



PRESSURE VESSEL INSPECTION REPORT

66069776

EQ #

66069776

NO #

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HDMS

Linked

FACILITY Ansell Field DATE February 26, 2009 REPORT # IR090226JNi

VESSEL STATIC DATA

Prov. Insp. #	A#488071	CRN	K9276.23	Equip Tag #	-		
Equipment Location (LSD)	12-27-049-19 w5m	Serial #	005739-200				
Equipment Description	Vertical Separator	Vessel Class	-				
Manufacturer	Nusco	Year Built	2002				
MAWP	1440 PSI	KPag / psig	@ 100 °F	°C / °F	MDMT	-20 °F	°C / °F
CODE : UM	☐ U ☒ U2 ☐	RT : 1	☐ 2 ☒ 3 ☐ 4 ☐	PWHT : YES	☐ NO ☒		
Diameter	16" (NPS)	Length	21'-6" (S/S)	OAL	mm/in	Vertical	☒ Horizontal ☐
Shell	Mat'l SA 106 B	Thickness	1.031" 813"	mm	Corr Allowance	.0625"	mm/in
Head	Mat'l SA 516-70 N	Thickness	0.83" 1.031"	mm	Corr Allowance	.0625"	mm/in
Nozzle	Mat'l	Thickness		mm/in	Corr Allowance		mm/in
Internal Coating :	YES ☐ NO ☒	Internal Clad :	YES ☐ NO ☒	Capacity	N/A 1.5 ft ³	m ³	
Manway :	YES ☐ NO ☒	Inspection Port :	YES ☐ NO ☒	Skirt	☒ Legs	☐ Saddle	☐
Nozzle Rating	600 lb ANSI	Painted :	YES ☒ NO ☐	Insulated	: YES ☐ NO ☒		

PROCESS DATA

Product Description	Sweet Gas	Sweet	☒ Sour	☐ PPM:	
Operating Pressure	560 PSI	KPag / psig	Operating Temperature	40 °F	°C / °F

PSV STATIC DATA

Tag / Serial No.	Location	Size Inlet	Size Outlet	Set Pressure	Capacity SCFM / Lbs/Hr / GPM	Manufacturer	Model / Type	Service Date
1296-8	Vessel	1"	1"	1440 PSI	5181 SCFM	Taylor	82E8351 311	03/09

INSPECTION HISTORY

RBI Category	A ☐ B ☐ C ☐ D ☐	Last Inspection Date	W.O. #
Inspection Task List #		Inspection Type	Inspection Reason
Inspection Techniques Required		Next Inspection Type	Due Date
VE VI RT UT MT PT TT		Outstanding Repairs	

INSPECTION SUMMARY

An external inspection was performed to verify the vessels integrity.
The vessel is in-service and fully utilized.
No concerns were found and the vessel is considered acceptable for continued service.

RECOMMENDATIONS

None

REPAIRS COMPLETED

Object Name	Cause	Damage	Repair Activity
None			

VESSEL STATUS

Integrity Status	☒ Suitable for Continued Service	☐ Immediate Repairs Required	☐ Replace
		☐ Future Repairs Required	
Inventory Status	☒ In service Fully Utilized	☐ Idle	☐ Surplus
		☐ Scrap	
This IR completes a thorough inspection. Reschedule as indicated		☒ Partial IR only. Do not reschedule	☐



FACILITY	Ansell Field	DATE	February 26, 2009	REPORT #	IR090226JNi
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INSPECTION OBSERVATIONS**NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED**

No NCR's were issued.

EXTERNAL VISUAL INSPECTION

The overall condition of this vessel is good.

The vessel dataplate is legible and has the required information. / *Data Plate Condition - Good*

The vessel is protected with a PSV. The PSV is attached to the vessel, has a set pressure at or under MAWP and a current service date. / *PSV Condition - Good*

The gauges are clearly legible and appear to be functioning properly. / *Gauges Condition - Good*

The vessel appears to be properly secured and level. / *Vessel Secure - Yes*

The vessel is indirectly grounded. / *Vessel Grounded - Yes*

The piping, bolting, tubing and external attachments are secure with no active leaks. / *Piping & Bolting Condition - Good*

The vessel and piping are painted with no notable corrosion found. / *Vessel Paint Condition - Fair*

The floor is painted with no notable corrosion found. / *Floor Condition - Good*

The exterior piping is insulated and clad. / *Insulation Condition - Good*

EXTERNAL NDE EXAMINATION

An external ultrasonic corrosion survey was completed as requested.

No relevant indications were noted at the time of inspection.

For more details see formal UT report by Hunt Inspection - Project C2946

INTERNAL VISUAL INSPECTION

There was no internal Visual at time of inspection.

INTERNAL NDE EXAMINATION

There was no internal NDE at time of inspection.

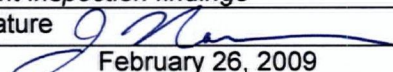
PRESSURE TEST

Test Completed ☐ Yes ☒ No Test Acceptable ☐ Yes ☐ No Test Report #

INSPECTOR CERTIFICATION

I, the undersigned certify that the above equipment has been inspected in accordance with the assigned task list and that statements within this report are correct and represent inspection findings

Inspectors Name Joel Norman

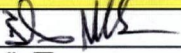
Inspector's Signature 

Inspection Company Hunt Inspection Ltd.

Date February 26, 2009

LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION

Lead Inspector Bob Marchak

Signature 

Date Apr. 28, 2009

Vessel Inspection Interval 5 Years

Leave "as-is" ☐

Change to

PSV Inspection Interval 5 Years

Leave "as-is" ☐

Change to

Office Use Only

Report Entered to SEQA Database by

Date

Static Data Verified by

Date

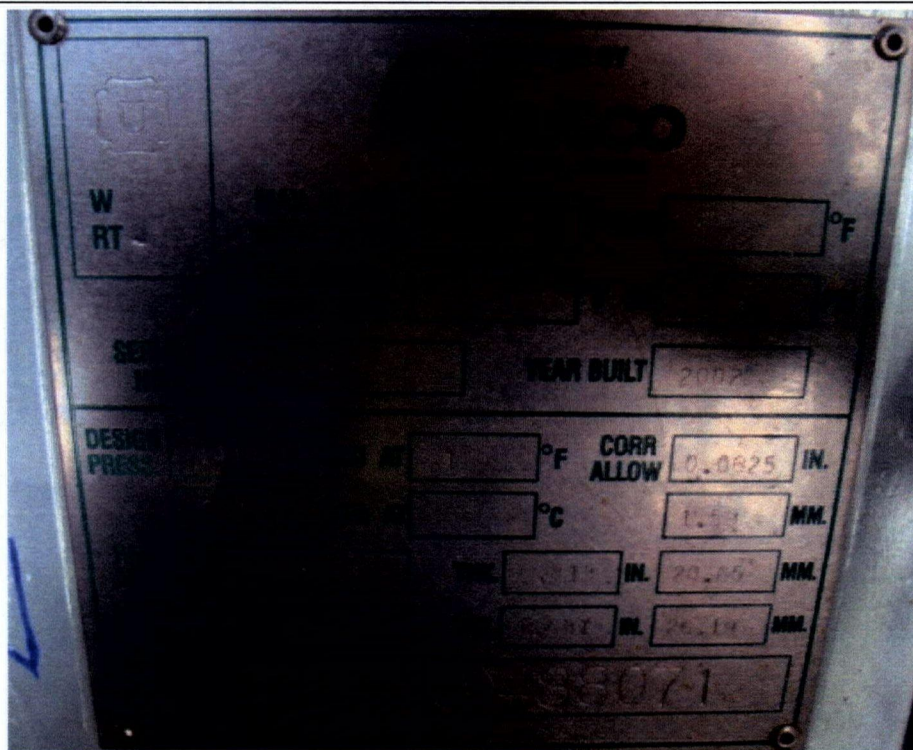
Husky Energy
PRESSURE VESSEL INSPECTION REPORT

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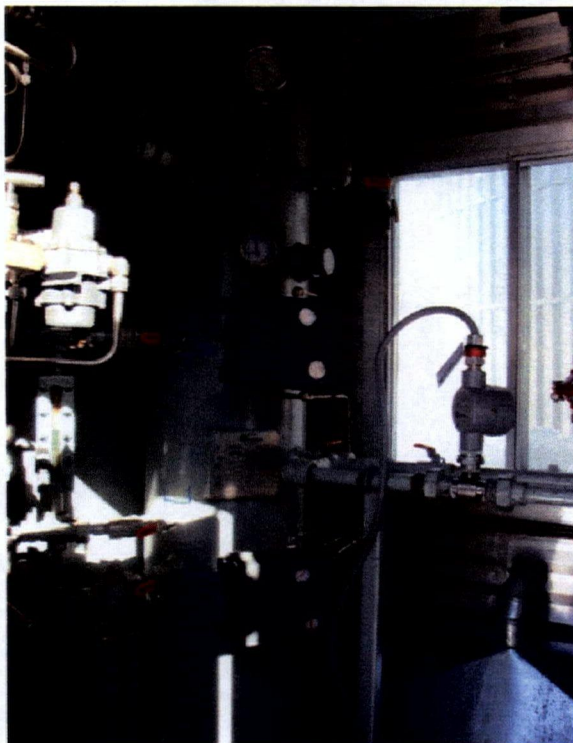
FACILITY	Ansell Field	DATE	February 26, 2009	REPORT #	IR090226JNi
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Photos

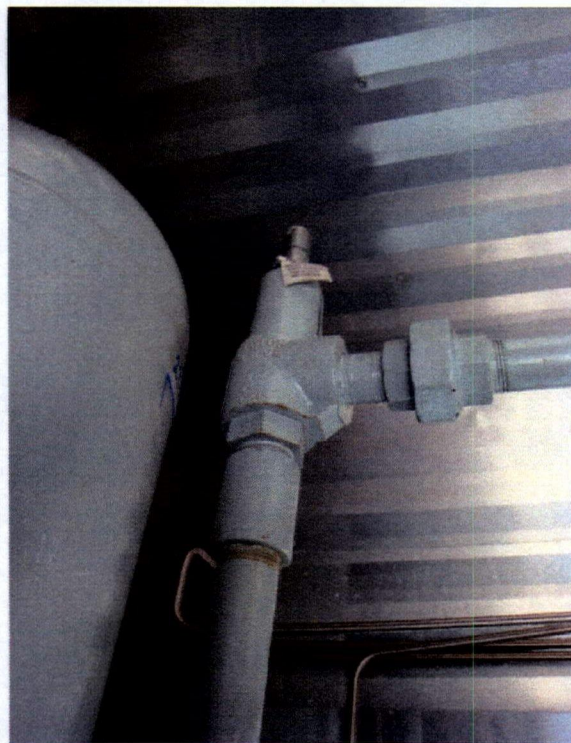
Data Plate



Vessel



PSV



Husky Energy
PRESSURE VESSEL INSPECTION REPORT

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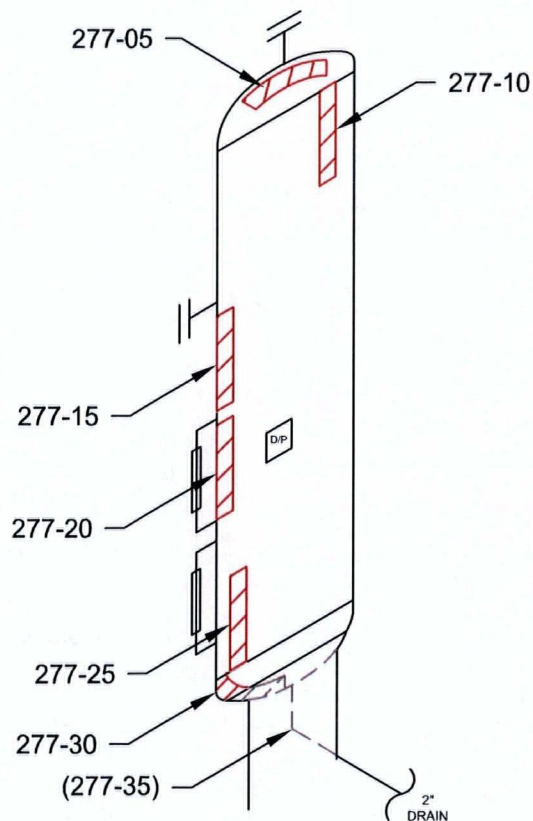
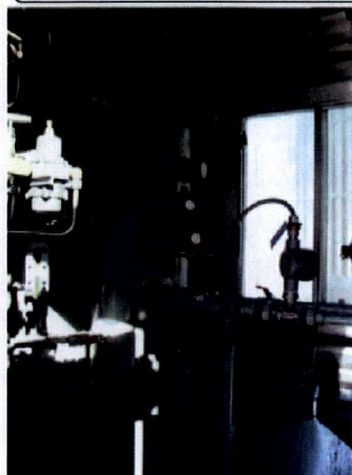
Photos

Building	LSD Sign
	

ITEM:

SEPARATOR

A 0488071



STETTLER, AB (403) 742-4868
 LACOMBE, AB (403) 782-7855
 BROOKS, AB (403) 501-8029
 GRANDE PRAIRIE, AB (866) 422-9732

TECHNICIAN:

JOEL NORMAN
 SNT LEVEL III
 CGSB 48.9712
 LEVEL III # 6951

DATE: **02/26/09**DWG # **277**CLIENT: **HUSKY ENERGY**LSD: **12-27-049-19-W5M**

INSPECTOR : BOB MARCHAK

LOCATION : ANSELL FIELD

DISTRICT UNIT : FH-FW

BLDG/SKID : -

PROCESS : SWEET

CODE : ASME SEC VIII DIV 1

SPECIFICATION : AS PER ASME SE 797

TECHNIQUE : UT 1-1, REV .1

METHOD : UT CONTINUOUS / A SCAN

SURFACE COND : PAINTED

SURFACE TEMP : AMBIENT

VESSEL INFORMATIONVESSEL # : **A 0488071**

CRN # : K9276.231

SERIAL # : 005739-200

MANUFACTURER : NUSCO

DATE BUILT : 2002

CLIENT ID / TAG : -

M.A.W.P. : 1440 PSI

M.A.W.T. : 100 °F

JOINT EFFICIENCY/RT : RT 2

STRESS RELIEVED : N/A

INSULATED : NO

MANWAY : NO

VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	16"	.813"	SA-516-70	.0625"
VESSEL SHELL	16"	1.031"	SA-106-B	.0625"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

PROJECT:

C2946



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 12-27-049-19W5 Dwg: 277 Vessel Number: A0488071
District Unit: FH-FW Vessel Name: SEPARATOR
Location: ANSELL FIELD Year Built: 2002
Skid: - Tag Number: -
CRN: K9276.231

Manufacturer: NUSCO
Serial Number: 005739-200
Shell MAWP PSI: 1440 MAWT F: 100
Tube MAWP PSI: 0 MAWT F: 0
Vessel CA: 0.0625

Survey Date: 2/26/09
Inspector: BOB MARCHAK
Process: SWEET
Project #: C2946

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
277-05	Top	Head	Baseline	0.839	0.845	0.846	0.849	0.852	0.848	2009	0.847	0.839	0.8130	0.0625	0.5212	2010	2029
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	16		Current	0.839	0.845	0.846	0.849	0.852	0.848	2009	0.847	0.839					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 516 - 70												LT Loss MPY 0.000				
													OK				
277-10	Upper	Shell	Baseline	1.075	1.079	1.081	1.082	1.089	1.087	2009	1.082	1.075	1.0310	0.0625	0.6181	2010	2029
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	16		Current	1.075	1.079	1.081	1.082	1.089	1.087	2009	1.082	1.075					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												LT Loss MPY 0.000				
													OK				
277-15	Mid	Shell	Baseline	1.086	1.089	1.087	1.088	1.089	1.088	2009	1.088	1.086	1.0310	0.0625	0.6181	2010	2029
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	16		Current	1.086	1.089	1.087	1.088	1.089	1.088	2009	1.088	1.086					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												LT Loss MPY 0.000				
													OK				
277-20	Mid	Shell	Baseline	1.072	1.084	1.085	1.087	1.059	1.052	2009	1.073	1.052	1.0310	0.0625	0.6181	2010	2029
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	16		Current	1.072	1.084	1.085	1.087	1.059	1.052	2009	1.073	1.052					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												LT Loss MPY 0.000				
													OK				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 12-27-049-19W5 Dwg: 277 Vessel Number: A0488071
District Unit: FH-FW Vessel Name: SEPARATOR
Location: ANSELL FIELD Year Built: 2002
Skid: - Tag Number: -
CRN: K9276.231

Manufacturer: NUSCO
Serial Number: 005739-200
Shell MAWP PSI: 1440 MAWT F: 100
Tube MAWP PSI: 0 MAWT F: 0
Vessel CA: 0.0625

Survey Date: 2/26/09
Inspector: BOB MARCHAK
Process: SWEET
Project #: C2946

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
277-25	Lower	Shell	Baseline	1.107	1.108	1.111	1.110	1.109	1.104	2009	1.108	1.104	1.0310	0.0625	0.6181	2010	2029
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	16		Current	1.107	1.108	1.111	1.110	1.109	1.104	2009	1.108	1.104					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												LT Loss MPY 0.000				
													OK				
277-30	Bottom	Head	Baseline	0.912	0.835	0.836	0.835	0.834	0.838	2009	0.848	0.834	0.8130	0.0625	0.5212	2010	2029
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	16		Current	0.912	0.835	0.836	0.835	0.834	0.838	2009	0.848	0.834					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 516 - 70												LT Loss MPY 0.000				
													OK				
277-35	Drain	Nozzle	Baseline	0.299	0.302	0.300	0.294	0.292	0.289	2009	0.296	0.289	0.3430	0.0625	0.0749	2010	2029
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.299	0.302	0.300	0.294	0.292	0.289	2009	0.296	0.289					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												LT Loss MPY 0.000				
													OK				
277-40		Piping	Baseline	0.211	0.213	0.215	0.212	0.215	0.215	2009	0.214	0.211	0.2160	0.0270	0.1216	2010	2029
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	3.5		Current	0.211	0.213	0.215	0.212	0.215	0.215	2009	0.214	0.211					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 12-27-049-19W5 Dwg: 277 Vessel Number: A0488071
District Unit: FH-FW Vessel Name: SEPARATOR
Location: ANSELL FIELD Year Built: 2002
Skid: - Tag Number: -
CRN: K9276.231

Manufacturer: NUSCO
Serial Number: 005739-200
Shell MAWP PSI: 1440 MAWT F: 100
Tube MAWP PSI: 0 MAWT F: 0
Vessel CA: 0.0625

Survey Date: 2/26/09
Inspector: BOB MARCHAK
Process: SWEET
Project #: C2946

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
277-45	Piping	Baseline		0.205	0.201	0.224	0.222	0.173	0.172	2009	0.200	0.172	0.2180	0.0272	0.0825	2010	2029
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.205	0.201	0.224	0.222	0.173	0.172	2009	0.200	0.172					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													Caution				
277-50	Piping	Baseline		0.226	0.223	0.222	0.222	0.225	0.226	2009	0.224	0.222	0.2160	0.0270	0.1216	2010	2029
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	3.5		Current	0.226	0.223	0.222	0.222	0.225	0.226	2009	0.224	0.222					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				

