

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

(Alternate Form for Single Chamber, Completely Shop Fabricated Vessels Only)

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

A2899668

LARSEN & D'AMICO MFG. LTD. 9805-51 Avenue Edmonton, AB T6E 4W8

- Manufactured and certified by **LARSEN & D'AMICO MFG. LTD.** (Name and address of manufacturer)
- Manufactured for **Select Oilfield Services 9411-39 Avenue Edmonton, AB T6E 5T3** (Name and address of purchaser)
- Location of installation **for resale** (Name and address)
- Type **horiz. HT6875 K8502.2 LD-2874-A1 1993** (Horiz or vert tank) (Mfg's serial No) (CRN) (Drawing 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. Year **1992**

to **Dec** Addenda (Date) (**6.35** mm) (Code Case Nos **1.59** mm) (**1829** mm) Special Service per UG 720(d)

- Shell: **SA-516-70 .250" .0625 72" OD 20'-0" (6096)** (Matl (Spec No, Grade) Nom Thk (in) Cor Allow (in) Diam ID (ft & in) Length (overall) (ft & in))
- Seams: **double butt # 85 n/r -- double butt # 2** (Long (Welded, Dbl, Sing, Lap, Butt) R T (Spot or Full) FR (%) H T Temp (F) Time (hr) Girth (Welded, Dbl, Sing, Lap, Butt) R T (Spot, Partial or Full) No of Courses)
- Heads: (a) Matl **SA-516-70** (Spec No, Grade) (b) Matl **SA-516-70** (Spec No, Grade)

| | Location (Top Bottom Ends) | Minimum Thickness (mm) | Corrosion Allowance (mm) | Crown Radius | Knuckle Radius | Flattening Ratio | Conical Apex Angle | Hemispherical Radius | Free Diameter | Side to Pressure (Concave or Convex) |
|-----|----------------------------|------------------------|--------------------------|--------------|----------------|------------------|--------------------|----------------------|---------------|--------------------------------------|
| (a) | end | .34 (8.64) | .062 (1.59) | 72" | | | | | | concave |
| (b) | end | .34 (8.64) | .062 (1.59) | 72" | | | | | | concave |

If removable, bolts used (describe other fastenings)

- MAWP **(345 KPa) 50 psi** at max. temp **(93 °C) 200 °F**
 Min design metal temp **(-29 °C) -20 °F** at **50 psi** Hydro pneu or comb test pressure **(517 KPa) 75 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 U4 FORM | | | | | | | | |

- Supports: Skirt **NO** Lugs **NO** Legs **NO** Other **saddles** Attached **shell-welded** (Yes or 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: **IMPACT TESTS EXEMPT PAGA UG20 (F)** (Name of part, item number, Mfg's name and identifying stamp)

TYPE: **EMULSION TREATER** W.O.# **3223** ITEM # **HT**
 CAPACITY: **608 CU. FT. (17.2 CU. METER)** WEIGHT: **13,750 LBS (6250 KG)**
 HYDROTEST POSITION: **horizontal** FABRICATION **DEL2874 REV 2** ULTIMATE OWNER **Select**

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 **Oct. 28 1995**.
 Date **Dec 9-93** Co. name **LARSEN & D'AMICO MFG. LTD.** Signed **W.C. Smith** (Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by **LARSEN & D'AMICO MFG. LTD.** at **9805-51 Avenue Edmonton, AB**
 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 **Boiler & Pressure Vessel Safety**
 have inspected the component described in this Manufacturer's Data Report on **Dec. 10**, 19**93**, 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 **Dec. 10/93** Signed **[Signature]** Commissions **Alberta #37** (Authorized Inspector) (National Board (incl endorsements), State, Prov. and No.)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET (A) 2899668
 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 AVE EDMONTON, AB. T6E 4W8
(Name and address of manufacturer)
- Manufactured for SELECT OILFIELD SERVICES 9411-39 Avenue Edmonton, AB T6E 5T3
(Name and address of purchaser)
- Location of Installation for resale
(Name and address)
- Type horiz treater HT 6875 K8502.2 LD-2874-A1 --- 1993
(Horiz., vert., tank, etc.) (Mfg's serial No.) (CRN) (Dwg) (Net L Bd No.) (Year built)

| Purpose (Inlet, Outlet, Drain) | No | diam or Size | Type | Matl | Num Thk | Reinforcement Matl | How Attached | Location |
|--------------------------------|----|--------------|----------|----------------------------|---------|--------------------|--------------|-----------------|
| LC | 3 | 4" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| Anode | 2 | 4" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| inlet | 1 | 3" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| gas out | 1 | 3" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | gas dome |
| PSV | 1 | 3" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| oil out | 1 | 3" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| water out | 2 | 3" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| drain | 2 | 2" | 150 flgd | SA-106-B | Sch 80 | n/r | welded | shell |
| LSDH | 1 | 2" | scd cplg | SA-105 | | n/r | welded | shell |
| LSDL | 1 | 2" | scd cplg | SA-105 | | n/r | welded | shell |
| preheat | 2 | 1" | scd cplg | SA-105 | | n/r | welded | shell/head |
| LC | 1 | 1" | scd cplg | SA-105 | | n/r | welded | shell |
| LSDH | 1 | 1" | scd cplg | SA-105 | | n/r | welded | shell |
| LG | 6 | 3/4" | scd cplg | SA-106-B | | n/r | welded | shell |
| TT | 1 | 3/4" | scd cplg | SA-105 | | n/r | welded | shell |
| aux. conn | 2 | 1 | scd cplg | SA-105 | | n/r | welded | water out |
| vent | 1 | 1/2" | scd cplg | SA-105 | | n/r | welded | gas dome |
| vent | 1 | 1" | scd cplg | SA-105 | | n/r | welded | shell |
| sample | 1 | 3/4" | scd cplg | SA-105 | | n/r | welded | shell |
| PI | 1 | 1/2" | scd cplg | SA-105 | | n/r | welded | shell |
| sample | 1 | 1/2" | scd cplg | SA-105 | | n/r | welded | shell |
| gas dome | 1 | 16" | 50 flgd | SA-53-B | .375" | n/r | welded | shell |
| firetube mw | 1 | 20" x 47" | 50 flgd | SA-516-70 | 1.125 | n/r | welded | head |
| manway | 1 | 18" | 50 flgd | SA-53-B | .375" | n/r | welded | shell |
| firetube | 1 | 18" | 50 flgd | SA-53-B | .375" | n/r | bolted | firetube manway |
| | | | | **RADIOGRAPHY | | | | |
| | | | | One spdt on each head seam | | | | |
| | | | | random spot on remainder | | | | |

WO 3223 HT

Date 9 Dec 93 Co. name LARSEN & D'AMICO MFG. LTD Signed we [Signature]
(Date) (Manufacturer) (Representative)
 Date Dec. 10/93 Signed [Signature] Commissions Alberta #37
(Date) (Authorized Inspector) (Prov. Board (incl. endorsement), State, Prov., and No.)