Ⓐ2501321

FORM U-1A MANUFACTURERS' 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

1. Manufactured and certified by Cessco Fabrication & Engineering Limited, 7310-99 St., Edm., AB (name and address of manufacturer)

2. Manufactured for Texaco Canada Resources, Calgary, AB (name and address of purchaser)

3. Location of installation Bonnie Glen Cycle Plant (name and address)

4. Type: Horiz (horiz. or vert., tank) | 3142 (mfr's. serial no.) | H5920.2 (CRN) | 3142 (drawing no.) | --- (Nat'l. Bd. no.) | 1989 (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 Code, Section VIII, Division 1: 1986 (year), 1987 (addenda (date)) (Code Case no.) (special service per UG-120(d))

6. Shell: SA516-70N. (mat'l. (spec. no., grade)) | 2" (nom. thickness (in.)) | 0.063" (corr. allow. (in.)) | 12' - 0" (dia. ID (ft. & in.)) | 92' - 4" t/t (length (overall) (ft. & in.))

7. Seams: W.D.B. (long. (welded, dbl., sngl. lap, butt)) | Full (RT (spot or full)) | 100 (eff. (%)) | 1150 (HT temp. (°F)) | 2 (time (hr.)) | W.D.B. (girth (welded, dbl., sngl., lap, butt)) | Full (RT (spot, partial, or full)) | 10 (no. of courses)

8. Heads: (a) SA516-70N (mat'l. (spec. no., grade)) (b) SA516-70N (mat'l. (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)	Ends	1.95	0.063	--	--	2:1	--	--	--	Concave
(b)										

If removable, bolts used (describe other fastenings): (mat'l., spec. no., gr., size, no.)

9. MAWP: 451 (psi) at max. temp. 200 (°F). Min design metal temp. -20 (°F) at 451 (psi). Hydro., pneu. or comb. test pressure 708 (psi).

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, outlet, drain, etc.)	No.	Dia. or Size	Type	Mat'l.	Nom. Thickness	Reinforcement Mat'l.	How Attached	Location
Inlet	N1	6	RFHB	SA350-LF2	300	---	welded	shell
Outlet	N2	6	RFHB	SA350-LF2	300	---	welded	shell
Outlet	N3	2	RFWN	SA106	XXH	---	welded	shell
Drain	N5	3	RFHB	SA350-LF2	300	---	welded	shell

11. Supports: Skirt No (yes or no) Lugs (no.) Legs (no.) Other saddles (describe) Attached welded to shell (where & how)

12. Remarks: Manufacturers' 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, mfr's. name and identifying stamp)

1. Ethane product storage 2. 10897 ft^3 3. Texaco
3. Vessel Impact Test To UG84 4. Design for Full Vacuum at 200°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. 4546 expires 30/9, 19 90

Date April 4/89 Name Cessco (manufacturer) Signed [signature] (representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Cessco Fabrication & Engineering Ltd at 7304-99 St., Edm., AB.

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Alberta and employed by Boilers Branch of Alberta have inspected the component described in this Manufacturers' Data Report on April 4, 19 89 and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 Manufacturers' 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 April 4, 1989 Signed [signature] (Authorized Inspector) Commissions Alberta (Nat'l. Bd. (incl. 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 Cessco Fabrication & Engineering Limited, 7310-99 St., Edm., AB
(Name and address of manufacturer)

anufactured for Texaco Canada Resources
(Name and address of purchaser)

3. Location of installation Bonnie Glen Cycle Plant
(Name and address)

4. Type Horiz (Horiz., vert., tank, etc.) | 3142 (Mfgr's. serial No.) | H5920.2 (CRN) | 3142 (Dwg) | --- (Nat'l. Bd. No.) | 1989 (Year built)

Data Report Item Number	Remarks
Nozzles	
Vent N6	1 1/2" RFWN, SA106 sch XXH welded to shell
PSV N7	4" RF "HB" SA350-LF2 300# welded to shell
S.O. N8	2" RFWN, SA106B sch XXH welded to shell
Bridle N9	2" RFWN, SA106B sch XXH welded to shell
T1 N10	1 1/2 RFWN, SA106B sch XXH welded to head
Manway MH	24" RF "F" SA350-LF2 welded to shell

Date April 4 /89 Co. name Cessco (Manufacturer) Signed Charlie Taylor (Representative)

Date April 4/89 Signed (Authorized Inspector) Commissions Alberta [Natl. Board (incl. endorsements), State, Prov., and No.]

(10/83)

This form (E118SI) is available from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017