FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

(Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only) A-185432

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

1. Manufactured by LEGRAND INDUSTRIES LTD., 616 – 58th Avenue S.E., Calgary, Alberta
2. Manufactured for BECHTEL CANADA LTD FOR ESSO CHEMICAL CANADA
3. Location of Installation PORTAGE LA PRAIRIE, MANITOBA
4. Type HORIZONTAL (Horiz. or vert. tank) | 81-11-01 (Mfgr's Serial No.) | A2558-4 (CRN) | 81-11-010 (Drawing No.) | (Nat'l Bd. No.) | (Year Built) 1981

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 1980 (Year) and Addenda to S80 (Date) and Code Case Nos. _____ Special Service per UG-120(d) _____

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, Mfgr's name and identifying stamp)

6. Shell: Matl. SA 516 Gr 70 (Spec. No., Grade) Nom. Thk. .875 in. Corr. Allow. .125 in. Diam. 8 ft. 10 in. Length 25 ft. 0 in.

7. Seams: Long. BUTT (Welded, Dbl., Sngl., Lap, Butt) R.T. FULL (Spot or Full) Eff. 100 % H.T. Temp. _____ F Time _____ hr. Girth BUTT (Welded, Dbl., Sngl., Lap, Butt) R.T. FULL (Spot, Partial, or Full) No. of Courses 3

8. Heads: (a) Material SA 516-GR 70 (Spec. No., Grade) (b) Material SA 516-GR 70 (Spec. No., Grade)

Location (Top, Bottom, Ends)	Min. Thk.	Corr. Allow.	Crown Radius	Knuckle Radius	Ellipse Ratio	Conical Apex Angle	Hemisph. Radius	Flat Diam.	Side to Pressure (Convex or Concave)
ENDS	.820	.125			2:1				CONCAVE

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

9. Const. for max. AWP 250 psi at max. temp. 120° F. Min. temp. -20° F. Hydro. pneu., or comb. pressure 438 psi.

10. Safety Valve Outlets: Number 2 Size 4" Location SHEL

11. Nozzles and Inspection Openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
MANWAY	1	20" 300#	RFWN	A 105	XH	SA516-70	WELDED	HEAD
VENT	1	6" 300#	RFWN	A 105	SCH 120	SA516-70	WELDED	SHELL
	1	3" 300#	RFWN	A 105	SCH 160	SA516-70	WELDED	SHELL
	4	2" 300#	RFWN	A 105	SCH 160	SA516-70	WELDED	SHELL
	5	1½"6000#	SW CLPG	A 105			WELDED	SHELL/HEAD
	5	3/4"6000#	SW CLPG	A 105				SHELL/HEAD

12. Supports: Skirt _____ (Yes or no) Lugs _____ (No.) Legs _____ (No.) Other SADDLES (Describe) Attached _____ (Where and how)

13. Remarks: PROPANE STORAGE DRUM
SURF AREA 950 sq ft
VOL 1400 cu ft

CERTIFICATE OF 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.

Date Aug 12/81 Signed LEGRAND INDUSTRIES LTD (Manufacturer) by Dan Dumke (Representative)

"U" Certificate of Authorization No. 5635 expires 30 JANUARY 19 83

CERTIFICATE OF SHOP INSPECTION

Vessel made by LEGRAND INDUSTRIES LTD at 616 – 58th Avenue S.W., Calgary

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 GOVERNMENT OF ALBERTA have inspected the pressure vessel described in this Manufacturers' Data Report on AUG 12 1981, 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 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.

Signed _____ (Inspector) Date 81-08-12 Commissions _____ (Nat'l Board, State, Province and No.)

NB-16 This form may be obtained from the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Col's., O. 43229

MANITOBA

DEPARTMENT OF LABOUR
Mechanical and Engineering Division

MANUFACTURER'S SPECIFICATIONS

UNFIRED PRESSURE VESSEL

Manufactured to Manitoba Regulations 96/57 and CSA B51

Date APRIL 20, 1981

Type of Pressure Vessel PROPANE STORAGE DRUM (To Contain) PROPANE
(Air, Ammonia, Propane, etc.)

Manufactured by LEGRAND INDUSTRIES LTD., 616 - 58TH AVENUE SE., CALGARY, ALBERTA T2H 0P8
(Name and address of manufacturer)

Working Pressure 250 PSIG Temperature 120/-20 Degrees F. Dwg. No. 81-11-010 Rev 1.

Designs to A.S.M.E. Code year 1980 Section UW11 Part No. (a)

List registration numbers previously allotted by other provinces

Outside diameter 97 3/4" Overall length 1400 Cu. Ft. Cubic feet capacity Heating surface

Outside surface (Required on Propane and A.A. vessels for checking safety valve)

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1. OUTER SHELL AND HEADS:
Note: This section also pertains to simple vessel with no inner shell, tube bank or coil. (See Section 2)

Design Pressure 250 PSIG Working Pressure 215 PSIG

Design temperature 120°F Working temperature 120°F

Inside diameter of shell 96" Min. design thickness shell plates 7/8" (0.875")
(Top, bottom, intermediate, etc.)

Shell material spec. No. SA516 GR70
(ASTM-ASME) (Top, bottom, intermediate, etc.)

Longitudinal joint DBL BUTT (Simple, double or lap welded, etc.) Longitudinal joint eff. 100% Unit stress, psi 17,500

Heads 2:1 (Flat, dished, elliptical 2:1, etc.) ENDS (Top, bottom, intermediate, etc.)

Radius of dish Of knuckle

Inside diameter of heads 96" ENDS
(Top, bottom, intermediate, etc.)

Minimum design thickness of head plates 0.820" (Concave head) (Convex head) ENDS (Top, bottom, intermediate, etc.)

Head material specification No. SA516 GR70 (ASTM-ASME) ENDS (Top, bottom, intermediate, etc.)

Type of head joints DBL BUTT (Simple, double or lap welded, etc.) ENDS (Top, bottom, intermediate, etc.)
NOTE: If bolted or riveted construction, give detail sketches with all dimensions, etc., on design drawings.

Corrosion allowance thickness 0.125" (On shell) 0.125" (On head)

If lined or clad vessel (Thickness of shell lining) (Of head lining) Lining specification No. (ASTM-ASME)

Safety valve outlets 2 4" (No. and size) Required safety valve capacity (ASME, lbs. per hour or cubic feet per minute)

Fusible plug NO (Yes or No) (Size) Drain connection YES (Yes or No) 3" (Size) Manhole YES (Yes or No) 1" (Number)

Number, size and kind of inspection openings (Free of piping and other attachments)

Nozzles SEE NOZZLE DATA ON DRAWINGS
(Type, size, thickness and reinforcing)

Vessel to be stress relieved NO (Yes or No) In shop (Yes or No) In field (Yes or No)

SECTION 1 (Continued)

Vessel to be radiographed ..... YES (Yes or No) ..... Spot or complete radiograph ..... COMPLETE .....

Vessel to be examined by sectioning ..... NO (Yes or No) ..... Code year and paragraph ..... UW11(a) 1980 (ASME) .....

2. INNER SHELL, COIL OR TUBE BANK (Also heads of same, if any)

Design pressure ..... Working pressure ..... Design temperature ..... Working temp. .....

Inside diameter of shell ..... Minimum thickness shell plate ..... Shell material spec. No. ..... (ASTM-ASME)

Longitudinal joint ..... (Single, double or lap welded, etc.) Longitudinal joint efficiency ..... Unit stress per sq. in. .....

Heads ..... (Flat, dished, elliptical, 2, 1, etc.) Radius of dish ..... of knuckle .....

Inside diameter of head ..... Minimum thickness of head plates ..... (Concave head) (Convex head) (Other heads)

Head material specification No. ..... (ASTM-ASME) Type of head joints ..... (Single, double or lap welded, etc.)

NOTE: If bolted or riveted construction give detail sketches with all dimensions, etc., on design drawings.

Corrosion allowance thickness ..... (On shell) ..... (On heads)

If lined or clad vessel ..... (Thickness of shell lining) (Of head lining) ..... Lining specification No. ..... (ASTM-ASME)

Heating surface of coil or tube bank ..... (Square feet) ..... How attached to heads .....

Number of tubes ..... Size ..... Thickness or gauge No. ..... Spec. No. ..... (ASTM-ASME)

Is separate safety valve from that outer shell required ..... (Yes or No) ..... Required capacity ..... (ASME lbs. per hr. or cu. ft. per min.)

Safety valve outlet ..... (Number and size) ..... Fusible plug ..... (Yes or No) ..... (Size)

Number, size and kind of inspection openings .....

To be stress relieved ..... (Yes or No) ..... In shop ..... (Yes or No) ..... In field ..... (Yes or No)

To be radiographed ..... (Yes or No) ..... Spot or complete radiograph .....

To be examined by sectioning ..... Code year and paragraph this part .....

3. Is the welding procedure to be used registered with the department? SEE BELOW (Yes or No) Regist. Number SEE BELOW

Do welders hold current certificate? YES, ALBERTA (Yes or No)

Remarks, etc ..... WELDING PROCEDURES REGISTERED WITH PROVINCE OF ALBERTA BOILERS BRANCH:

WP242 LG4 MARCH 24, 1969
LG5 MARCH 24, 1969
LG19 NOVEMBER 30, 1972

4. I HEREBY CERTIFY THAT if the design to which the foregoing statements pertain is registered by the department, that every vessel manufactured under such registration will be constructed strictly in accordance with these specifications and related drawings, and that each vessel will be stamped in accordance with the CSA B51 Canadian regulations for the Construction and Inspection of Boilers and Pressure Vessels.

B. J. Collins
(Signature for manufacturer)

APRIL 20, 1981
(Date submitted)

PROVINCE OF MANITOBA
Mechanical & Engineering Division
Registration of Boiler or Pressure Vessel

Drawing No.(s) 81-11-010 Rev 1

Canadian Registration No. A2552.4

Registered for a maximum working pressure of 250PSIG at 650°F

Subject to design, construction and inspection in accordance with the applicable A. S. M. E. Code(s) and Regulations made under The Steam and Pressure Plants Act.

81.05.28
DATE

EXAMINER

DIRECTOR

(Leave blank for Department Registration Stamp)