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

A 439359

1. Manufactured and certified by **Opsco'92 Industries Ltd. 2601 Centre Avenue East, Calgary, Alberta, T2P 2L1**
(Name and address of manufacturer)

2. Manufactured for **BERKLEY PETROLEUM SUITE 2810, 205- 5TH AVE. S.W. CALGARY, AB. T2P-2V7**
(Name and address of purchaser)

3. Location of installation **5-12-87-25W5M HALFWAY RIVER**
(Name and address)

4. Type **HORZ. SEPARATOR** (Horz or vert tank) | **01-2941-1** (Mfg's serial No.) | **L2812.213** (CRN) | **V-98-2941-1746 R2** (Drawing No.) | **N/A** (Nat'l Bd No.) | **1998** (Year Built)

5. The chemical and physical properties of all parts meet the requirements of material specification of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 **1995** (Year)

to **1997** (Addenda (date)) | **N/A** (Code Case Nos) | **N/A** (Special service per UG 120(d))

6. Shell **SA-516-70N** (Mat'l (Spec No Grade)) | **2.00"** (Nominal Thk (in.)) | **0.125"** (Corr Allow (in.)) | **3'-8"** (Diameter I D (ft & in.)) | **15'-0"** (Length (overall)(ft & in.))

7. Seams **TYPE 1** (Long (Weld Dbl Sngl Lap Butt)) | **FULL** (R T (Spot or Full)) | **100%** (Eff (%)) | **1150 F** (H T Temp (F)) | **2 HRS** (Time (hr)) | **TYPE 1** (Girth (Welded Dbl Sngl Lap Butt)) | **FULL** (R T (Spot, Partial or Full)) | **2** (No. of Courses)

8. Heads (a) Mat'l **SA-516-70N** (Spec No Grade) (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 Pres (Conc/Conv.)
(a)	M/W END	1.989"	0.125"			2:1				CONC
(b)	DATUM END	1.989"	0.126"			2:1				CONC

If removable, bolts used (describe other fasteners) (Matl Spec No Gr Size No.)

9. MAWP **1345** psi at max temp **200** °F
Min Design Metal Temp **-20** °F at **1345** psi Hydro pneu or comb test pressure **2018** psi

10. Nozzles, Inspection and safety valve openings

Purpose (Inlet Outlet Drain)	No	Diam or Size	Type	Matl	Nom Thk	Reinforcement Material	How Attached	Location
IN/OUT	2	6"	600# RFHB	SA-105N	2.060"	INTEGRAL	FIG.UW-16.1 (c)	
WD/PD/HC LC	3	2"	600# RFLWN	SA-105N	0.660"	INTEGRAL	FIG.UW-16.1 (c)	
LC BR	2	2"	600#RFWN	SA-105N	0.343"	INTEGRAL	FIG.UW-16.1 (c)	
HCD/PSV	2	3"	600# RFHB	SA-105N	1.240"	INTEGRAL	FIG.UW-16.1 (c)	
TI	1	1"	600# RFLWN	SA-105N	0.560"	INTEGRAL	FIG.UW-16.1 (c)	
PI	1	¼"	600# RFLWN	SA-105N	0.570"	INTEGRAL	FIG.UW-16.1 (c)	
MANWAY	1	16"	600#RFHB	SA-105N	2.690"	INTEGRAL	FIG.UW-16.1 (c)	

11. Supports Skirt **NO** (Yes/no) Lugs ____ (No.) Legs **2** (No.) Other ____ (Describe) Attached **BOTH ENDS/ WELDED** (Where and how)

12. Remarks Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following the report
(Name of part item number Mfr's name and identifying stamp)

Impact Testing. **REQUIRED AS PER UCS-66(a)** Radiography per **UW11a & UW-51**

Tag No. **V-110** Volume. **167.3 Cu.Ft. (4.75 Cu.M)** **JOB# 3030**

IMPACT TESTING FOR ITEMS #3,#9 & #11 AS PER UG-84(i) ALL OTHER MATERIAL EXEMPT AS PER UG-20(f)

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. **21366** expires **July 21, 2001**

Date **Nov. 19/98** Co Name **Opsco'92 Industries Ltd.** (Manufacturer) Signed ____ (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by **Opsco'92 Industries Ltd.** at **CALGARY, ALBERTA, CANADA**

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 **ABSA, Alberta Boilers Safety Association**

have inspected the component described in the Manufacturer's Data Report on **23rd November**, 19**98**, 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 the 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 **23rd November** Signed ____ (Authorized Inspector) Commissions **ALBERTA** (Authorized Inspection Agency)