

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 Code Rules, Section VIII, Division 1

619782

1. Manufactured and certified by Enerflex Ltd., 3615 34<sup>th</sup> Street N.E. Calgary, AB, T1Y 6Z8  
(Name and address of Manufacturer)

Manufactured for Husky Oil Operations Ltd. Box 4490, Stn D, Calgary, AB, T2P 3G7  
(Name and address of Purchaser)

3. Location of installation McMullen TCP, LSD: 03-35-078-25 W4M  
(Name and address)

4. Type STAGE 1 SUCTION SCRUBBER 31967211 V2124.213 31833-V-0401 SHT1 & 2 Rev.5 -- 2012  
(Horiz. or vert. tank) (Mfr's serial No.) (CRN) (Drawing no.) (Nat'l Bd. 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 2010  
Year

to 2011 2714 --  
Addenda (Date) Code Case Nos. Special Service per UG 120(d)

6. Shell: SA-106-B 0.688" 0.0625" 1', 10.624" 5', 6"  
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: SMLS N/A 100 -- -- TYPE 1 SPOT 70 1  
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Time (hr) Girth (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) No. of Courses

8. Heads: (a) Matl. SA-516-70N (b) Matl. SA-516-70N  
(Spec No., Grade) (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)	TOP	0.5625"	0.0625"	--	--	2:1	--	--	--	CONCAVE
(b)	BOTTOM	0.5625"	0.0625"	--	--	2:1	--	--	--	CONCAVE

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

9. MAWP 655 N/A psi at max. temp. 300 N/A °F  
(internal) (external) (internal) (external)

Min. design metal temp. -20 °F at 655 psi. Hydro., pneu., or comb. Test pressure HYDRO AT 852 psi.  
Proof Test --

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Matl.	Attachment Details		Location
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
INLET	1	6"	RFWN CL.300	SA-106-B/SA-234-WPB	SA-105-N	0.719"	0.0625"	--	FIG UW-16.1(c)	TYPE1	SHELL
OUTLET	1	6"	RFWN CL.300	SA-106-B	SA-105-N	0.719"	0.0625"	--	FIG UW-16.1(c)	TYPE1	SHELL
LC/LS	1	3"	RFLWN CL.300	--	SA-105-N	0.813"	0.0625"	--	FIG UW-16.1(c)	TYPE1	SHELL
TI/LG/PI/INSP	5	2"	RFWN CL.300	SA-106-B	SA-105-N	0.344"	0.0625"	--	FIG UW-16.1(c)	TYPE1	SHELL
INSP	1	2"	RFWN CL.300	SA-106-B	SA-105-N	0.344"	0.0625"	--	FIG UW-16.1(c)	TYPE1	HEAD
DRAIN	1	2"	RFWN CL.300	SA-106-B/SA-234-WPB	SA-105-N	0.344"	0.0625"	--	FIG UW-16.1(c)	TYPE1	HEAD

11. Supports: Skirt YES Lugs 2 Legs N/A Other N/A Attached HEADS-WELDED  
(Yes or No) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report: NONE

(Name of part, item number, Mfr's name and identifying stamp)

N3/N4: RFHUB FLG. CL 300, SA-105-N (8) STUDS, 3/4" X 4 1/2 LG, UNC, SA-193-B7, (16) NUTS, 3/4" DIA, UNC, SA-194-2H N7/N11: RFBLIND FLG. CL 300, SA-105-N (8) STUDS, 5/8" X 4 LG, UNC, SA-193-B7, (16) NUTS, 5/8" DIA, UNC, SA-194-2H  
N5/N8/N9A/B/N10: RFHUB FLG. CL 300, SA-105-N (8) STUDS, 5/8" X 4 LG, UNC, SA-193-B7, (16) NUTS, 5/8" DIA, UNC, SA-194-2H

SERVICE: SWEET

PSV ON PIPE AS PER UG-125

CONST. DRAWING NO.: 31967-V-0601 REV.1 SH1 & 2

RADIOGRAPHY: SPOT UW-11(a)5(b)

TESTING: NO CHARPY IMPACT TEST REQUIRED PER UG-20(f), UCS-66(c)

CUBIC CAPACITY: 22 CUBIC FEET

CERTIFICATE OF SHOP/FIELD 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. 28071 expires December 7, 2012.  
Date May 31, 2012 Co. name Enerflex Ltd. Signed [Signature]  
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Enerflex Ltd. at CALGARY, ALBERTA, CANADA  
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 have inspected the component described in this Manufacturer's Data Report on JUN 21 2012, 2012, 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/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 JUN 21 2012 Signed Niranjana Nang Commissions 12860 A.B ALBERTA 242  
(Authorized Inspector) (Nat'l Board. (incl. endorsements) State, Prov. and No.)