

1. Manufactured and certified by Exchanger Industries Ltd, 5105-54 Ave, SE Calgary Alberta.
(Name and address of manufacturer)
2. Manufactured for Anderson Exploration 2500, 700 9 Avenue S.W. Calgary, Alberta
(Name and address of purchaser)
3. Location of installation Anderson Exploration, Dunvegan, Fairview, Alberta
(Name and address)
4. Type HORIZ. 86-1766 A F8391.2 86-1766 A N.A. 1986
(How or what, unit) (Mfg's serial No.) (CRN) (Drawing) (Net's Id. No.) (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 Rules, Section VIII, Division 1 1983
Year

W-85

Address (Name) _____ Code Case No. _____ Special service per UG 120(d) _____

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

6. Shell: SA-106-B 375 1/16" 17 1/2" 11' 6"
Matl (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (in. & in.) Length (Overall) (in. & in.)
7. Seams: SMLS Pipe N.A. 100% N.A.
Long (Dbl., Sngl.) R.T. (Spot or Full) EH (in.) -M.T. Temp. (°F)
- Time N.A. Single Spot 1
Grain (Dbl., Sngl.) R.T. (Spot, Partial, or Full) No. of Courses

8. Heads: (a) Matl. N.A. (b) Matl. _____ (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 (Concave or Convex)
(a)									
(b)									

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

9. Type of Jacket _____ Proof Test _____
10. Jacket Closure _____ If bar, give dimensions _____ If bolted, describe or sketch _____
(Describe as gage & weld, bar, etc)
11. MAWP 375 psi at max. temp. 285 °F. Min. temp. (when less than -20°F) _____
Hydro., pneu., or comb. test press. 563 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: SA-516-70N 17 1/8" 2 7/8" 1/8" Welded
Stationary Matl (Spec No., Gr.) Diam. (in) (Subject to pressure) Nom. Thk. (in.) Corr. Allow. (in.) Attach (Welded, Bolted)
- N.A. _____
Floating Matl (Spec No., Gr.) _____
SA-179 3/4" OD (in.) 14 BWG M/W 248 _____
Matl (Spec No., Gr.) _____ Nom. Thk. (in. or Gauge) Number _____
Type (Straight or "U") _____

13. Tubes: _____
SA-516-70 3/4" 1/16" 17 1/2" 12' 19.
Matl (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Tube Length = _____
Length (Overall) (in. & in.) _____

14. Shell: SA-516-70 3/4" 1/16" 17 1/2" 1' 10"
Matl (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (in. & in.) _____
Length (Overall) (in. & in.) _____
15. Seams: Double Spot 85% N.A.
Long (Dbl., Sngl.) R.T. (Spot or Full) EH (in.) M.T. Temp. (°F)
- N.A. _____
Time Single Spot 1 ea. end
Grain (Dbl., Sngl.) R.T. (Spot, Partial, or Full) No. of Courses

16. Heads: (a) Matl. SA-516-70 (b) Matl. SA-516-70 (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 (Concave or Convex)
(a) End	.695	1/16			2:1				Concave
(b) End	.695	1/16			2:1				Concave

If removable, bolts used (describe other fastenings) 28 - 1" x 7 1/2" SA-197-B7 Studs each end

(Matl., Spec No., Gr., Size, No)

17. MAWP 1075 psi at max. temp. 285 °F. Min. temp. (when less than -20°F) _____
Hydro., pneu., or comb. test press. 1613 psi.

18. Nozzles, Inspection and Safety Valve Openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Dim. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Chan. Inlet	1	10" 600#	RFWN	SA-106-B	.500	3/4" SA-516-70	WELDED	Top
Chan. Outlet	1	10" 600#	RFWN	SA-106-B	.500	3/4" SA-516-70	WELDED	Bottom
Shell Inlet	1	4" 300#	RFWN	SA-106-B	.337	NONE	WELDED	Bottom
Shell Outlet	1	6" 300#	RFWN	SA-106-B	.562	NONE	WELDED	Top
Vent	1	1" 6000#	CPLG	SA-105-	.555	NONE	WELDED	Top
Drain	1	1" 6000#	CPLG	SA-105-	.555	NONE	WELDED	Bottom
Drain	1	2" 300#	RFWN	SA-106-B	.343	NONE	WELDED	Bottom

19. Supports: Skirt (Yes or No) _____ Lugs (No) _____ Legs (No) _____ Other Saddles Attached Welded to bottom of shell (Where and how)

20. Remarks: Manufacturer's 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, size, name and identifying stamp)

Service: De-ethanizer Reboiler

Tube Surface Area: 560 sq. ft.

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. 5983 expires 30 March, 19 87
Date SEP 16/86 Co. name Exchanger Industries Ltd Signed _____
(Manufacturer)

Vessel constructed by Exchanger Industries Ltd at 5105-54 Ave, SE Calgary Alberta.
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 _____

of Alberta SEP 16, 19 86, 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 86-9-16 Signed _____ Commissions _____
(Authorized Inspector) (Mat'l Board, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

"U" Certificate of Authorization No. _____ expires _____, 19 _____
Date _____ Co. name _____ Signed _____
(Assembler that certified and constructed field assembly) (By Representative)

CERTIFICATE OF FIELD ASSEMBLY 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 _____ and employed by _____

_____ of _____ have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that, to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of _____ psi. 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 _____ Signed _____ Commissions _____
(Authorized Inspector) (Mat'l Board, State, Province and No.)