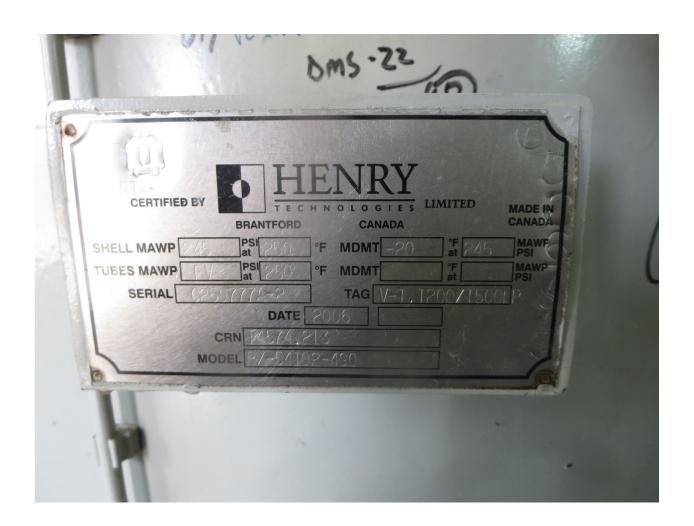
### Husky Energy

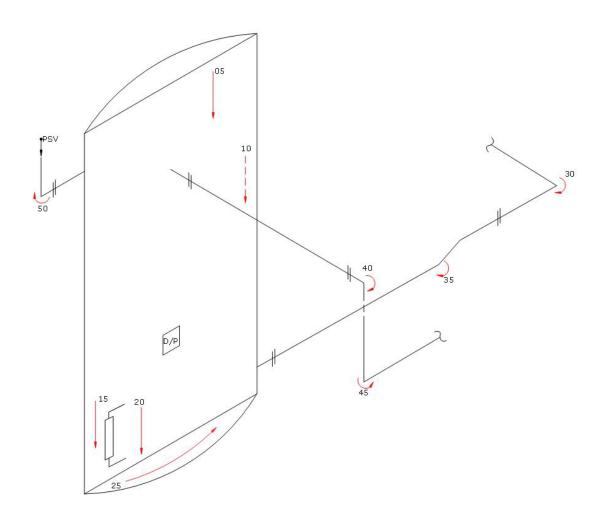
Location Name:	ANSELL GAS PLANT	LSD:	07-27-051-19W5
A#:	A0586795	Equipment/Tag No.	V-1
<b>Equipment Description:</b>	SUCTION SCRUBBER	Serial Number:	C250777A-2
		CRN: (or other ID#)	T4574.213
MAWP:	245 PSI	Design Temp:	250°F
Shell Material:	SA-516-70	Head Material:	SA-516-70
Shell Thickness:	0.625"	Head Thickness:	0.5625"
Corrosion Allowance:	0.0625"	Date Built:	2006
Size:	48"	Manufacturer:	HENRY

Notes:





## Husky Energy







Spec: ASME VIII Div.1

**Comments:** 

#### **Ultrasonic Corrosion Survey**

Survey Name: Husky Energy Date: Jul 10, 2014

Inspector: C. Graham

**Retirement Date:** 

**LSD:** 07-27-051-19W5 **Area:** Ansell **Location:** Gas Plant

A #:A0586795Tag Number:V-1Vessel Name:Suction ScrubberCRN:T4574.213Year Built:2006Serial Number:C250777A-2

**Vessel CA:** 1.5875 mm **Manufacturer:** Henry

Shell MAWP: 245psi MAWTF: 250°F Tube MAWP: MAWTF:

TML De	escription		Baseline				Material:	SA-516-70
05	Shell		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	Cylindrical	Min	16.310	14.288	1.588	15.875		
OD:	48"	Avg	16.430					Remaining Life:
Spec:	ASME VIII Div.1	Comments:						Retirement Date:
TML De	escription		Baseline				Material:	SA-516-70
10	Shell		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	Cylindrical	Min	15.880	14.288	1.588	15.875		
OD:	48"	Avg	16.000					Remaining Life:
Spec:	ASME VIII Div.1	Comments:						Retirement Date:
ΓML De	escription		Baseline				Material:	SA-516-70
15	Shell		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	Cylindrical	Min	15.750	14.288	1.588	15.875		
OD:	48"	Avg	15.980					Remaining Life:
Spec:	ASME VIII Div.1	Comments:						Retirement Date:
TML De	escription		Baseline				Material:	SA-516-70
20	Shell		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	Cylindrical	Min	15.290	14.288	1.588	15.875		
OD:	48"	Avg	16.100					Remaining Life:



#### **Ultrasonic Corrosion Survey**

Survey Name: Husky Energy Date: Jul 10, 2014

Inspector: C. Graham

LSD: 07-27-051-19W5 Area: Ansell Location: Gas Plant

A #:A0586795Tag Number:V-1Vessel Name:Suction ScrubberCRN:T4574.213Year Built:2006Serial Number:C250777A-2

**Vessel CA:** 1.5875 mm **Manufacturer:** Henry

Shell MAWP: 245psi MAWTF: 250°F Tube MAWP: MAWTF:

TML De	escription		Baseline				Material:	SA-516-70
25	Head		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	Ellipsoidal	Min	15.390	12.700	1.588	14.288		
OD:	48"	Avg	15.720					Remaining Life:
Spec:	ASME VIII Div.1	Comments:						Retirement Date:
TML De	escription		Baseline				Material:	A-234-WPB
30	Piping		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	90° Elbow	Min	8.860	8.334	1.191	9.525		
OD:	12.75"	Avg	9.350					Remaining Life:
Spec:	ASME B31.3	Comments:						Retirement Date:
TML De	escription		Baseline				Material:	A-234-WPB
35	Piping		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	45° Elbow	Min	9.350	8.334	1.191	9.525		
OD:	12.75"	Avg	9.600					Remaining Life:
Spec:	ASME B31.3	Comments:						Retirement Date:
TML De	escription		Baseline				Material:	A-234-WPB
40	Piping		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	90° Elbow	Min	8.790	8.112	1.159	9.271		
OD:	10.75"	Avg	9.400					Remaining Life:
Spec:	ASME B31.3	Comments:						Retirement Date:



#### **Ultrasonic Corrosion Survey**

Survey Name: Husky Energy Date: Jul 10, 2014

Inspector: C. Graham

**LSD:** 07-27-051-19W5 **Area:** Ansell **Location:** Gas Plant

A #:A0586795Tag Number:V-1Vessel Name:Suction ScrubberCRN:T4574.213Year Built:2006Serial Number:C250777A-2

**Vessel CA:** 1.5875 mm **Manufacturer:** Henry

Shell MAWP: 245psi MAWTF: 250°F Tube MAWP: MAWTF:

			<u> </u>					
TML De	escription		Baseline				Material:	A-234-WPB
45	Piping		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	90° Elbow	Min	10.110	8.112	1.159	9.271		
OD:	10.75"	Avg	10.640					Remaining Life:
Spec:	ASME B31.3	Comment	s:					<b>Retirement Date:</b>
TML De	TML Description		Baseline				Material:	A-234-WPB
50	Piping		2014	Flag	CA	Nominal	T Min	Corr. Rate
Shape:	90° Elbow	Min	5.210	4.801	0.686	5.486		
OD:	3.5"	Avg	5.380					Remaining Life:
Spec:	<b>ASME B31.3</b>	Comment	s:					Retirement Date:

# 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

CUST. P.O.: 188788

	***										
Manufactured a	nd cert	ified by <u>H</u>	ENRY TECHNOL	OGIES LIMITI	ED, 36 CRAIG		BRANTFORD, ON dress of manufacture		NADA_N3T_5T6		
Manufactured for	or <u>T</u> (	OROMONT I	PROCESS SYSTE	MS, 3615-34th		ary, AB TIY	6Z8				
Location of instr	allation	UNKNOV	VN		(Na	ime and address (	or purchaser)				
						(Name and				2006	
	TCAL	C250777		74574.2 (CRN)		R250777.	R250777A 1 N/A (Drawing no.) (Nat'l Bd. No.)				
5. The chemical a		vert tank) ical propertie	Mfgr's seria) s of all parts meet t							) (Year built)	
			ction, and workman						2004		
									Year		
to		- Addenda (Date	)			518-5 Case Nos			Special Service per U	/G 120(d)	
6. Shell:		516 70	,	5/8"				54" ID.			
		ec. No., Grade)	Non	n. Thk. (in.)	C	orr. Allow (in.)	Dia	Diam I D (ft. & in.) Length			
	NGL/B		SPOT	85%				JIT _	SPOT,100%	No. of Courses	
	i. (Welde igl , Lap,	ed, Dbł., Butt)	R.T. (Spot or Full)	Eff (%)	H.T. Temp (°F)	Time (hr)	Girth (Welded Sngl., Lap, I		R.T (Spot, Eff (%) or Full)	NO. Of Courses	
8. Heads: (a) Matl.			SA 516	5 70		(b) Matl			SA 516 70		
-			(Spec No.,		T	T ==== -			pec No., Grade)	Side to Pressure	
Location (7 Bottom, En		Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispheri Radius	cal Flat Diameter	(Convex or Concave)	
(a) TOP		0.5625"	1/16"	-	-	2:1		-	-	CONCAVE	
(b) BOTTO!	М	0.5625"	1/16"		<u> </u>	2:1	<u> </u>	-		CONCAVE	
If removable, bolt	s used	(describe othe	er (astenings) -	***************************************		- (N	Matl, Spec No. Gr, S	Size. No )			
9. MAWP		245		FV		t max. temp	250			250 °F	
Min. design meta		(internal)	-20	(external) °F a		osi. ###	(intern: ###, pneu., ######		(external)	270 psi	
10. Nozzles, inspect		safety valve of					<b>,                                 </b>				
Purpose	T	Diam.		*		Nom.	Reinforcer	ment	How Attached		
(Inlet, Outlet, Drain)	No.	or Size	Type WE.	Mat SA-106		Thk. SCII.80	Matt.	SA-516 Gr 70		Location SIDE	
CONN. CONN.	1	3"	WE.	SA-106 SA-106		SCH.160	3A-310 G	-		SIDE	
CONN.	1	2"	WE.	SA-106		SCH.160	-	-		ВОТТОМ	
CONN.	2	2"	CPLG.	SA 10	5N	6000LB.	-	-		SIDE	
CONN.	1_1_	1-1/2"	CPLG.	SA 10		6000LB.		-		SIDE	
CONN. CONN.	6	3/4"	CPLG.	SA 10 SA 10		6000LB.				SIDE SIDE / BTM	
INSP. OPENING	1	20"	WE.	SA-106		SCH.40		SA-516 Gr 70		TOP	
11. Supports: Skirt		NO	Lugs 2	Legs		Other I	PAD (2), BRACKI		ttached TOP.	/BTM/WELDED	
	(Ye	s or no)	(No.)		(No.)		(Describe)		-	(Where and how)	
12. Remarks: Manufa	cturer's	Partial Data	Reports properly id	entified and sigr	ned by Commis	sioned Inspecto	ors have been furni	shed for the fo	ollowing items of the	e report:	
			/NI	ame of part, iter	number Mes	'a sama and ida	antifuing atoms)				
IMPACT TEST EX	ЕМРТ	PER UCS-66		ame or part, iter	n number, iviigi	s name and ide	entirying stamp)				
vessel meets r	T-4 RE	QUIREMEN	TS								
HEADS ARE HOT	FORM	ED									
				CERTIFICAT	TE OF SHOP	FIELD COM	PLIANCE				
•			in this report are co			-			this vessel		
			ure Vessels, Section	on VIII, Division	1. "U" Certificat	te of Authorizati	on No.	29646	· · · · · · · · · · · · · · · · · · ·		
expires Date Maul6	Jun-5-	-2006 Co. Nan					Signed &	ana.	in	_	
Date IT MILE!	00		ne HENRY TEC	<u>-INOLOGIES I</u> (Manufac			olgilou <u>C</u>	()	Representative)		
				CERTIFICA	TE OF SHOP	/ FIELD INSP	PECTION				
Vessel construct			RY TECHNOLOG			36 CRAIG ST			TARIO CANADA	<u>A N3T 5T6</u> .	
		•	nmission issued by	The National B	oard of Boiler a			d the State or	Province of		
ONTARIO		_ and emplo	· ·	turaria Data Pa-	nort on MA	T.S.S.A Y 16, 2		and state th			
			bed in this Manufac f, the Manufacturer						•		
1. By signing this	certific	ate neither th	e Inspector nor his	employer makes	s any warranty,	expressed or in	nplied, concerning	the pressure	vessel		
			Report Furthermore				be liable in any ma	anner for any	personal	140	
Date MAY			any kinu ang ya	WWW.	XAAA .	Commiss	ions		<i>O</i> ^	V 44	
·	7		(Aut	horized Inspector)			(Nat'l B	loard, (incl. ende	orsements) State, Prov	√. and No.)	