6674284 (2)600025

## FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS (Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only) As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1.	Manufactured and certified by Enerflex Ltd., 10121 Barlow Trail NE, Calgary, Alberta, T3J 3C6												
2.	Manufa	(Name and address of manufacturer) anufactured for Husky Oil Operations Ltd., Box 4490, Stn. D Calgary Alberta, T2P 3G7											
3.	Location	(Name and address of purchaser) cation of installation McMullen TCP. LSD: 03-35-07825 W4											
4.	Type	Verti		12517		V2200			02 Rev.5	***			
							ecificati	ving Number) (Year built) ications of the ASME BOILER AND PRESSURE VESSEL					
	CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1  Year												
	to <u>2009</u>												
6.	Shell:		Addenda (da A-516-70N	<u> </u>	0.625		0.0625"		4' -			8' - 6" 5	S/S
7.	Seams:		l spec. number, g ype 1	rade) Full	(Nominal, thick 1.0	:ness)	(Corr. allow.)		(Inner diar Type 1		Spot	[Length (over	rall)] 1
• •	••••		dbl., sngl., lap, but	(R.T. (spot or )	full)] (Eff., %)	) (H.T. to	emp.) (Time, h	r) [Girth	,(welded, dbl., sng	., lap, butt)j	(R.T. (spot or full))	(Eff., %)	No. of courses
8.	Heads: (a) Material SA-516-70N (b) Material SA-516-70N (Spec. no., grade) (Spec. no., grade)												
	Lor	cation (Top,	Minimum	Corrosion	Crown	Knuckle	Elliptical	Coni	cal Hemi	spherical	Flat		o Pressure
1 6	Bot	ttom, Ends)	Thickness	Allowance	Radius	Radius	Ratio	Apex A	Angle R	adius	Diameter	(Convex	or Concave)
<u> </u>	a)   o)   F	Top Bottom	0.5625" 0.5625"	0.0625" 0.0625"			SE 2:1						ncave ncave
L	l			*			1				<del>1</del>		77
^	If removable, bolts used (describe other fastenings)  (Material spec. number, grade, size, number)												
9.	9. MAWP 350 PSIG at max. temp. 250°F  (Internal) (External) (Internal) (External)										*		
	Min. design metal temp at												
10.			and safety	valve openings	s:								
Г		urpose		Diameter			Material		Nominal	Reinfor	rcement	How	Location
<u> </u>		Outlet, Drain)	Number	or Size	Type SEE		ATTACHED		Thickness U4	+	terial	Attached	LOCULOT
11	1. Supports: Skirt No Lugs 2 Legs Other Support Lugs Attached Head/Shell & Welded												
			(Yes or no)	(Number	r} {	(Number)	(De	escribe)			(Whe	ere and how)	
12.		ks: Manufacto of the report:		Data Reports	propeny iden	tified and :	signed by Comr -	nissione 	d inspectors	nave be	en turmonot	Her the ic	)IIUwing
	1.010	// Mile 1-p-:		na Drimary			item number, Manuf Onstruction Di					e	
												· ·	
Impact testing: exempt, per UG-20(f)(1-5), UCS-66(c) Volume: 128 Cu. Ft.  Relief Valve installed on piping in accordance with UG-125													
18" CL300 RFBL Flange SA-105N Studs: 1 1/4"Ø 8" Lg. SA-193-B7 Qty. 24, Nuts: 1 1/4"Ø SA-194-2H Qty. 48													
2 - 4" CL300 Hub Flange RF SA-105N Studs: 3/4"Ø 4 1/2" Lg. SA-193-B7 Qty. 16, Nuts: 3/4"Ø SA-194-2H Qty. 32 8 - 2" CL300 RFBL SA-105N Studs: 5/8"Ø 3 1/2" Lg. SA-193-B7 Qty. 56, Nuts: 5/8"Ø SA-194-2H Qty. 112													
2" CL300 RF Hub Flange SA-105N Studs: 5/8"Ø 3 1/2" Lg. SA-193-B7 Qty. 8, Nuts: 5/8"Ø SA-194-2H Qty. 16													
					OEDTIE(C)	ATE OF SI	IOD/EIELD COL	JDI JANI			***************************************		~-
١,	le certif	v that the sta	stements mac	de in this repor			IOP/FIELD CON all details of des			uction. a	ind workman	nship of th	iis vessel
CC	onform t	to the ASME	<b>BOILER AND</b>	PRESSURE VE	ESSEL CODE	, Section \	/III, Division 1.	"U" Cer	rtificate of A	uthorizat	tion Number	33	.658
	cpires		er 26, 2011			مالموسا	الما الما		Cianad	r	11 110	_lî	
٥	ate <u>1</u>	Oct 2010	Co.	name	,,	Enerfle (Manu	X Ltd. ufacturer)		Signed		— (Heb	resentative	-
١.,	_ 						SHOP/FIELD IN			Color	- Alborto	Canada	_
		nstructed by ersigned, hole		rommission iss	Enerflex		ard of Boiler and		at re Vessel Ins		arv. Alberta		
<u> </u>	1110 0110	Clargitou, i.c.	Alberta	Ottominoole		employed				<u>AB\$A</u>	41141		
have inspected the component described in this Manufacturer's Data Report on OCT 0 4 2010 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 injuly or property damage or a loss of any kind arising from or connected with this inspection.  Date  Commissions											1.	
ĺ					(Authorized in	spectori		1	(National Board (	incl. endors	sements), State,	, Province and	I Number]

## FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

THE CONTRACTOR STATE

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	As Required by the Provisions of the Advice botter and the source reader code reader, that a vision of the Advice reader and the source reader and the sou												
1. Manufacti	ured and certified	by	Enerflex Ltd., 10121 Barlow Trail NE, Calgary, Alberta, T3J 3C6 (Name and address of Manufacturer)										
2. Manufacti	ured for		Husky Oil Operations Ltd., Box 4990, Stn. D Calgary Alberta, T2P 3G7										
			(Name and address of Purchaser) McMullen TCP, LSD: 03-35-078-25 W4										
3. Location of Installation McMullen TCP. LSD: 03-35-07825 W4 (Name and address)													
4. Type:	Vertica	I		Prima	ary Oil Separator		12517236						
	(Horizontal, vertical, o	r sphere)	(Tank, separator, heat exch., etc.)				(Manufacturers serial Number)						
	1/0000 040		12517-V402 Rev.5				2010						
	V2200,213 (CRN)			12017-1 (Drawi	ing Number) (Nati	lonal Board, Number) (Year built)							
<u> </u>													
Remarks													
Data Report	Purpose (inlet, Outlet, Drain)	Number	Diameter or Size	Турв	Material	Nominal Thickness	Reinforcement Material	How Attached	Location				
10-N1	Inlet	1	10"NPS	CL300 RFWN	SA-105N/SA-106B	0.593"	SA-516-70N	UW16.1(c)	Shell				
10-N2	Outlet	1	10"NPS	CL300 RFWN	SA-105N/SA-106B	0.593"	SA-516-70N	UW16.1(c)	Shell				
10-N3	Manway	1	18"NPS	CL300 RFWN	SA-105N/SA-106B	0.937"	SA-516-70N	UW16.1(c)	Head				
10-N4	Oil Outlet	1	3"NPS	CL300 RFWN	SA-105N/SA-234-WPB/SA-106B	0.600*		UW16.1(c)	Head				
10-N5	PSV	1	3"NPS	CL300 RFWN	SA-105N/SA-234-WPB/SA-106B	0.600"		UW16.1(c)	Shell				
10-N6	Imm. Heater 1		3*NPS	S CL300 RFLWN SA-105N		0.81"		UW16.1(c)	Shell				
10-N7	LSHH	1	4"NPS	CL300 RFLWN	SA-105N	0.875"		UW16.1(c)	Shell				
10-N8	LSLL	1	4"NPS	CL300 RFLWN	SA-105N	0.875"		UW16.1(c)	Shell				
10-N9A	PDI	1	2"NPS	CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell				
10-N9B	B PDI 1		2"NPS	CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell				
10-N10	TI	1	2"NPS	CL300 RFWN	SA-105N/SA-106B	0.343"	•••	UW16.1(c)	Shell				
10-N11	TE 1 2"NPS CL3		CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell					
10-N12	Oil Return	1	2"NPS	CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell				
10-N13	Oil Fill 1 2"NPS CL300 RFW		CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell					
10-N14A			CL300 RFWN	SA-105N/SA-106B	0.343"		UW16.1(c)	Shell					
10-N14B	LG	1	2"NPS	CL300 RFWN	SA-105N/SA-234-WPB/SA-106B	0.343"	<b>W-4</b>	UW16.1(c)	Head				
10-N15	15 Drain 1		2"NPS	CL300 RFWN	SA-105N/SA-234-WPB/SA-106B	0.343"		UW16.1(c)	Head				
							·		<u> </u>				
		<u> </u>											
		<u> </u>		<u> </u>	<u> </u>			<u> </u>					
Certificate of A	uthorization: Typ	)e	"U"	No.	33,658 Expires	Novem	ıber 26, 2011						
							1	U ^					
Date 1 C	Oct 2010 N	lame	Enerflex Ltd. (Manufacture)				Signed (Representative)						
Date OCT 0 4 2010 Name Seas Commissions ALTA #5.8													
				(Auth	orized Inspector)		onal Board (Incl. endorse	ments), State, Provi	nce and Number)				