

A487741

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS (Alternative Form For Single Chamber, Completely Shop or Field Fabricated Vessels Only) As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

- Manufactured and certified by: **LARSEN & D'AMICO MFG. LTD. 9805 - 51 Avenue, Edmonton, Alberta T6E 4W8**
(Name and Address of Manufacturer)
 - Manufactured for: **ARGO SALES LTD., P.O. BOX 1160, NISKU, ALBERTA, T9E 8A8**
(Name and Address of Purchaser)
 - Location of installation: **RESALE**
(Name and Address)
 - Type: **VERTICAL SEPARATOR** **VS-11687** **R3524.21** **LD-4975-A REV 0** **N/A** **2003**
(Horz, Vert, Tank, etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year Built)
 - 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 **2002**
(Year) Addenda (Date)
- N/A** Code Case Numbers **N/A** Special Services per UG-120(d)
- Shell: **SA-516-70N** **1.0"** (25.40) **1/8"** (3.2) **24"** O.D. (610) **96"** (2438)
Matl. (Spec. No., Grade) Nom. Thk. Corr. Allow. Diam I.D. / O.D. Length Overall
inch (mm) inch (mm) inch (mm) inch (mm) inch (mm)
 - Seams: **TYPE 1** **FULL** **100** **1150 °F 621 °C** **1.0** **TYPE 1** **FULL UW11(a)** **1**
Long, (Welded, Dbl R.T. (Spot Eff. (%) H.T. Temp. Time (hr.) Girth (Welded, Dbl., R.T. (S. Jt/Partial/Full) No. of
Sngl., Lap, Butt) or Full) Sngl., Lap, Butt) Courses
 - Heads: (a) Matl **SA-516-70 N** (b) Matl **SA-516-70 N**
(Spec. No. Grade) (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)	TOP	0.9375" (23.81)	1/8" (3.2)	0" (0.00)	0" (0.00)	2:1				CONCAVE
(b)	BOTTOM	0.9375" (23.81)	1/8" (3.2)	0" (0.00)	0" (0.00)	2:1				CONCAVE

- If removable, bolts used (describe other fastenings) **N/A** (Matl., Spec. No., Gr., Size, No.)
- MAWP **1440 psi 9928 Kpa** at max. temp. **127 °F 52.85 °C** Min. design metal temp. **-20 °F -28.88 °C**
at **1440 psi 9928 Kpa** Hydro Test pressure **2160 psi 14893 Kpa**

- 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								

- Supports: Skirt **YES** Lugs **N/A** Legs **N/A** Other **N/A** Attached **BTM HEAD/WELDED**
(Yes or No) (No.) (No.) (Describe) (Where and How)

- Remarks: **Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: N/A**
(name of part, item number, Mfg's name and identifying stamp) ****HEAD CALCULATED Min. 0.9375 in. (23.81 mm)**

IMPACT TESTS EXEMPT PER UG-20(f)

Type: **3 PHASE VERTICAL SEPARATOR** WO# **4450** Item # **VS1**
Weight: **3311 lbs. 1501.87 (kg)** Hydrotest Position: **HORIZONTAL**
Capacity: **23.62 cu.ft. 0.67 (cu. Meters)** Fabrication Drawing No. **LD-4975-A REV 0**

CERTIFICATE OF SHOP/FIELD 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, 2004**

Date July 19/03 Company Name Larsen & D'Amico Manufacturing Ltd Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD 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 July 18, 2003

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 July 18, 2003 Signed [Signature] Commissions Alberta #187
(Authorized Inspector) (National Board (include Endorsements) State, Prov. and No.)

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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)
- 2. Manufactured for: **ARGO SALES LTD., P.O. BOX 1160, NISKU, ALBERTA, T9E 8A8**
 (Name and Address of Purchaser)
- 3. Location of installation: **RESALE**
 (Name and Address)
- 4. Type: **Vertical** **SEPARATOR** **VS-11687** **R3524.21** **LD-4975-A REV 0** **N/A** **2003**
 (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)	No.	Diameter or Size	Type	Material	Nominal Thk.	Reinforcement Material	How * Attached	Location
N1-INLET	1	3" ID	600# RFLWN	SA-105N	0.81"		1	SHELL
N2-GAS OUTLET	1	3" ID	600# RFLWN	SA-105N	0.81"		1	TOP HEAD
N3-PSV	1	2" NPS	600# RFWN	SA-105N	SCH 160		2	TOP HEAD
		2" NPS	PIPE	SA-106-B	SCH 160			
N4-OIL LLC	1	3" ID	600# RFLWN	SA-105N	0.81"		1	SHELL
N5-WATER LLC	1	3" ID	600# RFLWN	SA-105N	0.81"		1	SHELL
N6-OIL OUT	1	2" NPS	600# RFWN	SA-105N	SCH 160		2	SHELL
		2" NPS	PIPE	SA-106-B	SCH 160			
N7-WATER OUT	1	2" NPS	600# RFWN	SA-105N	SCH 160		2	SHELL
		2" NPS	PIPE	SA-105N	SCH 160			
N8-DRAIN	1	2" NPS	600# RFWN	SA-105N	SCH 160		2	BTM HEAD
		2" NPS	PIPE	SA-106-B	SCH 160			
		2" NPS	ELBOW	SA-234-WPB	SCH 160			
N9-HLSD	1	3" ID	600# RFLWN	SA-105N	0.81"		1	SHELL
N10 A/B-INSP.	2	3" ID	600# RFLWN	SA-105N	0.81"		1	SHELL
C1A/B-OIL LG	2	3/4" NPS	CPLG	SA-105N	6000#		2	SHELL
C2A/B-WATER LG	2	3/4" NPS	CPLG	SA-105N	6000#		2	SHELL
C3-PI	1	1/2" NPS	CPLG	SA-105N	6000#		2	SHELL
C4-TI	1	3/4" NPS	CPLG	SA-105N	6000#		2	SHELL

* 1) PER Fig. UW-16.1 (c), 2) PER fig. UW-16.1(a)
 Certificate of Authorization: Type: U No. 14254

Date July 18/03 Name LARSEN & D'AMICO MFG. LTD.
 Date July 18, 2003 Name Harold Lake
 (Authorized Inspector)

Expires **OCTOBER 28 2004**

Signed [Signature]
 (Manufacturer) (Representative)

Commission Alberta #87
 [Nat'l Board incl. Endorsement, State, Province and No.]