

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

④ 443846
① 443846

1. Manufactured and certified by: **LARSEN & D'AMICO MFG. LTD. 9805 - 51 Avenue, Edmonton, Alberta T6E 4W8**
(Name and Address of Manufacturer)
2. Manufactured for: **ARGO SALES LTD., P.O. BOX 6118, FT ST JOHN, B.C., V1J 4H6**
(Name and Address of Purchaser)
3. Location of installation: **RESALE**
(Name and Address)
4. Type: **Horizontal** (Horz, Vert, Tank, etc) **HS-9204** (Mfg'r's serial No) **L4790.21** (CRN) **LD-3679-A1 REV 0** (Drawing No) **N/A** (Nat'l Bd No) **1999** (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** to **1999**
(Year) Addenda (Date)

N/A Code Case Numbers **N/A** Special Services per UG-120(d)

6. Shell: **SA-516-70N** (Mat'l. Spec No, Grade) **0.875"** (22.23) (Nom. Thk inch) **1/8"** (3.2) (Corr Allow inch) **36"** (Diam inch) **O.D. (914)** (ID / O.D (mm)) **96"** (2438) (Length Overall inch) **(2438)** (mm)
7. Seams: **TYPE 1** (Long, (Welded, Dbl Sngl, Lap, Butt)) **FULL** (RT (Spot or Full)) **100** (Eff (%)) **1150 °F 621.1 °C** (HT Temp) **75 MIN** (Time (hr)) **TYPE 1** (Grth (Welded, Dbl Sngl, Lap, Butt)) **FULL UW11(a)** (RT (Spot/Partial/Full)) **1** (No of Courses)
8. Heads: (a) Mat'l **SA-516-70 N** (Spec. No. Grade) (b) Mat'l **SA-516-70 N** (Spec. No. Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness in (mm)	Corrosion Allowance in (mm)	Crown Radius in (mm)	Knuckle Radius in (mm)	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Concave or Convex)
(a)	ENDS	0.8375 (21.81)	1/8" (3.2)	0' (0.00)	0' (0.00)	2:1				CONCAVE
(b)	ENDS	0.8375 (21.81)	1/8" (3.2)	0' (0.00)	0' (0.00)	2:1				CONCAVE

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

9. MAWP **720 psi** **4964 Kpa** at max. temp. **100 °F 37.84 °C** (Hydro Test pressure) Min. design metal temp. **-20 °F -28.88 °C**
at **720 psi** **4964 Kpa** **1080 psi** **7446 Kpa**

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 U4 FORM								

11. Supports: Skirt **NO** (Yes or No) Lugs **N/A** (No) Legs **TWO** (No) Other **N/A** (Describe) Attached **SHELL / WELDED** (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: **IMPACT TESTS EXEMPT PER UG-20(f) PARAGRAPHS 1-5 AND FIG UCS-96.1 GENERAL NOTE 1 FOR ITEM #3**
"HEAD CALCULATED Min. **0.9375 in. (23.81 mm)**
(name of part, item number, Mfg's name and indentifying stamp)

Type: **3 PHASE HORIZONTAL SEPARATOR** " **PRESSURE RELIEF DEVICE PROVIDED** WOF# **3837** Item # **HS1**
Weight: **6400 lbs.** **2903.04 (kg)** BY OTHERS IN THE PIPING Hydrotest Position: **HORIZONTAL**
Capacity: **59 cu.ft.** **1.67 (cu. Meters)** Fabrication Drawing No. **LD-3679-A1 REV 0**

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. 14254 Expires October 28, 2001

Date MAR 9/99 Company Name Larsen & D'Amico Manufacturing Ltd Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by: Larsen & D'Amico Manufacturing Ltd. at 9805-51 Avenue, Edmonton, Alberta 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 Boilers Safety Association have inspected the component described in this Manufacturer's Data Report on March 9, 1999 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 9/99 Signed [Signature] Commissions Alberta 5
(Authorized Inspector) (National Board (include Endorsements) State, Prov and No)

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: **LARSEN & D'AMICO MFG. LTD. 9805 - 51 Avenue, Edmonton, Alberta T6E 4W8**
(Name and Address of Manufacturer) A 443846
2. Manufactured for: **ARGO SALES LTD., P.O. BOX 6118, FT ST JOHN, B.C., V1J 4H6**
(Name and Address of Purchaser)
3. Location of Installation: **RESALE**
(Name and Address)
4. Type: **Horizontal** **SEPARATOR** **HS-9204** **L4790.21** **LD-3679-A1 REV 0** **N/A** **1999**
(Horz, Vert, or Sphere) (Tank, Sep., Heat (Mfg's Serial No) (CRN) (Drawing No) (Nat'l Bd No) (Year Built)
Exh., Etc)

Purpose (Inlet, Outlet, Drain)	Item No.	Diameter or Size	Type	Material	Nominal Thk.	Reinforcement Material	How * Attached	Location
INLET	N1	6"	300# RFLWN	SA-105	1.05"		WELDED	SHELL
		6"	ELBOW	SA-234-WPB	SCH 40		WELDED	SHELL
GAS OUTLET	N2	6"	300# RFLWN	SA-105	1.05"			
LC OIL	C1	2"	COUPLING	SA-105	6000#		WELDED	SHELL
LSDH	C2 A/B	2"	COUPLING	SA-105	6000#		WELDED	SHELL
OIL OUTLET	C3	2"	COUPLING	SA-105	6000#		WELDED	SHELL
WATER OUTLET	C4	2"	COUPLING	SA-105	6000#		WELDED	WB SHELL
DRAIN	C5	2"	COUPLING	SA-105	6000#		WELDED	WB HEAD
PSV	C6	1-1/2"	COUPLING	SA-105	6000#		WELDED	SHELL
LG OIL	C7 A/B	3/4"	COUPLING	SA-105	6000#		WELDED	SHELL
LEVEL CAGE	C8 A	2"	COUPLING	SA-105	6000#		WELDED	SHELL
	C8 B	2"	COUPLING	SA-105	6000#		WELDED	WB SHELL
TI	C9 A/B	3/4"	COUPLING	SA-105	6000#		WELDED	SHELL
PI	C10 A/B	1/2"	COUPLING	SA-105	6000#		WELDED	SHELL
INSPECTION	C11 A/B	2.375" ID	COUPLING	SA-105	6000#		WELDED	SHELL
HEAT COIL (VESS.)	C12 A/B	1"	COUPLING	SA-105	6000#		WELDED	SHELL
HEAT COIL (WB)	C13 A/B	1"	COUPLING	SA-105	6000#		WELDED	WB SHELL
WATER BOOT	WB	16" OD	PIPE	SA-106-B	SCH 100		WELDED	SHELL
		28" OD	REPAD		3/4"	SA-516-70N	WELDED	SHELL
			2:1 SE HEAD	SA-516-70N	9375" MIN		WELDED	WB SHELL

Certificate of Authorization:

Type: U No 14264

Expires OCTOBER 28 2001

Date Mar 9/99 Name **LARSEN & D'AMICO MFG. LTD.**
(Manufacturer)

Signed [Signature]
(Representative)

Date March 9/99 Name [Signature]
(Authorized Inspector)

Commission **Alberta 5-**
(Nat'l Board incl. Endorsement, State, Province and No)