

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

3108482

Nov. 22/95
 KJ

1. Manufactured and certified by DOCAL LIMITEE, 3535 BOUL. PITFIELD, ST-LAURENT, QUEBEC, CANADA H4S 1H3
 (Name and address of manufacturer)

2. Manufactured for STARTEC REFRIGERATION SERVICES LTD, 6700 - 9th STREET N.E., CALGARY, ALBERTA T2E 8K6
 (Name and address of purchaser)

3. Location of Installation ALBERTA
 (Name and address)

4. Type VERTICAL SEPAR. 8940 N-9285.2 C-2506 REV.0 --- 1995
 (Name or code, tank) (Mfg'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, EDITION 1992
 Year

to A94 --- 1/4-0.22 M3 ---
 Address (Date) Code Case No. Special Service per UG 120(b)

6. Shell: SA-106-B 3/8" 1/16" 1'-3 1/4" 6'-0"
 Mat'l. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: SLS --- 85% --- --- TYPE 2 --- 1
 Long. (Welded, Dth., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dth., Sngl., Lap, Butt) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mat'l. SA-516-70 (Spec. No., Grade) (b) Mat'l. SA-516-70 (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)	END	.271"	1/16"			2:1				CONC.
(b)	END	.271"	1/16"			2:1				CONC.

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

9. MAWP 350 psi at max. temp. 300 °F
 Min. design metal temp. -20 °F at 350 psi. Hydro., pneu., or comb. test pressure (HYDRO) 525 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	2	4"	PIPE	SA-106-B	XS	N/A	FIG. HW-16.1(c)	---
DRAIN/SP.	2	1"	FPT	SA-105	6000#	N/A	FIG. HW-16.1(c)	---
LEVEL/HLSD	2	1-1/2"	FPT	SA-105	6000#	N/A	FIG. HW-16.1(c)	---

11. Supports: Skirt YES Lugs --- Legs --- Other --- Attached WELDED AT BOTTOM
 (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's. name and identifying stamp)

- 1) SAFETY DEVICE SELECTED AND INSTALLED BY OTHERS IN THE SYSTEM
- 2) VOLUME: 8.31 CU. FT
- 3) SHOP DRAWING B-1851-C REV.0
- 4) HEADS STRESS RELIEVED
- 5) INSPECTION OPENINGS OMITTED PER UG-46(e) (SEE CONTINUATION ON FORM U-4)

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. 26,601 expires NOV. 22, 1995
 Date 95/10/31 Co. name DOCAL LIMITEE (Manufacturer) Signed Judefroy Robert (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by DOCAL LIMITEE at ST-LAURENT (QUEBEC)
 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 QUEBEC and employed by THE GOVERNMENT OF QUEBEC
 have inspected the component described in this Manufacturer's Data Report on Oct 27, 1995, 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 95/10/31 Signed J. Gagnon (Authorized Inspector) Commissions --- (No. 1 Board (incl. endorsements), State, Prov. and No. 1)

JEAN-GUY GAGNON
 (No. 1 Board (incl. endorsements), State, Prov. and No. 1)

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

(A) 3108482

1. Manufactured and certified by DOCAL LIMITEE, 3535 BOUL. PITFIELD, ST-LAURENT, QUEBEC, CANADA H4S 1H3,
(Name and address of Manufacturer)

2. Manufactured for STARTEC REFRIGERATION SERVICES LTD, 6700 - 9th STREET N.E., CALGARY, ALBERTA
(Name and address of Purchaser) T2E 8K6

3. Location of installation ALBERTA
(Name and address)

4. Type: VERTICAL SEPARATOR 8940
(Vert., vert., or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

M-9285.2 C-2506 REV. 0 1995
(CRN) (Drawing No.) (Net'l. Bd. No.) (Year built)

Date Report Item Number	Remarks
12)	REMARKS (CONTINUED)
11	6) RADIOGRAPHY OF 10% OF PRESSURE BUTT WELDS AND ULTRASONS OF 10% OF NOZZLES TO SHELL WELDS PER CUSTOMER REQUIREMENTS.
	7) IMPACT TEST EXEMPT PER UG-20(f)

Certificate of Authorization: Type _____ No. 26,601 Expires NOVEMBER 22 . 19 95

Date 95/10/31 Name DOCAL LIMITEE Signed Robert Rodefray
(Manufacturer) (Inspector)

Date 95/10/31 Name Jos Sagnon Commission _____
(Authorizing Inspector) (Net'l. Bd. Incl. endorsement, State, Province and No.)

(12/91) This form (E00118) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 **REPRINT 932**

JEAN-GUY GAGNON Q
 RÉGIE DU BÂTIMENT DU QUÉBEC