

**FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS** A 610254  
Exh V-1110  
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules Section VIII, Division 1

1. Manufactured and certified by Moss Fabrication Ltd., 6619-86<sup>th</sup> Avenue S.E. Calgary, AB. T2C 2S4  
(Name and address of Manufacturer)

2. Manufactured for Devon Canada Corp. 2000 - 400 3 Ave SW Calgary Ab T2P 4H2  
(Name and address of Purchaser)

3. Location of installation LSD 09 - 21 - 047 - 17 W5M  
(Name and address)

4. Type Horizontal 36" Separator 4504-1  
(Horizontal, vertical, or sphere) (Tank, separator, jkt. vessel, heat exh., etc.) (Manufacturer's serial number)

5. ASME Code, Section VIII, Div. 1 V4749.2 R4504-1 Rev 0 n/a 2011  
(CRN) (Drawing No.) (National Board Number.) (Year Built)

6. ASME Code, Section VIII, Div. 1 2010 n/a n/a  
[Edition and Addenda (date)] [Code Case Number] [Special Service per UG-120(d)]

Items 6-11 Incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.

6. Shell (a) Number of course(s): 1 (b) Overall length (ft & in.): 10'-0"

Course(s)			Material	Thickness		Long Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length (ft & in.)	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	36" OD	10'-0"	SA516-70N	0.875"	0.125"	1	Full	100%	1	Full	100%	1150 F	1.25 Hr

7. Heads: (a) SA 516-70N (b) SA516-70N  
(Material spec. number, grade or type) (H.T. - time & temp.) (Material spec. number, grade or type) (H.T. - time & temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full, Spot, None	Eff.
(a)	RH/LH Head	0.812"	0.125"	n/a	n/a	2:1	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a
(b)	Boot Bottom	0.625"	0.125"	n/a	n/a	2:1	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a

If removable, bolts used (describe other fastening) n/a  
(Material spec. number, grade, size, number)

8. Type of jacket n/a Jacket closure n/a  
(Describe as ogee and weld, bar, etc)

9. MAWP 720 n/a psi at max. temp. 130 n/a °F Min. design metal temp. -20 °F at 720 psi.  
(Internal) (External) (Internal) (External)

10. Impact test No exempt as per UG - 20(f)(1-5) at test temperature of n/a °F.  
(Indicate yes or no and the component(s) impact tested)

11. Hydro test pressure 1110 PSI Proof test n/a

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: n/a n/a n/a n/a n/a  
[Stationary (material spec. no.)] [Diameter, (subject to press. )] (Nominal thickness) (Corr. Allow.) [Attachment (welded or bolted)]

n/a n/a n/a n/a n/a  
(Floating (material spec. no.)) (Diameter) (Nominal thickness) (Corr. Allow.) (Attachment)

13. Tubes n/a n/a n/a n/a n/a  
(Material spec. no., grade or type) (O.D.) (Nominal thickness) (Number) [Type (straight or U)]

Items 14-18 Incl. to be completed for Inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: (a) No. of course(s) 1 Coil (b) Overall length (ft & in.): 7'-11-3/4"

Course(s)			Material	Thickness		Long Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	2" NPS	7'-113/4"	SA106B /SA234WPB	0.343"	0.187"	Sml	n/a	100%	1	Full	100%	1150F	1.25 Hr

15. Heads: (a) (b)  
(Material spec. number, grade or type) (H.T. - Time & Temp.) (Material spec. number, grade or type) (H.T. - Time & Temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical	Conical	Hemispherical	Flat	Side to Pressure		Category A	
		Min.	Corr.	Crown	Knuckle	Ratio	Apex Angle	Radius	Diameter	Convex	Concave	Type	Full, Spot, None
(a)													
(b)													

If removable, bolts used (describe other fastening) n/a  
(Material spec. number, grade, size, number)



FORM U-1 (Back)

16. MAWP 245 (Internal) 720 (External) psi at 250 (Internal) 130 (External) °F Min. design metal temp. -20 °F at 245 Psi

17. Impact test No exempt per UG 20(f)(1-5) at test temperature of n/a °F.  
(Indicate yes or no and the component(s) impact tested)

18. Hydro test press. 428 PSI Proof test n/a

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet/Outlet	2	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
HC Outlet	1	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
Water LC	1	2" NPS	CI300RFLWN	SA105N	n/a	0.655"	0.125"	n/a	UW16.1c	Type 1	Shell
Bridle HC	2	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
Water LG	2	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
Inspection *	2	3" NPS	CI300RFWN	SA106B	SA105N	0.438"	0.125"	SA516-70N	UW16.1c	Type 1	Shell/Boot
Heating Coil	2	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
Boot	1	8" NPS	Pipe	SA106B	n/a	0.875"	0.125"	SA516-70N	UW16.1c	n/a	Shell Head
LSH	1	3" NPS	CI300RFWN	SA106B	SA105N	0.438"	0.125"	SA516-70N	UW16.1c	Type 1	Shell
Water Out	1	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell
PI/TI	2	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Boot Head
PSV	1	2" NPS	CI300RFWN	SA106B	SA105N	0.343"	0.125"	n/a	UW16.1c	Type 1	Shell

20. Supports: Skirt no Lugs no Legs n/a Other 2 Saddles Attached Shell Welded  
(Yes/no) (Number) (Describe) (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:  
(list the name of part, item number, Manufacturer's name and identifying number):

22. Remarks: Radiography as per UW11(a)  
SAFETY VALVES: P.S.V. installed as per UG - 125 CUBIC CAPACITY: 61 cu. ft.  
SURFACE AREA: n/a  
SERVICE: Sour Service Manufactured to Moss Fabrication drwg. Number: V4504-1 Rev 1  
Item #: \* 16 pcs. 3/4" x 4-1/2" lg. SA-193-B7M, 32 pcs. SA-194-2HM nuts UNC, 2 - 3" CI 300 RFBF SA105N

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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.  
U Certificate of Authorization Number: 33,250 Expires April 26, 2014  
Date JUL 19 2011 Name Moss Fabrication Ltd. Signed [Signature]  
(Manufacturer) (Representative)

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 ABSA of CALGARY, AB, CANADA have inspected the pressure vessel described in this Manufacturer's Data Report on JUL 19 2011, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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 JUL 19 2011 Signed [Signature] Commissions AB 249 NB 12900 A  
(Authorized Inspector) (National Board (incl. endorsements), State, Province, and)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.  
U Certificate of Authorization Number: \_\_\_\_\_ Expires \_\_\_\_\_  
Date \_\_\_\_\_ Name \_\_\_\_\_ Signed \_\_\_\_\_  
(Assembler) (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 to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL 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/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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) (National Board (incl. endorsements), State, Province and number.)





CERTIFIED BY  
**MOSS FABRICATION LTD.**  
 CALGARY, ALBERTA, CANADA

W

R.T. 1

R.T.

M.A.W.P. 720 P.S.I. AT 130 °F

COIL 245 PSI AT 250 °F

M.A.E.W.P. 720 P.S.I. AT 130 °F

MDMT -20 °F AT 245 PSI

M.D.M.T. -20 °F AT 720 P.S.I.

-29 °C AT 4964 KPa

C.R.N. V4749.2

YEAR BUILT 2011 SERIAL NO. 4504-1

Ⓐ 610254