

# Husky Energy

## PRESSURE VESSEL INSPECTION REPORT

EQ # 66123509 NO # 6070464

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FACILITY Ansell Field DATE February 22, 2009 REPORT # IR090222JNp

### VESSEL STATIC DATA

Prov. Insp. # -	CRN F 6388.2	Equip Tag # -
Equipment Location (LSD) 31102/17-07-051-18 w5m	Serial # 10818	
Equipment Description Fuel Gas Scrubber	Vessel Class -	
Manufacturer RJV Gas Field Services	Year Built 2006	
MAWP 150 PSI KPag / psig @ 100 °F °C / °F	MDMT -20 °F °C / °F	
CODE : UM <input type="checkbox"/> U <input type="checkbox"/> U2 <input type="checkbox"/> RT : 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	PWHT : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Diameter 219mm(NPS) Length 760mm (S/S) OAL mm/in	Vertical <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/>	
Shell Mat'l SA 106 B Thickness 8.1mm mm	Corr Allowance 3.17mm mm/in	
Top Head Mat'l SA 234 WPB Thickness 7.16mm mm	Corr Allowance 3.17mm mm/in	
Bottom Head Mat'l SA 516-70 Thickness 19.05mm mm/in	Corr Allowance 3.17mm mm/in	
Internal Coating : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Internal Clad : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Capacity N/A m <sup>3</sup>
Manway : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Inspection Port : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Skirt <input type="checkbox"/> Legs <input type="checkbox"/> Saddle <input type="checkbox"/>
Nozzle Rating - lb ANSI Painted : YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Insulated : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	

### PROCESS DATA

Product Description Sweet Gas	Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/> PPM:
Operating Pressure 100 PSI KPag / psig	Operating Temperature 65 °F °C / °F

### PSV STATIC DATA

Tag / Serial No.	Location	Size Inlet Outlet	Set Pressure	Capacity SCFM / Lbs/Hr / GPM	Manufacturer	Model / Type	Service Date
33187-29	Vessel	1" 1"	150 PSI	582 SCFM	Taylor	82E4351 311	03/07

### INSPECTION HISTORY

RBI Category A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>	Last Inspection Date	W.O. #
Inspection Task List #	Inspection Type	Inspection Reason Integrity Inspection
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 <input checked="" type="checkbox"/> Suitable for Continued Service	<input type="checkbox"/> Immediate Repairs Required	<input type="checkbox"/> Replace
	<input type="checkbox"/> Future Repairs Required	
Inventory Status <input checked="" type="checkbox"/> In service Fully Utilized	<input type="checkbox"/> Idle	<input type="checkbox"/> Surplus
		<input type="checkbox"/> Scrap
This IR completes a thorough inspection. Reschedule as indicated		<input checked="" type="checkbox"/> Partial IR only. Do not reschedule <input type="checkbox"/>



**PRESSURE VESSEL INSPECTION REPORT**

<b>FACILITY</b>	<b>Ansell Field</b>	<b>DATE</b>	<b>February 22, 2009</b>	<b>REPORT #</b>	<b>IR090222JNp</b>
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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 - Good*

The floor is painted with no notable corrosion found. / *Floor 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 22, 2009

**LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION**

Lead Inspector Bob Marchak

Signature

Date Apr. 27, 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

Head Corrosion Allowance - 3.17mm

SEIM Changes

Eq. Text & Tech Desc - 150PSI

Construction - Year - 2006

Support Type - Other

Stress Relief - No

Stress Shell Mat'l - SA106B

Head t - 7.16mm

Head Mat'l - SA234WPB





FACILITY	Ansell Field	DATE	February 22, 2009	REPORT #	IR090222JNp
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Photos

Data Plate



Vessel




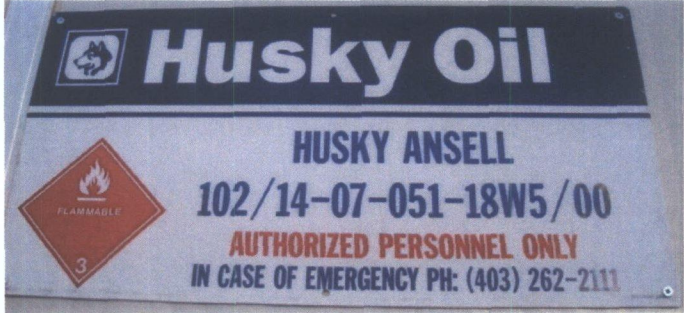
PSV



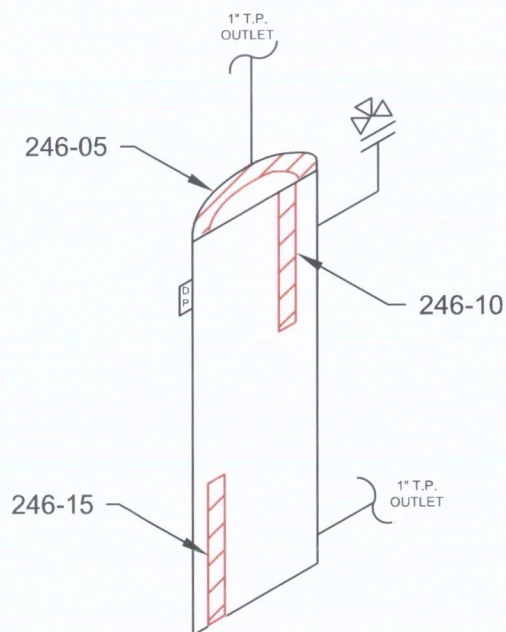


FACILITY	Ansell Field	DATE	February 22, 2009	REPORT #	IR090222JNp
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Photos

Building	LSD Sign
	

ITEM:

**FUEL GAS SCRUBBER**

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: **02/22/09**DWG # **246**CLIENT: **HUSKY ENERGY**LSD: **102/14-07-051-18-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 INFORMATION**

VESSEL # : -

CRN # : F6388.2

SERIAL # : 10818

MANUFACTURER : RJV

DATE BUILT : 2006-11

CLIENT ID / TAG : -

M.A.W.P. : 150 PSI

M.A.W.T. : 100 °F

JOINT EFFICIENCY/RT : N/A

STRESS RELIEVED : NO

INSULATED : NO

MANWAY : NO

**VESSEL SPECIFICATIONS**

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	8.625"	.282"	SA-234-WPB	.125"
VESSEL SHELL	8.625"	.319"	SA-106-B	.125"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

ALL FITTED PIPING

PROJECT:

**C2946**





## ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 14-07-051-18W5 Dwg: 246

Vessel Number: -

Manufacturer: RJV

Survey Date: 2/22/09

District Unit: FH-FW

Vessel Name: FUEL GAS SCRUBBER

Serial Number: 10818

Inspector: BOB MARCHAK

Location: ANSELL FIELD

Year Built: 2006

Shell MAWP PSI: 150 MAWT F: 100

Process: SWEET

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

Project #: C2946

CRN: F6388.2

Vessel CA: 0.1250

			Readings								Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
Band	Description		1	2	3	4	5	6										
246-05	Top	Head	Baseline	0.315	0.288	0.294	0.300	0.288	0.308	2009	0.299	0.288	0.2820	0.1250	0.0354	2010	2029	
Shape	Ellipsoidal	Shell Side	Previous	Comments-->														
OD	8.625		Current	0.315	0.288	0.294	0.300	0.288	0.308	2009	0.299	0.288						
Spec.	VIII Div 1			ST Loss MPY								OK						
Material	SA 234 - WPB			LT Loss MPY								0.000						
246-10	Upper	Shell	Baseline	0.320	0.323	0.322	0.322	0.324	0.322	2009	0.322	0.320	0.3190	0.1250	0.0352	2010	2029	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	8.625		Current	0.320	0.323	0.322	0.322	0.324	0.322	2009	0.322	0.320						
Spec.	VIII Div 1			ST Loss MPY								OK						
Material	SA 106 - B			LT Loss MPY								0.000						
246-15	Lower	Shell	Baseline	0.329	0.326	0.325	0.326	0.326	0.325	2009	0.326	0.325	0.3190	0.1250	0.0352	2010	2029	
Shape	Cylindrical	Shell Side	Previous	Comments-->														
OD	8.625		Current	0.329	0.326	0.325	0.326	0.326	0.325	2009	0.326	0.325						
Spec.	VIII Div 1			ST Loss MPY								OK						
Material	SA 106 - B			LT Loss MPY								0.000						