

**FORM U-1A MANUFACTURERS 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

*(A) 445569*  
*Jan 25/00*

1. Manufactured and certified by Orban Industries Ltd. 5440-53rd Street S.E. Calgary, Alberta T2C 4B6  
(Name and Address of Manufacturer)

2. Manufactured for Alta Gas Services Inc. 1700,355-4th Avenue S.W. Calgary Alberta T2P 3Y6  
(Name and Address of purchaser)

3. Location of installation Alta Gas Services Inc. 17 14 33 10 W4M  
(Name and address)

4. Type Vertical 00-001EVS L-8644 2 00-001-B Rev. 1 N/A 2000  
(Horiz or vert tank) (Mfr's serial No.) (CRN) (Drawing No.) (Nat'l EC No.) (Year)

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 1999 N/A N/A  
Year

6. Shell SA-516-70N 0.5" 0.0625" 1' 11" 7' 6"  
Adulanda (Date) Code case Nos. Special Service per UG-120(d)

7. Seams: Type 1 Full 1.0 N/R N/A Type 1 Spot 1  
Mat. (Spec No. Grade) Nom. Thk. (in) Corr. Allow. (in) Diam. I.D. (ft & in) Length (overall) (ft & in)  
Long (Welded, Dbl. Singl. Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl. Singl. Lap, Butt) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mat. SA-516-70N (b) Mat. SA-516-70N  
(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) <u>Top</u>	<u>0.480"</u>	<u>0.0625"</u>			<u>2:1</u>				<u>Concave</u>
(b) <u>Btm</u>	<u>0.480"</u>	<u>0.0625"</u>			<u>2:1</u>				<u>Concave</u>

If removable, bolts used (describe other fastenings) N/A  
(Mat. Spec No. Gr. Size No.)

9. MAWP 720 psi at max. temp. 100 °F  
 Min. design metal temp. -20 °F at 720 psi. Hydro., pneu. or comb. test pressure 936 psi

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No	Diam or Size	Type	Mat.	Nom. Thk.	Reinforcement Mat.	How Attached	Location
				<u>SEE ATTACHED FORM</u>		<u>U-4</u>		

11. Supports: Skirt Yes Lugs 0 Legs 0 Other N/A Attached Btm/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:

(Name of part, item number, Mfr's name and identifying stamp)  
Vol. 21.4 Cu. Ft. (0.61 Cu. M.) Vertical Separator UW 11(a)5(b)  
Impact Test Exempt per. UG-20(f) 1-5 and UCS-66(a)  
Manufacture Drawing 00-001-B Rev. 1

**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 31,452 expires Nov 1, 2002  
 Date Jan 25, 2000 Co. name Orban Industries Ltd. Signed [Signature]  
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP INSPECTION**

Vessel constructed by Orban Industries Ltd. at 5440-53rd Street S.E. Calgary Alberta, T2C 4B6  
 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 Alberta and employed by Alberta Boiler Safety Association  
 have inspected the component described in this Manufacturer's Data Report on Jan 25, 2000 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 Jan 25/00 Signed [Signature] Commissions ALTA #58  
(Authorized Inspector) (National Board (incl. endorsements) State, Prov. and No.)

A445569

**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 Orban Industries Ltd. 5440-53<sup>rd</sup> Street S.E. Calgary, Alberta T2C 4B6  
(Name and address of Manufacturer)

2 Manufactured for Alta Gas Services Inc. 1700 355-4<sup>th</sup> Avenue S.W. Calgary Alberta T2P 3Y6  
(Name and address of Purchaser)

3 Location of installation Alta Gas Services Inc. LSD: 17 14 33 10 W4M  
(Name and address)

4 Type Vertical Separator 00.001BVS  
(Horiz. vert. or sphere) (Tank, separator, heat exch. etc.) (Mfg's serial No.)

L-8644.2 00-001-B Rev. 0 N/A 2000  
(CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l	Nom. Thk.	Reinforcement Mat'l	How Attached	Location
INLET	1	3" 3000#	RFWN	SA-106B/SA-105N	600	INHERENT	UW-16.1(c)	SHELL
OUTLET	1	3" 3000#	RFV/N	SA-106B/SA-105N	600	INHERENT	UW-16.1(c)	Top Head
COND OUT	1	1" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
WATER OUT	1	1" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
PSV	1	1" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
DRAIN	1	2"	PIPE	SA-106B/SA-105N	344	INHERENT	UW-16.1(c)	Btm Head
LC WATER	1	2" 3000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
LC COND	1	2" 3000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
HLSD	1	2" 3000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
LG WATER	2	1/4" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
LG COND	2	1/4" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
PI	1	1/4" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
TI	1	1/4" 6000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL
INSP	2	2" 3000#	TOL	SA-105N		INHERENT	UW-16.2(L)	SHELL

Certificate of Authorization: Type "U" No. 31452 Expires Nov. 1, 2002

Date Jan 25/00 Name Orban Industries Ltd Signed [Signature]  
(Manufacturer) (Representative)

Date Jan 25/00 Name [Signature] Commission ALTA #58  
(Authorized Inspector) (Nat'l Board Incl. Endorsement, State, Province and No.)