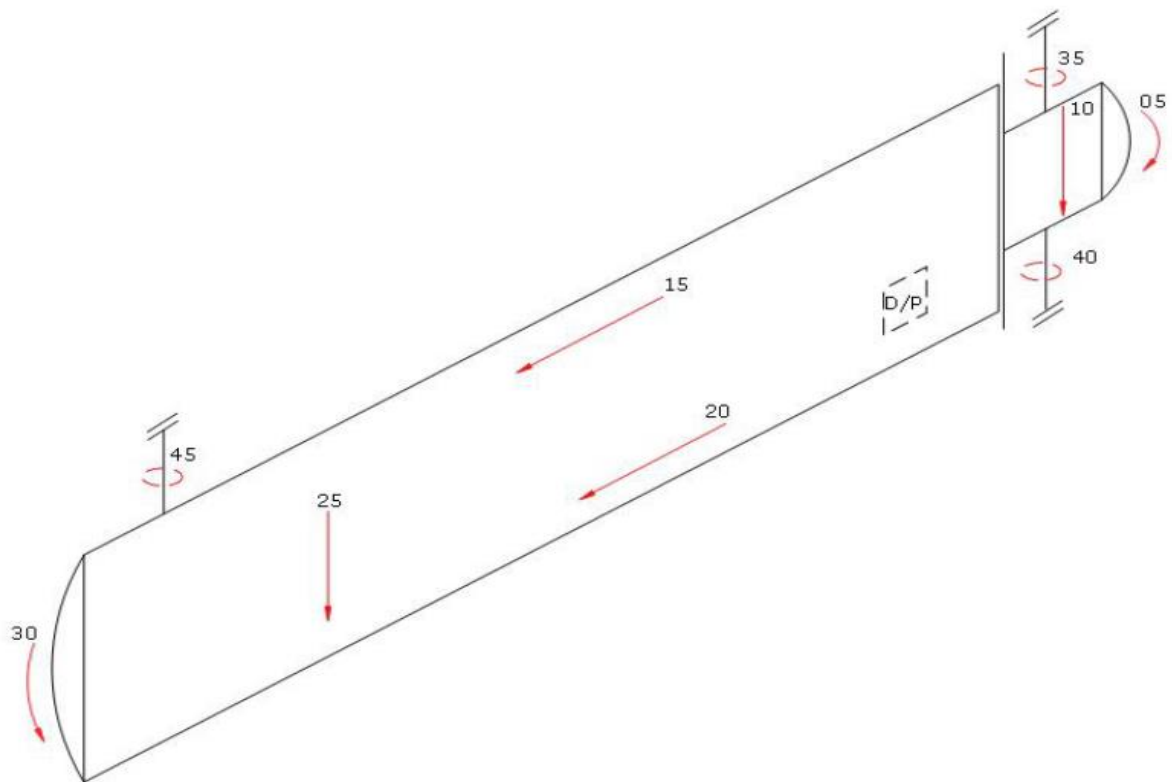




Location Name:	ANSELL	LSD:	07-21-051-19 W5M
Jur #:	A0194704	Equipment/Tag No.	66036274
Equipment Description:	STABILIZER REBOILER		
Manufacturer:	ELLETT		
Serial Number:	18765	CRN:	F1711.2
Shell MAWP:	3351	KPA Shell Design Temp:	179 °C
Tube MAWP:		KPA Tube Design Temp:	°C
Shell Material:	SA-106-B	Head Material:	SA-234-WPB
Shell Thickness:	12.70	mm Head Thickness:	12.70 mm
Corrosion Allowance:	3.175	mm Date Built:	1984
Size:	406.4	mm Pipe / Rolled Plate:	PIPE
RT:		Streamline Report #:	STL-190246-DMS 50

NOTES:









Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: JUNE 14/ 19

Streamline Report #: STL-190246-DMS 50

Inspector: JAEHUN LEE

LSD: 07-21-051-19 W5M	Area: ANSELL	Location: ANSELL GAS PLANT
Jur #: A0194704	Tag Number: 66036274	Vessel Name: STABILIZER REBOILER
CRN: F1711.2	Year Built: 1984	Serial Number: 18765
RT:	Vessel CA: 3.175 mm	Manufacturer: ELLETT
	Shell MAWP: 3351 KPA	Tube MAWP: KPA
	MAWT: 179 °C	MAWT: °C
		Pipe/Plate PIPE

CML Description	Baseline	Flange ANSI:	Material:
00	2014 2019	CA Nominal	T Min
Shape:	Min	Flag	STCR mm/yr
OD:	Avg		LTCCR mm/yr
Spec:	Comments: No CML 00		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
05 HEAD	2014 2019	CA Nominal	T Min
Shape: Ellipsoidal	Min	Flag	STCR mm/yr
OD: 406.4	Avg		LTCCR mm/yr
Spec: ASME VIII Div.1	Comments: NO ACCESS(COVERED BY INSULATION)		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
10 SHELL	2014 2019	CA Nominal	T Min
Shape: Cylindrical	Min	Flag	STCR mm/yr
OD: 406.4	Avg		LTCCR mm/yr
Spec: ASME VIII Div.1	Comments: NO ACCESS(COVERED BY INSULATION)		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
15 SHELL	2014 2019	CA Nominal	T Min
Shape: Cylindrical	Min	Flag	STCR mm/yr
OD: 406.4	Avg		LTCCR mm/yr
Spec: ASME VIII Div.1	Comments:		Remaining Life:
			Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: JUNE 14/ 19

Streamline Report #: STL-190246-DMS 50

Inspector: JAEHUN LEE

LSD: 07-21-051-19 W5M	Area: ANSELL	Location: ANSELL GAS PLANT
Jur #: A0194704	Tag Number: 66036274	Vessel Name: STABILIZER REBOILER
CRN: F1711.2	Year Built: 1984	Serial Number: 18765
RT:	Vessel CA: 3.175 mm	Manufacturer: ELLETT
	Shell MAWP: 3351 KPA	Tube MAWP: KPA
	MAWT: 179 °C	MAWT: °C
		Pipe/Plate PIPE

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
20 SHELL	2014 2019	CA Nominal	T Min
Shape: Cylindrical	Min 12.62 12.60	3.175 12.700	STCR mm/yr 0.004
OD: 406.4	Avg 12.85 13.08		LTCR mm/yr 0.003
Spec: ASME VIII Div.1	Comments:		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
25 SHELL	2014 2019	CA Nominal	T Min
Shape: Cylindrical	Min 12.65 12.60	3.175 12.700	STCR mm/yr 0.010
OD: 406.4	Avg 13.13 13.18		LTCR mm/yr 0.003
Spec: ASME VIII Div.1	Comments:		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
30 HEAD	2014 2019	CA Nominal	T Min
Shape: Ellipsoidal	Min 15.27 15.24	3.175 12.700	STCR mm/yr 0.006
OD: 406.4	Avg 15.57 15.88		LTCR mm/yr 0.000
Spec: ASME VIII Div.1	Comments:		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
35 NOZZLE	2014 2019	CA Nominal	T Min
Shape: 360° Circ	Min 5.72	3.175 6.020	STCR mm/yr 1.144
OD: 114.3	Avg 6.17		LTCR mm/yr 0.010
Spec: ASME VIII Div.1	Comments: NO ACCESS(COVERED BY INSULATION)		Remaining Life:
			Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: JUNE 14/ 19

Streamline Report #: STL-190246-DMS 50

Inspector: JAEHUN LEE

LSD: 07-21-051-19 W5M	Area: ANSELL	Location: ANSELL GAS PLANT
Jur #: A0194704	Tag Number: 66036274	Vessel Name: STABILIZER REBOILER
CRN: F1711.2	Year Built: 1984	Serial Number: 18765
RT:	Vessel CA: 3.175 mm	Manufacturer: ELLETT
	Shell MAWP: 3351 KPA	Tube MAWP: KPA
	MAWT: 179 °C	MAWT: °C
		Pipe/Plate PIPE

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
40 NOZZLE	2014 2019	CA	T Min
Shape: 360° Circ	Min 5.72	Nominal 6.020	STCR mm/yr 1.144
OD: 114.3	Avg 6.05		LTCR mm/yr 0.010
Spec: ASME VIII Div.1	Comments: NO ACCESS(COVERED BY INSULATION)		Remaining Life:
			Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-106-B
45 NOZZLE	2014 2019	CA	T Min
Shape: 360° Circ	Min 10.59	Nominal 10.973	STCR mm/yr 2.118
OD: 168.275	Avg 11.02		LTCR mm/yr 0.013
Spec: ASME VIII Div.1	Comments: NO ACCESS(COVERED BY INSULATION)		Remaining Life:
			Retirement Date:

0316 A194704
B.C. File F.4138FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

2P.7946, B.C.

1. Manufactured and certified by Ellett Copper & Brass Co. Limited, 1575 Kingsway Avenue, Port Coquitlam, B.C.
(Name and address of manufacturer)2. Manufactured for Cord Projects Ltd. 526-10333 Southport Road S.W., Calgary, Alberta
(Name and address of purchaser)Location of installation Western Decalita Petroleum, Diamond Valley Gas Plant, Alberta
(Name and address)Type Horiz. Exchanger 18765 F-1711.2 F-808-1E 1984
(Name or Vert. No.) (Design Serial No.) (CRN) (Drawing) (Mat'l. Bd. No.) (Year built)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

Summer, 1984

1899.1

Address (Mat'l.)

Code Case No.

Special services 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 .500 0.1250 1'-4" 15'-6"
(Mat'l. Spec. No., Grade) (Nom. Thk. (in)) (Corr. Allow. (in)) (Diam. I.D. (in & in)) (Length (Overall) (in))7. Seams: 30 min Dbl Butt Full Two
(Long I.D. (in)) (R.T. (Spot or Full)) (HT Temp. (F))
(Type) (Girth I.D. (in)) (R.T. (Spot, Partial, or Full)) (No. of Courses)8. Heads: (a) Mat'l. SA 234 WPB (Spec. No., Grade) (b) 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)	End	.500	0.1250	Std. Pipe Cap						concave
(b)										

If removable, bolts used (describe other fastenings)

(Mat'l. Spec. No., Gr., Size, No.)

9. Type of Jacket _____ Proof Test _____

10. Jacket Closure _____ If bar, give dimensions _____ If bolted, describe or sketch.

11. MAWP 486 psi at max. temp. 355 °F. Min. temp. (when less than -20° F) _____ °F.
Hydro., pneu., or comb. test press. 728 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: SA 516-70 2.421 2.421 0.0625 Bolted
(Stationary Mat'l. (Spec. No., Gr.)) (Diam. (in) (Subject to pressure)) (Nom. Thk. (in)) (Corr. Allow. (in)) (Attach. (Welded, Bolted))

Floating Mat'l. (Spec. No., Gr.)

Diam. (in)

Nom. Thk. (in)

Corr. Allow. (in)

Attach.

13. Tubes: SA 179 3/4 14 ga. 52 U
(Mat'l. (Spec. No., Gr.)) (O.D. (in)) (Nom. Thk. (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: SA 106 B .375 0.0625 1'-4" 2'-0"
(Mat'l. (Spec. No., Grade)) (Nom. Thk. (in)) (Corr. Allow. (in)) (Diam. I.D. (in)) (Length (Overall) (in))15. Seams: _____ Dbl Butt _____ 1
(Long I.D. (in)) (R.T. (Spot or Full)) (HT Temp. (F))
(Type) (Girth I.D. (in)) (R.T. (Spot, Partial, or Full)) (No. of Courses)16. Heads: (a) Mat'l. SA234 WPB (Spec. No., Grade) (b) 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)	End	.375	0.0625	Std. Pipe Cap						Concave
(b)										

If removable, bolts used (describe other fastenings) SA193 B7X-20 Reg 1 1/2" dia. x 10-3/4" long
(Mat'l. Spec. No., Gr., Size, No.)17. MAWP 180 psi at max. temp. 390 °F. Min. temp. (when less than -20° F) _____ °F.
Hydro., pneu., or comb. test press. 270 psi.

(12/82)

This form (E00108) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

NOV 27 1984

Form U-1 (Back)

18. Nozzles, Inspection and Safety Valve Openings:

[illegible]

19. Supports: Shirts Lugs Legs Saddles Welded to shell
(yes or no) (yes or no) (yes or no) (Describe) (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: _____

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.

Certificate of Authorization No. 2901 expires Dec 31, 1987
 Date Nov 14/84 Co. name Ellett Copper & Brass Signed Jack Baker
(Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Ellett Copper & Brass Co. Limited at 155 Kingsway Avenue, Port Coquitlam, B.C.

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 British Columbia and employed by The Government of the Province of British Columbia have inspected the pressure vessel described in this Manufacturer's Data

of British Columbia have inspected the pressure vessel described in this Manufacturer's Data Report on November 14th, 1984, 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 to any person for injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 11-14-84 Signed [Signature] Commissions BC 34

(Not a Bond, State Printer and No. 1)

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 _____ Signature _____ Signed _____
(A signature that is printed and dated) (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 _____

(Must Be Held in Compliance with State Code and Rule)