

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

482558

1. Manufactured and certified by Orban Industries Ltd. 5550-55st Street S.E. Calgary, Alberta T2C 3G9
(Name and Address of Manufacturer)

2. Manufactured for ENERMARK INC C/O TUXTLA 1900 700-9TH AVE SW CALGARY AB T2P-3V4
(Name and address of purchaser)

3. Location of installation ENERMARK INC LSD 11-13-50-22 W4M
(Name and address)

4. Type VERTICAL 02-008VS 2 P8344 2 02-008 -B REV 2 N/A 2002
(Horn 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 2001
to N/A N/A N/A
Year

6. Shell: SA-516-70N .75" 0625" 2'-10 1/2" 10'-0"
Addenda (Date) Code case Nos Special Service per UG-120(d)

7. Seams: TYPE 1 FULL 100% N/A N/A TYPE 1 SPOT 1
Long (Welded, Dbl) Nom Thk (in) Corr Allow (in) Diam ID (ft & in) Length (overall) (ft & in)
Singl. Lap. Butt RT (Spot or Full) Eff (%) HT Temp (°F) Time (hr) Girth (Welded Dbl) RT (Spot Partial or Full) No of Courses

8. Heads: (a) Matl. SA-516-70N (b) Matl. 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) TOP	0.75"	0.625"			2:1				CONCAVE
(b) BOTTOM	0.75"	0.625"			2:1				CONCAVE

If removable, bolts used (describe other fastenings)

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	Matl.	Nom Thk	Reinforcement Matl.	How Attached	Location
				SEE ATTACHED	FORM	U-4		

11. Supports: Skirt YES Lugs 2 Legs Other Attached TOP/BOTT 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

VOL 73.17 CU FT (2.07 CU M) VERTICAL SEPARATOR RADIOGRAPHY AS PER UW-11(a)5(b)
IMPACT TEST EXEMPT AS PER UG-20(f) SWEET SERVICE

MANUFACTURE DRAWING # 02-008 -B REV 2 PSV PROVIDED ON PIPING AS PER UG 125

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 32,685 expires JULY 11, 20 04

Date March 18/02 Co. name Orban Industries Ltd Signed Bel Bato
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Orban Industries Ltd at 5550-55 Street S.E. Calgary, Canada T2C 3G9
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 March 18, 2002 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 March 18/02 Signed [Signature] Commissions Alberta 400
Authorized Inspector (National Board and/or State, Provincial and Territorial)

④ 482558.

- | Type | VERTICAL | SEPARATOR | 02-008 VS 2 |
|----------------|-----------------------------|-------------------------------------|--------------------|
| | (Electric, vent, or siphon) | (Tank, separator, heat exch., etc.) | (Affix serial No.) |
| P8344.2 | | | |
| (CRN) | | | |
| 02-008-B REV 2 | | N/A | 2002 |
| (Drawing No.) | | (Part Bld No.) | (Year Built) |

Continued from Form U1a

Certificate of Authorization
02 Type "J" No 32658 Expires JULY 11 2004

(Representative)

(Natl Board Incl. Endorsement, State/Province and No.)

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

④ 482538

~~*CORRECTED*~~

1. Manufactured and certified by Orban Industries Ltd 5550-55st Street S.E. Calgary Alberta T2C 3G9
(Name and address of Manufacturer)
2. Manufactured for ENERMARK INC C/O TUXTLA 1900 700-9TH AVE SW CALGARY AB T2P-3V4
(Name and address of purchaser)
3. Location of installation ENERMARK INC LSD 6-29-49-21- W4M
(Name and address)
4. Type VERTICAL 02-008VS 2 P8344 2 02-008 -B REV 2 N/A 2002
(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 2001
Year

6. Shell: SA-516-70N .75" 0625" 2'-10 1/2" 10'-0"
Addenda (Date) Code case Nos. Special Service per UG-120(d)
7. Seams: TYPE 1 FULL 100% N/A N/A TYPE 1 SPOT 1
Mat'l (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'l. SA-516-70N (b) Mat'l. SA-516-70N
(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	0.75"	.0625"			2:1				CONCAVE
(b)	BOTTOM	0.75"	.0625"			2:1				CONCAVE

If removable, bolts used (describe other fastenings)

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.
(Mat'l Spec No. Gr. Size No.)
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
				SEE ATTACHED	FORM	U-4		

11. Supports: Skirt YES Lugs 2 Legs Other Attached TOP/BOTT 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 73.17 CU FT (2.07 CU. M) VERTICAL SEPARATOR RADIOGRAPHY AS PER UW-11(a)5(b)

IMPACT TEST EXEMPT AS PER UG-20(f) SWEET SERVICE

MANUFACTURE DRAWING # 02-008 -B REV 2 PSV PROVIDED ON PIPING AS PER UG 125

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. 32,685 expires JULY 11 20 04

Date April 8/02 Co. name Orban Industries Ltd. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Orban Industries Ltd. at 5550-55 Street S.E. Calgary Canada T2C 3G9
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 April 8, 2002 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 April 8/2002 Signed [Signature] Commissions Alberta 40 (A)
(Authorized Inspector) (Nat'l board (incl. endorsements), date, Prov. and No.)

①482558

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 5550-55 Street S.E. Calgary, Alberta T2C 3G9
(Name and address of Manufacturer)

2. Manufactured for ENERMARK INC C/O TUXTLA 1900 700-9TH AVE SW CALGARY AB T2P-3V4
(Name and address of Purchaser)

3. Location of installation ENERMARK INC LSD 6-29-49-21- W4M
(Name and address)

4. Type: VERTICAL SEPARATOR 02-008 VS 2
(Horiz., vert., or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

P8344.2 02-008-B REV 2 N/A 2002
(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	6" 300#	RFLWN	SA-105N	1.06" WT	INHERANT	UW 16.1©	SHELL
GAS OUTLET	1	6" 300#	RFLWN	SA-105N	1.06" WT	INHERANT	UW 16.1©	TOP HEAD
INSPECTIONS	2	4" 300#	RFLWN	SA-105N	0.88" WT	INHERANT	UW 16.1©	SHELL
WATER OUT/DRAIN	1	3" 300#	RFLWN	SA-106B SA-105N	600"	INHERANT	UW 16.1©	BOTT HEAD
LC SLUGGED	1	3" 300#	RFLWN	SA-105N	0.81" WT	INHERANT	UW 16.1©	SHELL
LC WATER	1	3" 300#	RFLWN	SA-105N	0.81" WT	INHERANT	UW 16.1©	SHELL
PSV	1	3" 300#	RFLWN	SA-106B SA-105N	343"	INHERANT	UW 16.1©	SHELL
LG WATER	2	¾" 6000#	T.O.L	SA-105N		INHERANT	UW 16.1(a)	SHELL
TI	1	¾" 6000#	T.O.L	SA-105N		INHERANT	UW 16.1(a)	SHELL
LSH	1	1 ½" 6000#	T.O.L	SA-105N		INHERANT	UW 16.1(a)	SHELL
PSH	1	¾" 6000#	T.O.L	SA-105N		INHERANT	UW 16.1(a)	SHELL
PI/PC	1	¾" 6000#	T.O.L	SA-105N		INHERANT	UW 16.1(a)	SHELL

Certificate of Authorization: Type "U" No 32658 Expires JULY 11 2004
02

Date Apr. 18/02 Name Orban Industries Ltd. Signed Burt Burt
(Manufacturer) (Representative)

Date April 8/2002 Name [Signature] Commission Alberta 60(2)
(Authorized Inspector) (Nat'l Board incl. Endorsement State, Province and No.)