lugs NA Legs NA Other STRAPS Attached SHELL 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 NA

(Name of part, item number, Mfr's name and identifying stamp)  
VACUUM JACKETED VESSEL, LOW TEMPERATURE SERVICE, RT-UW-11A(15), DESIGN PRESSURE IS 280.5 PSI, INNER VESSEL CODED ONLY, HYDRO PORTS ARE PLUGGED AND SEAL WELDED, IMPACT TESTED PER UHT6, TEST POSITION IS HORIZONTAL.

**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. 8377 expires JAN 15 19 98  
 Date 1/5/95 Co. name MINNESOTA VALLEY ENGINEERING Signed [Signature]  
 (Manufacturer) (Representative)

**CERTIFICATE OF SHOP INSPECTION**

Vessel constructed by MINNESOTA VALLEY ENGINEERING at NEW PRAGUE, MN 56071  
 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 MINNESOTA and employed by COMMERCIAL UNION INSURANCE COMPANY  
 have inspected the component described in this Manufacturer's Data Report on JANUARY 5, 19 95, 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 1/6/95 Signed [Signature] Commissions NR4456A W186  
 (Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov. and No.)