

A 152767

AUG 15 1981

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

D.B. #A5880-A
Turbo-Vessel
T0423-170

152767

1. Manufactured by Dominion Bridge Company Ltd, Edmonton, Alberta
2. Manufactured for Turbo Resources Limited, Calgary
3. Location of installation Turbo - Balzac - Calgary (Year Built) 1981
4. Type HORIZ. (Mfg's Serial No.) D9441.2 (Drawing No.) #1-A5880
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 and Addenda to Dec. 1980 and Code Case Nos. 1980 (Date)

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: Shell Plates, formed & welded

6. Shell: Matl. SA516-70 (Spec. No., Grade) Thk. 1.22 in. Allow. 0.063 in. Diam. 144 in. Lgh. 66 ft 6 in. 3658 mm
7. Seams: Long. (Welded, Dbl. Singl. Lap, Butt) D.B.W. R.T. Full (Spot or Full) Efficiency 100 % H.T. Temp. _____ F Time _____ hr
Girth D.B.W. (Welded, Dbl. Singl. Lap, Butt) R.T. Full (Spot or Full) No. of Courses 7
8. Heads: (a) Material SA516-70 (Spec. No., Grade) (b) Material SA516-70 (Spec. No., Grade)

Location (Top, Bottom, Ends)	Min. Thk.	Corr. Allow.	Crown Radius	Knuckle Radius	Ellipse Ratio	Cornic. Apex Angle	Hemish. Radius	Rise Diam.	Side to Pressure (Convex or Concave)
(a) Ends	17mm	0.063"					1830mm		CONCAVE
(b)		(1.6mm)					(72")		

If removable, bolts used (describe other fastenings) _____

9. Constructed for max. allowable working pressure 275 psi at max. temp. 1000 F. Min. temp. (when less than -20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure 412 F. psi.

10. Safety Valve Outlets: Number 2 Size 4 Location _____

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Various - See drawing #1-A5880								

12. Supports: Shrt (Yes or no) Lugs (No.) Legs (No.) Other 2 Saddles Attached (Where and how)

13. Remarks: Volume 8425 Cu. Ft. (237 C.M.)

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 July 3, 1981 Signed Dominion Bridge Co. Ltd. by [Signature]
"U" Certificate of Authorization No. 11359 expires Dec 31. (Representative) 19 82

CERTIFICATE OF SHOP INSPECTION

Vessel made by Dominion Bridge Co. Ltd. at Edmonton, Alberta
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by Prov. of Alberta, have inspected the pressure vessel described in this Manufacturers' Data Report on 19 81, 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 [Signature] Date 8/17/81 Commissions [Signature] (N.B. Board, State, Province and No.)

A152767

FORM U-2 MANUFACTURERS' PARTIAL DATA REPORT
(A Part of a Pressure Vessel Fabricated by One Manufacturer for Another)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

A5880 Vess 'A'

- 1. (a) Manufactured by Dominion Bridge Company Limited, Calgary, Alberta
(Name and address of manufacturer of part)
- (b) Manufactured for Dominion Bridge Company Limited, Edmonton, Alberta
(Name and address of manufacturer of vessel)
- 2. Manufacturer's Serial No. of Part _____ CRN D9441.2 Drawing No. #1-A5880 Year Built 1981
- 3. (a) Constructed According to Drawing No. #1-A5880 Drawing Prepared by D.B. Company
- (b) Description of Part Inspected 7 Cans 3658 DIA x 2910 x 31 Plate
- 4. Special Service per UG-120(d) _____
- 5. Postweld Heat Treatment: Temperature _____ F Time _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1

Date MAY 13/81 Signed Dominion Bridge Co. Ltd. by John Murphy
(Manufacturer) (Representative)

"U" Certificate of Authorization No. 10684 expires Dec. 31, 1982

CERTIFICATE OF SHOP INSPECTION

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 Province of Alberta have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on MAY 13 19 81, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturers' Partial 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 81-05-13
Signed [Signature] Commissions _____
(Authorized Inspector) (Nat'l Board, State, Province and No.)

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers

6. Shell: Material SA516-70 (Spec. No., Grade) Nominal Thickness 31 in. Corrosion Allowance _____ in.
Diam. 3658 mm Length 2910 mm

7. Seams: Longitudinal D.B.W. R.T. Full Efficiency 100 %
(Welded, Dbl., Sngl. Lap, Butt) (Spot or Full)

H.T. Temp _____ F Time _____ Girth By Others
(Welded, Dbl, Sngl, Lap, Butt)

R.T. _____ No. of Courses _____
(Spot, Partial, or Full)

(a) Material		(b) Material			
(Spec. No., Grade)		(Spec. No., Grade)			
Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)					
(b)	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)	
(a)					
(b)					

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

9. Type of Jacket _____ Proof Test _____
 10. Jacket Closure _____ (Describe as gages & weld, bar, etc.) _____ If bar, give dimensions _____

If bolted, describe or sketch.

11. Constructed for max. allowable working pressure _____ psi at max. temp. _____ f Min. temp. (when less than -20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure _____ psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary—Material _____ (Spec. No. Gr.) _____ Diam. _____ (Subject to pressure) _____ in.
 Nominal Thickness _____ in. Corrosion Allowance _____ in. Attachment _____ (Welded, Bolted)
 Floating—Material _____ (Spec. No., Gr.) _____ Diam. _____ in.
 Nominal Thickness _____ in. Corrosion Allowance _____ in.
 Attachment _____
 13. Tubes: Material _____ (Spec. No., Gr.) _____ O.D. _____ in. Nominal Thickness _____ in. or gauge
 Number _____ Type _____ (Straight or "U") _____

Items 14-17 Incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

14. Shell: Material _____ (Spec. No., Gr.) _____ Nominal Thickness _____ in. Corrosion Allowance _____ in.

Diam. _____ R _____ in. Length _____ ft _____ in.

15. Seams: Longitudinal _____ (Welded, Dbl., Singl. Lap, Butt) _____ R.T. _____ (Spot or Full) _____ Efficiency _____ %

H.T. Temp _____ F Time _____ Girth _____ (Welded, Dbl., Singl. Lap, Butt)

R.T. _____ (Spot, Partial or Full) _____ No. of courses _____

16. Heads: (a) Material _____ (Spec. No., Grade) _____ (b) Material _____ (Spec. No., Grade) _____
 Location _____ Minimum Thickness _____ Corrosion Allowance _____ Crown Radius _____ Knuckle Radius _____ Elliptical Ratio _____
 (Top, Bottom, Ends)

(a) _____ Hemispherical _____ Flat _____ Side to Pressure _____
 Apex Angle _____ Radius _____ Diameter _____ (Convex or Concave)

(b) _____
 If removable, bolts used (describe other fastenings) _____

17. Constructed for max. allowable working pressure _____ (Material, Spec. No., Gr., Size, No.) _____
 less than -20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure _____ psi at max temp. _____ 100 _____ F. Min. temp. (when Hydrostatic, pneumatic, or combination test pressure _____ psi. _____
 Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number _____ Size _____ Location _____

19. Nozzles: _____
 Purpose _____ Diam. _____ or Size _____ Type _____ Material _____ Nominal Thickness _____ Reinforcement Material _____ How Attached _____
 (Inlet, Outlet, Drain) Number _____

20. Inspection Openings:

Manholes No.	Size	Location
_____	_____	_____
Handholes No.	Size <td>Location</td>	Location
_____	_____	_____
Threaded No.	Size <td>Location</td>	Location
_____	_____	_____

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

22. Remarks: _____

Forming, Welding Long Seam & R.T. of Long Seam
 OFI - Cans. By Dominion Bridge Company Ltd.
 CALGARY, Alberta