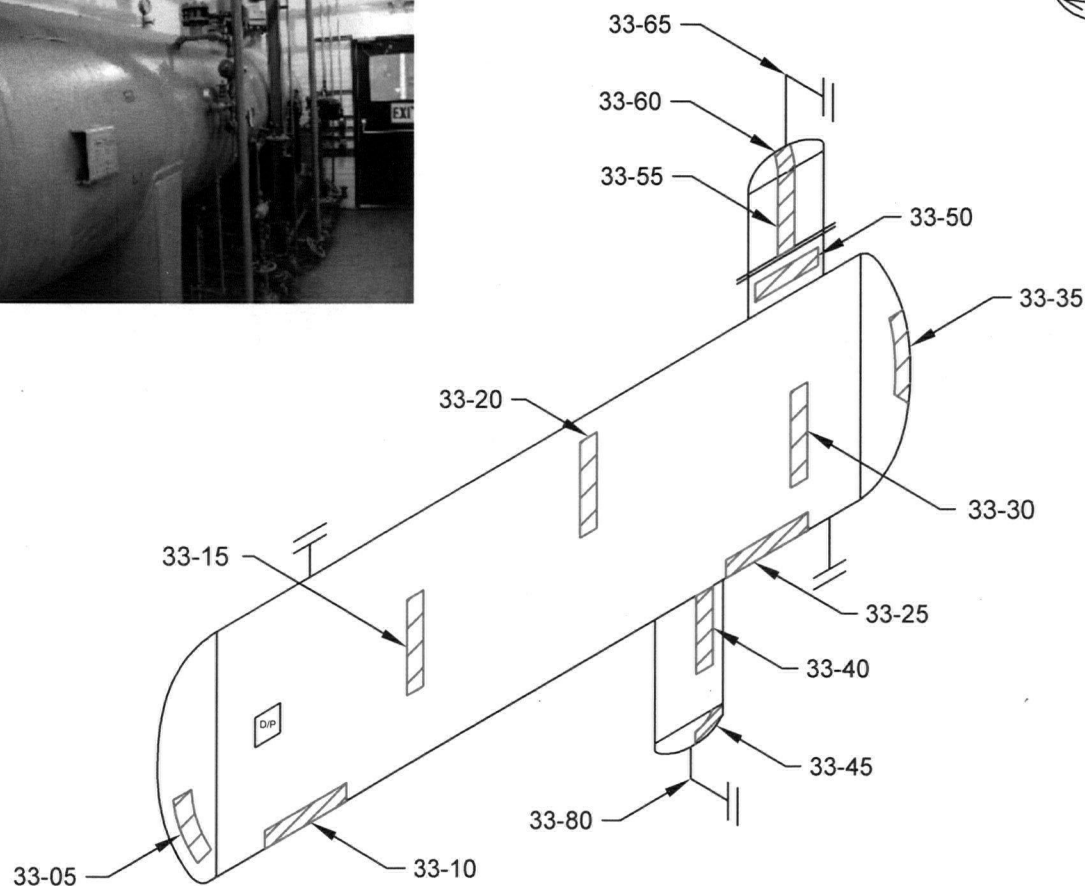
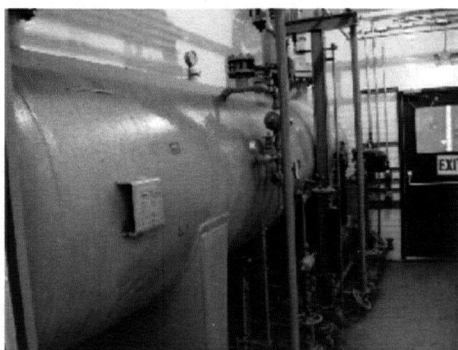


66128609

ITEM:

INLET SEPARATOR

A 0571608



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

TECHNICIAN:

ROY HATCHER
SNT LEVEL II
CGSB 48.9712
LEVEL II # 10430

DATE: 05/07/08

DWG # 33

CLIENT: HUSKY ENERGY

LSD: 07-27-051-19-W5M

INSPECTOR : BOB MARCHAK

LOCATION : ANSELL GAS PLANT

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 # : A 0571608

CRN # : U0192.213

SERIAL # : 12306200

MANUFACTURER: TOROMONT PROCESS SYSTEMS

DATE BUILT: 2007

CLIENT ID / TAG: -

M.A.W.P. : 390 PSI

M.A.W.T. : 150 °F

JOINT EFFICIENCY/RT: RT 2

STRESS RELIEVED: N/A

INSULATED : NO

MANWAY : YES

VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	48"	.500"	SA-516-70	-
VESSEL SHELL	48"	.625"	SA-516-70	-
BOOT HEAD	12.75"/20"	.432"/.500"	SA-234-WPB	-
BOOT SHELL	12.75"/20"	.500"/.500"	SA-106-B	-

COMMENTS:

PROJECT:
C30138



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

				Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
Band	Description			1	2	3	4	5	6								
33-05		Head	Baseline	0.628	0.629	0.630	0.632	0.631	0.635	2008	0.631	0.628	0.5000	0.0000	0.4591	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	48		Current	0.628	0.629	0.630	0.632	0.631	0.635	2008	0.631	0.628	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY		0.000						
33-10		Shell	Baseline	0.628	0.628	0.628	0.627	0.626	0.627	2008	0.627	0.626	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.628	0.628	0.628	0.627	0.626	0.627	2008	0.627	0.626	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY		0.000						
33-15		Shell	Baseline	0.643	0.639	0.637	0.635	0.634	0.630	2008	0.636	0.630	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.643	0.639	0.637	0.635	0.634	0.630	2008	0.636	0.630	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY		0.000						
33-20		Shell	Baseline	0.652	0.651	0.649	0.645	0.645	0.636	2008	0.646	0.636	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.652	0.651	0.649	0.645	0.645	0.636	2008	0.646	0.636	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY		0.000						



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-25		Shell	Baseline	0.637	0.634	0.629	0.628	0.628	0.627	2008	0.631	0.627	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.637	0.634	0.629	0.628	0.628	0.627	2008	0.631	0.627	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-30		Shell	Baseline	0.630	0.631	0.631	0.628	0.628	0.627	2008	0.629	0.627	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.630	0.631	0.631	0.628	0.628	0.627	2008	0.629	0.627	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-35		Head	Baseline	0.625	0.623	0.623	0.618	0.618	0.618	2008	0.621	0.618	0.5000	0.0000	0.4591	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	48		Current	0.625	0.623	0.623	0.618	0.618	0.618	2008	0.621	0.618	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-40	Boot	Shell	Baseline	0.490	0.490	0.492	0.490	0.493	0.495	2008	0.492	0.490	0.5000	0.0000	0.1359	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	12.75		Current	0.490	0.490	0.492	0.490	0.493	0.495	2008	0.492	0.490	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				Caution				
Material	SA 106 - B								LT Loss MPY	0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-45	Boot	Head	Baseline	0.520	0.433	0.433	0.442	0.432	0.412	2008	0.445	0.412	0.4320	0.0000	0.1359	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	12.75		Current	0.520	0.433	0.433	0.442	0.432	0.412	2008	0.445	0.412	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												Caution				
													LT Loss MPY 0.000				
33-50	Boot	Shell	Baseline	0.499	0.511	0.515	0.511	0.519	0.519	2008	0.512	0.499	0.5000	0.0000	0.2197	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	20		Current	0.499	0.511	0.515	0.511	0.519	0.519	2008	0.512	0.499	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												Caution				
													LT Loss MPY 0.000				
33-55	Boot	Shell	Baseline	0.501	0.500	0.500	0.500	0.501	0.502	2008	0.501	0.500	0.5000	0.0000	0.2197	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	20		Current	0.501	0.500	0.500	0.500	0.501	0.502	2008	0.501	0.500	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												OK				
													LT Loss MPY 0.000				
33-60	Boot	Head	Baseline	0.510	0.514	0.517	0.517	0.485	0.545	2008	0.515	0.485	0.5000	0.0000	0.2172	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	20		Current	0.510	0.514	0.517	0.517	0.485	0.545	2008	0.515	0.485	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												Caution				
													LT Loss MPY 0.000				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-65	Nozzle	Baseline		0.432	0.432	0.430	0.426	0.412	0.429	2008	0.427	0.412	0.4320	0.0000	0.0666	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	6.625		Current	0.432	0.432	0.430	0.426	0.412	0.429	2008	0.427	0.412					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												LT Loss MPY 0.000				
													Caution				
33-70	Piping	Baseline		0.136	0.146	0.149	0.153	0.155	0.142	2008	0.147	0.136	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.136	0.146	0.149	0.153	0.155	0.142	2008	0.147	0.136					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				
33-75	Piping	Baseline		0.136	0.149	0.152	0.152	0.159	0.158	2008	0.151	0.136	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.136	0.149	0.152	0.152	0.159	0.158	2008	0.151	0.136					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				
33-80	Nozzle	Baseline		0.342	0.324	0.320	0.317	0.315	0.316	2008	0.322	0.315	0.3430	0.0000	0.0195	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.342	0.324	0.320	0.317	0.315	0.316	2008	0.322	0.315					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												LT Loss MPY 0.000				
													Caution				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

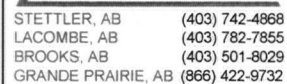
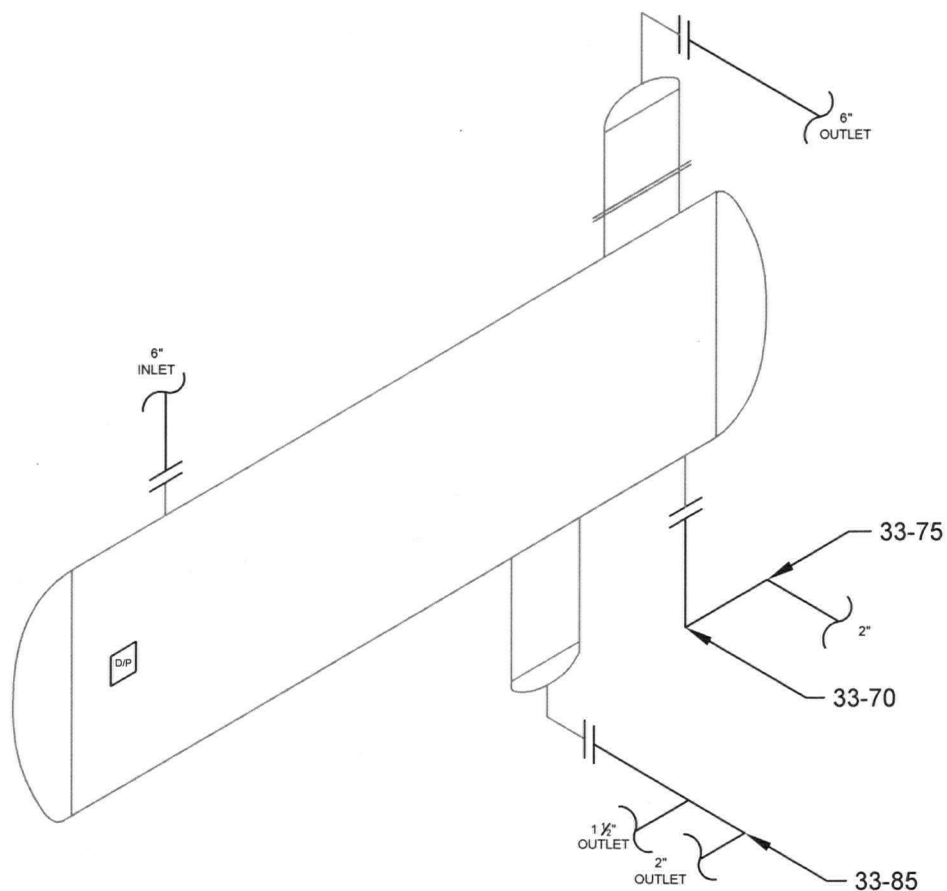
CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-85	Piping	Baseline		0.145	0.137	0.135	0.138	0.139	0.154	2008	0.141	0.135	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.145	0.137	0.135	0.138	0.139	0.154	2008	0.141	0.135					
Spec.	B31.3								ST Loss MPY								
Material	A 234 - WPB								LT Loss MPY		0.000						

INLET SEPARATOR - PIPING

A 0571608



ROY HATCHER
SNT LEVEL II
CGSB 48.9712
LEVEL II # 10430

DWG # 33A

CLIENT: HUSKY ENERGY

LSD: 07-27-051-19-W5M

INSPECTOR : BOB MARCHAK

LOCATION :	ANSELL GAS PLANT
-------------------	------------------

DISTRICT UNIT : FH-FW

BLDG/SKID:

PROCESS:	SWEET
-----------------	-------

CODE:	ASME B31.3
--------------	------------

SPECIFICATION: AS PER ASME SE 797

TECHNIQUE: UT-1-1, REV. 1

METHOD:	UT CONTINUOUS / A SCAN
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SURFACE COND:	PAINTED
----------------------	---------

SURFACE TEMP:	AMBIENT
----------------------	---------

PIPING INFORMATION

[illegible]

COMMENTS:

PROJECT:	C30138
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PRESSURE VESSEL INSPECTION REPORT

PAGE: 1 of 2

FACILITY Ansel Gas Plant #2	DATE June-22, 2009	REPORT #
------------------------------------	---------------------------	-----------------

VESSEL STATIC DATA			
Prov. Insp. # A571608	CRN U0192.213	Equip Tag # 66128609	
Equipment Location (LSD)	07-27-051-19W5M	Serial # 12306200	
Equipment Description	Inlet Separator	Vessel Class	
Manufacturer	Toromont Process Systems	Year Built 2007	
MAWP 390 psi	KPag / psig @ 150 °F	MDMT -20 °F	
CODE : UM ☐ U ☒ U2 ☐	RT : 1 ☐ 2 ☒ 3 ☐ 4 ☐	PWHT : YES ☐ NO ☒	
Diameter 48" Mm/in	Length	(T/T) 193" Mm/in	OAL Mm/in
Shell Mat'l SA-516-70N	Thickness 0.625" Mm/in	Corr Allowance 0.0625" Mm/in	
Head Mat'l SA-516-70N	Thickness 0.5625" Mm/in	Corr Allowance	Mm/in
Nozzle Mat'l	Thickness	Corr Allowance	Mm/in
Internal Coating : YES ☐ NO ☒	Internal Clad : YES ☐ NO ☒	Capacity m ³	
Manway : YES ☒ NO ☐	Inspection Port : YES ☒ NO ☐	Skirt ☐	Legs ☐ Saddle ☒
Nozzle Rating	lb ANSI	Painted : YES ☒ NO ☐	Insulated : YES ☐ NO ☒

PROCESS DATA			
Product Description	Gas	Sweet ☒	Sour ☐ PPM:
Operating Pressure	KPag / psig	Operating Temperature	°C / °F

PSV STATIC DATA							
Tag / Serial No.	Location	Size		Set Pressure	Capacity SCFM / Lbs/Hr / GPM	Manufacturer	Model / Type
484642-18-A10	Piping	Inlet 3"	Outlet 4"	2690 kpa	282.6 cubic m	Farris	
PSV112							

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

INSPECTION SUMMARY
External visual and ultrasonic inspections were carried out to determine the integrity of the separator. PSV on the separator was last serviced 02/2007. The separator is considered acceptable for continued service.

RECOMMENDATIONS
Carry out an internal inspection during the next inspection interval in 2014.

REPAIRS COMPLETED								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Object Name</th> <th>Cause</th> <th>Damage</th> <th>Repair Activity</th> </tr> <tr> <td colspan="4">None.</td> </tr> </table>	Object Name	Cause	Damage	Repair Activity	None.			
Object Name	Cause	Damage	Repair Activity					
None.								

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

J.2



FACILITY	Ansel Gas Plant #2	DATE	June-22, 2009	REPORT #	6081851
-----------------	---------------------------	-------------	----------------------	-----------------	----------------

INSPECTION OBSERVATIONS**NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED**

None.

EXTERNAL VISUAL INSPECTION

The nameplate is attached and legible with the A# stamped on it.
The separator is painted and is in good condition no paint chips noted.
The separator is welded to saddles that are securely bolted to the skid floor.
No leaks noted at any nozzles or connections.
The vessel has condensation covering the lower parts. No corrosion noted.
The PSV is located on piping off of the separator and was last serviced 02/2007.
The vessel appears to be level.
The overall condition of this vessel is good.

EXTERNAL NDE EXAMINATION

UT carried out by Bob Marchak
Separator
Nominal thickness of shell: 0.625", Nominal thickness of head: 0.5625, boot: 0.500", manway: 0.500"
South Head: 0.639"
South Shell Bottom: 0.636"
South Shell Mid: 0.641"
Mid Shell Top: 0.661"
North Shell Bottom: 0.639"
North Head: 0.631"
Boot Shell: 0.505"
Vapor Boot Shell: 0.529"
Top Vapor Boot Shell: 0.510"
No concerns were noted with the thickness readings.

INTERNAL VISUAL INSPECTION

N/A

INTERNAL NDE EXAMINATION

N/A

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 Bob Marchak

Inspector's Signature

Inspection Company Husky Energy

Date July 8 / 09

LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION

Lead Inspector Bob Marchak

Signature

Date 07-08-2009

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

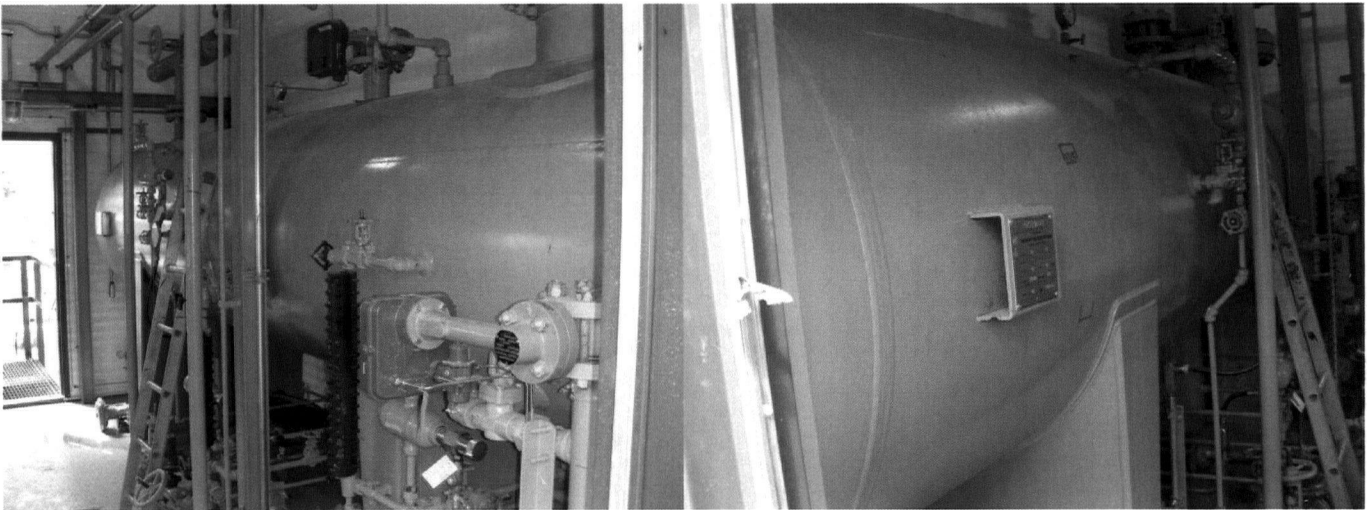
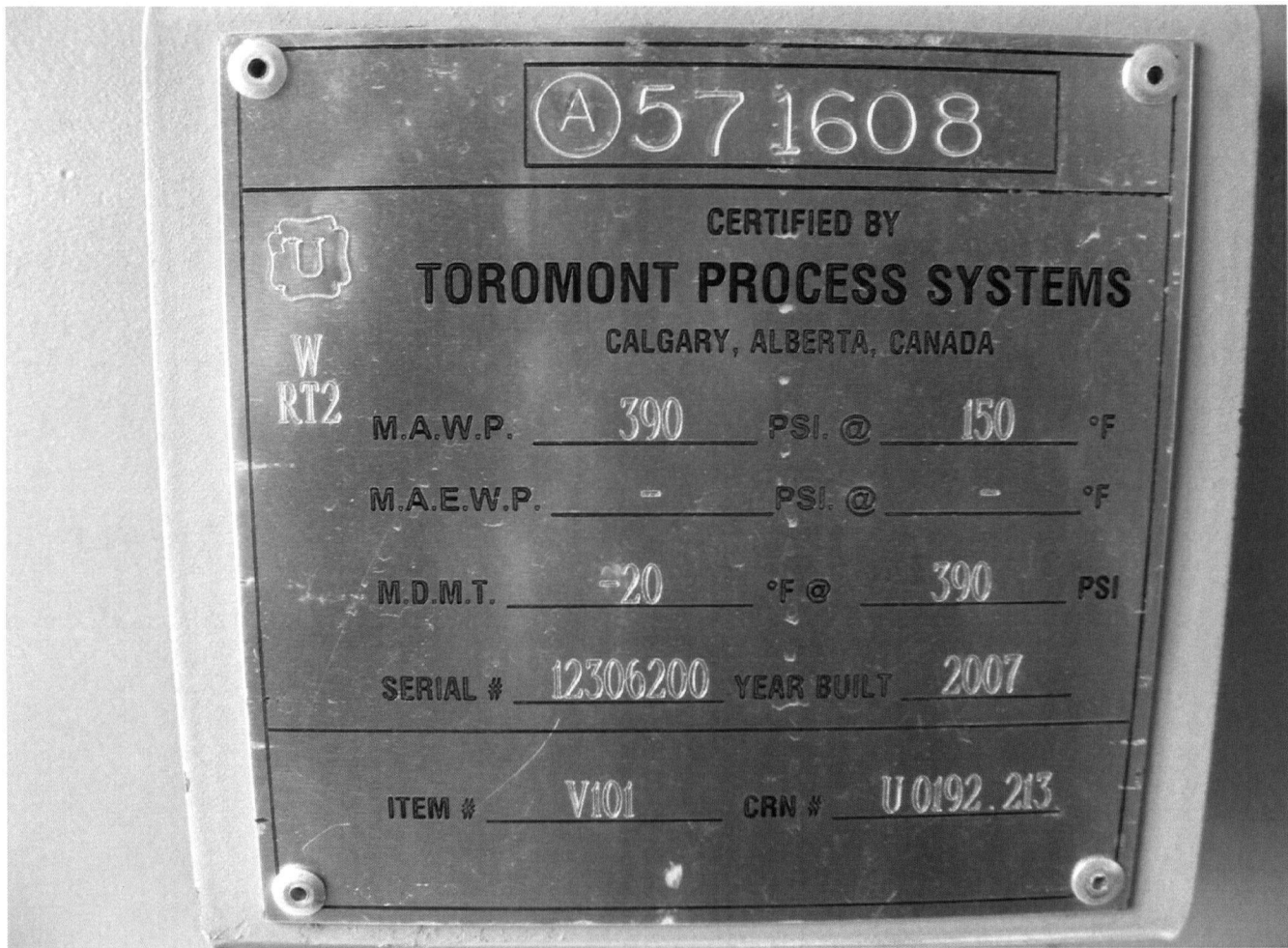
Date

Static Data Verified by

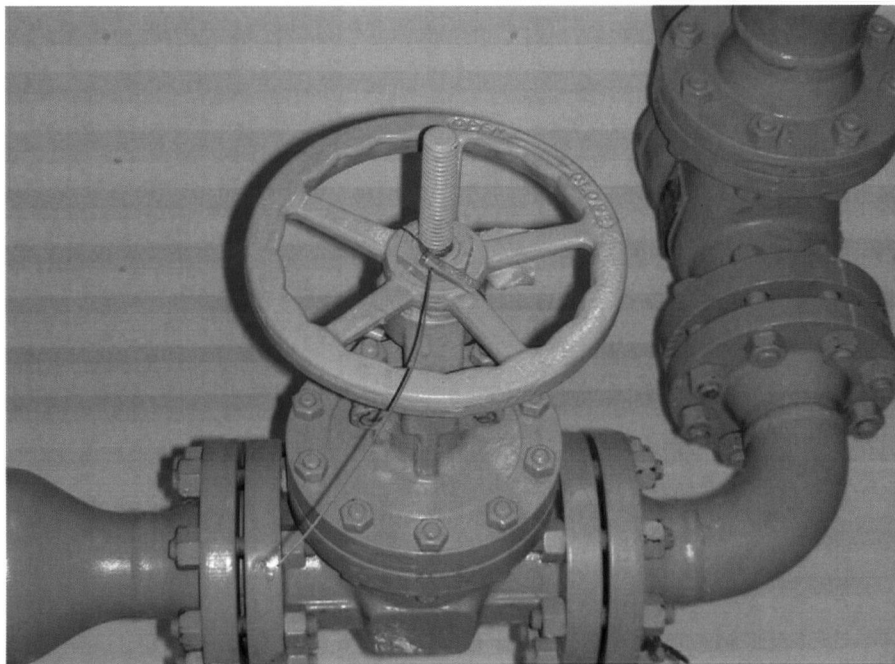
Date

SEIM: Good

A#571608 Inlet Separator
07-27-051019W5 Ansel Gas Plant #2



A#571608 Inlet Separator
07-27-051019W5 Ansel Gas Plant #2



Login Home Quality Assurance Help Exit

SEPARATOR INSPECTION REPORT

CV

Inspection Report

Print Back Cancel

Notification Number 6080734 ✓ Work Order 6084164 ✓
Notification Desc SEPARATOR, INLET Maintenance Plan QPSEPAR6938
Tasklist Operation (5Y Inspection Interval) 5Y Code Inspection Separator - Sweet Se

Equipment Static Data

Equipment Number 66128609 Equipment Description SEPARATOR, INLET
Class SEPARATOR Tag Number 2-V-001
Serial Number 12306200 Year Built 2007
Manufacturer TOROMONT ENERGY SYSTEMS
Location FH-FW-013-00006 Location Description ANSELL PLANT #2 07-27-051-19W5
Provincial Number 0571608 ✓ PM Activity Code
Status Codes NOPR ORAS Equipment Status In Service - Fully Utilized

CRN Number U0192.213 Code Stamp U Fluid Description NATURAL GAS
Fluid Service SWEET Internal Coating Exists Length 16.00 FOOT
MDMT - Min. Design Metal Temp -20 DEGF Shell MAWP 390 PSI Stress Relief
Vessel Diameter 46.0 " Volume 228.00 CUFT X-Ray

PRD Static Data

Equip ID	Location	Size		Set Pressure	Capacity	Manufacturer	Serial Number	Model Number	Next Service Date
		Inlet	Outlet						

Process Data

Product Description Fluid Service ☒ Sweet ☐ Sour PPM
Operating Pressure 1550 KPA Operating Temperature 3 °C

Pressure Test

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

PSV Data

Tag/Serial No.	Location	Size		Set Pressure	Capacity	Model / Type	Service Date
		Inlet	Outlet				
PSV112	PIPING	3"	4"	2690 KPA	282.6 M3	FARRIS	02/2007

Inspection History

Inspected By MARCHAK, BOB Inspection Date 2008.05.12

Inspection Summary

An external visual and UT inspections were carried out to verify the integrity of the vessel.
No concerns were noted and the vessel is considered acceptable for continued service.

Recommendations

- 1) Carry out external UT in 1 year to determine corrosion rate.
- 2) Plan to open and clean for an internal inspection in 2013.

Repairs Completed

Equipment Status

Integrity Status ☒ Suitable for Continued Service ☐ Immediate Repairs Required ☐ Replace
☐ Future Repairs Required
Inventory Status ☒ In Service - Fully Utilized ☐ Idle ☐ Surplus ☐ Scrap

QA Activities

☒ Leave As-Is ☐ Weld Overlayed ☐ Part / Component Replaced
☐ Equipment Replaced ☐ Grind Dressed ☐ Patch Installed
☐ MAWP Derated ☐ Coating - Cleaned & Patched ☐ Coating - Removed & Replaced
☐ Defect Removed & Rewelded ☐ Part Cleaned ☐ Lapped & Dressed
☐ Epoxy Patched

Noncompliances or Inspection Deficiencies Issued

External Visual Inspection

The nameplate is attached and legible with the A# stamped on it.
The vessel is painted and is in good condition with no chips or no significant corrosion noted.

The piping, bolting and external attachments are in good condition.
The vessel is protected by PSV112 that was last serviced 02/2007.
There is a block valve between the vessel and the PSV and it is currently car sealed open.
The gauges are clear and in good working condition.
The vessel is securely attached to the skid floor.
The overall condition of this vessel is good.

External NDE Examination

UT inspection was carried out by Hunt Inspection.
The lowest thickness readings are as follows:
Bottom Shell West(nominal 0.625") - 0.626"
Mid Shell West(nominal 0.625") - 0.630"
Top Shell Middle(nominal 0.625") - 0.636"
Mid Shell East(nominal 0.625") - 0.627"
Bottom Boot(nominal 0.500") - 0.490"
Bottom Boot Head(nominal 0.500") - 0.412"
West Head(nominal 0.5625") - 0.628"
East Head(nominal 0.5625") - 0.618"
Manway(nominal 0.500") - 0.499"
Manway Boot(nominal 0.500") - 0.500"
Top Head(nominal 0.500") - 0.485"
Gas Outlet Elbow 6"(nominal 0.432") - 0.412"
Bottom Boot Elbow 2"(nominal 0.343") - 0.315"
Calculated minimum thickness on boot head is 0.192"
Remaining life = 2.5 years
Carry out external UT in 1 year to determine corrosion rate.

Internal Visual Inspection

Internal NDE Examination

Data Integrity

The following changes are required in SEIM:
Manufacturer: Toromont Process Systems ✓
Vessel Diameter: 48" ✓

Inspection Interval

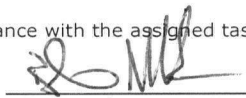
The inspection interval is to be set at 1 years.
The PSV service interval is to be set at 5 years.

Damages

Inspector Certification

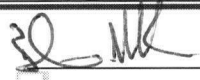
I, the undersigned certify that the above equipment has been inspected in accordance with the assigned task list and that statements within this report are correct and represent inspection findings.

Inspector Name MARCHAK, BOB Inspector Signature
Inspection Company HUSKY ENERGY Date


01-29-2009

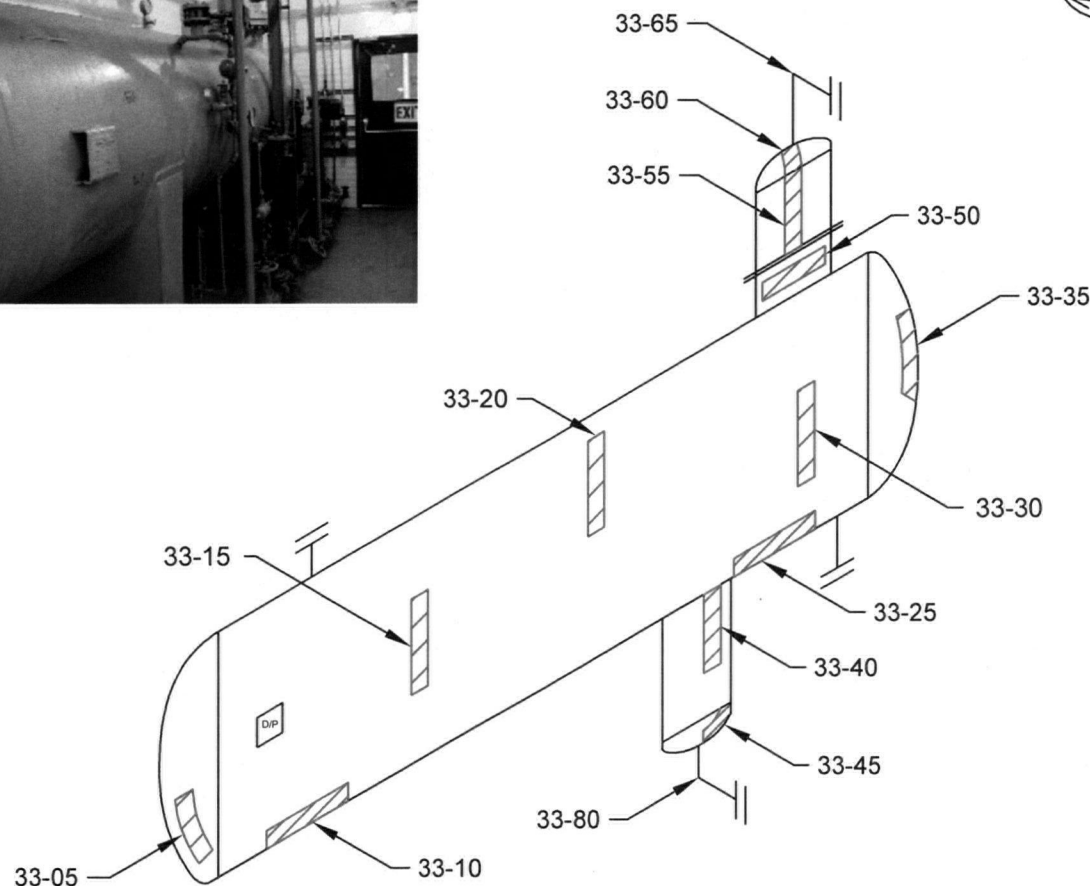
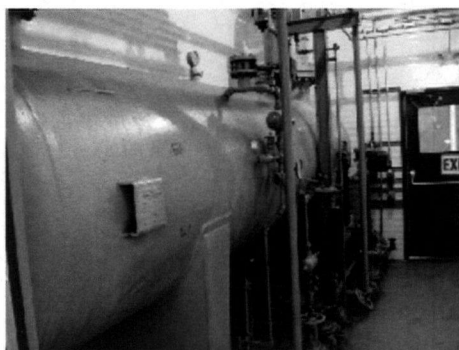
Lead Inspector's Acceptance & Schedule Confirmation

Lead Inspector Bob Marchak Signature
Vessel Inspection Interval 1
PSV Inspection Interval 5

 Date 01-29-2009
☐ Leave as-is / Change to: _____
☐ Leave as-is / Change to: _____

Top

ITEM:

INLET SEPARATOR**A 0571608**
HUNT
INSPECTION LTD.

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

TECHNICIAN:

 ROY HATCHER
 SNT LEVEL II
 CGSB 48.9712
 LEVEL II # 10430
DATE: **05/07/08**DWG # **33**CLIENT: **HUSKY ENERGY**LSD: **07-27-051-19-W5M**INSPECTOR: **BOB MARCHAK**LOCATION: **ANSELL GAS PLANT**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 #: **A 0571608**CRN #: **U0192.213**SERIAL #: **12306200**MANUFACTURER: **TOROMONT PROCESS SYSTEMS**DATE BUILT: **2007**CLIENT ID / TAG: **-**M.A.W.P.: **390 PSI**M.A.W.T.: **150 °F**JOINT EFFICIENCY/RT: **RT 2**STRESS RELIEVED: **N/A**INSULATED: **NO**MANWAY: **YES****VESSEL SPECIFICATIONS**

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	48"	.500"	SA-516-70	-
VESSEL SHELL	48"	.625"	SA-516-70	-
BOOT HEAD	12.75"/20"	.432"/.500"	SA-234-WPB	-
BOOT SHELL	12.75"/20"	.500"/.500"	SA-106-B	-

COMMENTS:

PROJECT:

C30138

ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

Survey Date: 5/07/08

LSD: 07-27-051-19W5 Dwg: 33

Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

				Readings													Recommended Retirement Date	
Band	Description			1	2	3	4	5	6	Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection		
33-05		Head	Baseline	0.628	0.629	0.630	0.632	0.631	0.635	2008	0.631	0.628	0.5000	0.0000	0.4591	2009	2028	
Shape	Ellipsoidal	Shell Side	Previous										0.5625					
OD	48		Current	0.628	0.629	0.630	0.632	0.631	0.635	2008	0.631	0.628	Comments--> NOMINAL & MATERIAL ASSUMED					
Spec.	VIII Div 1								ST Loss MPY				OK					
Material	SA 516 - 70								LT Loss MPY		0.000							
33-10		Shell	Baseline	0.628	0.628	0.628	0.627	0.626	0.627	2008	0.627	0.626	0.6250	0.0000	0.4612	2009	2028	
Shape	Cylindrical	Shell Side	Previous										Comments-->					
OD	48		Current	0.628	0.628	0.628	0.627	0.626	0.627	2008	0.627	0.626	NOMINAL & MATERIAL ASSUMED					
Spec.	VIII Div 1								ST Loss MPY				OK					
Material	SA 516 - 70								LT Loss MPY		0.000							
33-15		Shell	Baseline	0.643	0.639	0.637	0.635	0.634	0.630	2008	0.636	0.630	0.6250	0.0000	0.4612	2009	2028	
Shape	Cylindrical	Shell Side	Previous										Comments-->					
OD	48		Current	0.643	0.639	0.637	0.635	0.634	0.630	2008	0.636	0.630	NOMINAL & MATERIAL ASSUMED					
Spec.	VIII Div 1								ST Loss MPY				OK					
Material	SA 516 - 70								LT Loss MPY		0.000							
33-20		Shell	Baseline	0.652	0.651	0.649	0.645	0.645	0.636	2008	0.646	0.636	0.6250	0.0000	0.4612	2009	2028	
Shape	Cylindrical	Shell Side	Previous										Comments-->					
OD	48		Current	0.652	0.651	0.649	0.645	0.645	0.636	2008	0.646	0.636	NOMINAL & MATERIAL ASSUMED					
Spec.	VIII Div 1								ST Loss MPY				OK					
Material	SA 516 - 70								LT Loss MPY		0.000							

ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

Survey Date: 5/07/08

LSD: 07-27-051-19W5 Dwq: 33

Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-25		Shell	Baseline	0.637	0.634	0.629	0.628	0.628	0.627	2008	0.631	0.627	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.637	0.634	0.629	0.628	0.628	0.627	2008	0.631	0.627	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-30		Shell	Baseline	0.630	0.631	0.631	0.628	0.628	0.627	2008	0.629	0.627	0.6250	0.0000	0.4612	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	48		Current	0.630	0.631	0.631	0.628	0.628	0.627	2008	0.629	0.627	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-35		Head	Baseline	0.625	0.623	0.623	0.618	0.618	0.618	2008	0.621	0.618	0.5000	0.0000	0.4591	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										0.5025 Comments-->				
OD	48		Current	0.625	0.623	0.623	0.618	0.618	0.618	2008	0.621	0.618	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				OK				
Material	SA 516 - 70								LT Loss MPY	0.000							
33-40	Boot	Shell	Baseline	0.490	0.490	0.492	0.490	0.493	0.495	2008	0.492	0.490	0.5000	0.0000	0.1359	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	12.75		Current	0.490	0.490	0.492	0.490	0.493	0.495	2008	0.492	0.490	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1								ST Loss MPY				Caution				
Material	SA 106 - B								LT Loss MPY	0.000							



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-45	Boot	Head	Baseline	0.520	0.433	0.433	0.442	0.432	0.412	2008	0.445	0.412	0.4320	0.0000	0.1359	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	12.75		Current	0.520	0.433	0.433	0.442	0.432	0.412	2008	0.445	0.412	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												Caution				
													LT Loss MPY 0.000				
33-50	Boot	Shell	Baseline	0.499	0.511	0.515	0.511	0.519	0.519	2008	0.512	0.499	0.5000	0.0000	0.2197	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	20		Current	0.499	0.511	0.515	0.511	0.519	0.519	2008	0.512	0.499	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												Caution				
													LT Loss MPY 0.000				
33-55	Boot	Shell	Baseline	0.501	0.500	0.500	0.500	0.501	0.502	2008	0.501	0.500	0.5000	0.0000	0.2197	2009	2028
Shape	Cylindrical	Shell Side	Previous										Comments-->				
OD	20		Current	0.501	0.500	0.500	0.500	0.501	0.502	2008	0.501	0.500	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 106 - B												OK				
													LT Loss MPY 0.000				
33-60	Boot	Head	Baseline	0.510	0.514	0.517	0.517	0.485	0.545	2008	0.515	0.485	0.5000	0.0000	0.2172	2009	2028
Shape	Ellipsoidal	Shell Side	Previous										Comments-->				
OD	20		Current	0.510	0.514	0.517	0.517	0.485	0.545	2008	0.515	0.485	NOMINAL & MATERIAL ASSUMED				
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												Caution				
													LT Loss MPY 0.000				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

				Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
Band	Description			1	2	3	4	5	6								
33-65	Nozzle	Baseline		0.432	0.432	0.430	0.426	0.412	0.429	2008	0.427	0.412	0.4320	0.0000	0.0666	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	6.625		Current	0.432	0.432	0.430	0.426	0.412	0.429	2008	0.427	0.412					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												LT Loss MPY 0.000				
													Caution				
33-70	Piping	Baseline		0.136	0.146	0.149	0.153	0.155	0.142	2008	0.147	0.136	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.136	0.146	0.149	0.153	0.155	0.142	2008	0.147	0.136					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				
33-75	Piping	Baseline		0.136	0.149	0.152	0.152	0.159	0.158	2008	0.151	0.136	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.136	0.149	0.152	0.152	0.159	0.158	2008	0.151	0.136					
Spec.	B31.3												ST Loss MPY				
Material	A 234 - WPB												LT Loss MPY 0.000				
													OK				
33-80	Nozzle	Baseline		0.342	0.324	0.320	0.317	0.315	0.316	2008	0.322	0.315	0.3430	0.0000	0.0195	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.342	0.324	0.320	0.317	0.315	0.316	2008	0.322	0.315					
Spec.	VIII Div 1												ST Loss MPY				
Material	SA 234 - WPB												LT Loss MPY 0.000				
													Caution				



ULTRASONIC CORROSION SURVEY

Survey Name: HUSKY ENERGY

LSD: 07-27-051-19W5 Dwg: 33 Vessel Number: A0571608

Manufacturer: TOROMONT PROCESS
SYSTEMS

Survey Date: 5/07/08

Inspector: BOB MARCHAK

District Unit: FH-FW

Vessel Name: INLET SEPARATOR

Serial Number: 12306200

Process: SWEET

Location: ANSELL GAS PLANT

Year Built: 2007

Shell MAWP PSI: 390 MAWT F: 150

Project #: C30138

Skid: -

Tag Number: -

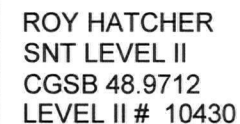
Tube MAWP PSI: 0 MAWT F: 0

CRN: U0192.213

Vessel CA: 0.0000

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
33-85	Piping	Baseline		0.145	0.137	0.135	0.138	0.139	0.154	2008	0.141	0.135	0.1540	0.0192	0.0229	2009	2028
Shape	90° Elbow	Shell Side	Previous										Comments-->				
OD	2.375		Current	0.145	0.137	0.135	0.138	0.139	0.154	2008	0.141	0.135					
Spec.	B31.3								ST Loss MPY								
Material	A 234 - WPB								LT Loss MPY			0.000		OK			

A 0571608

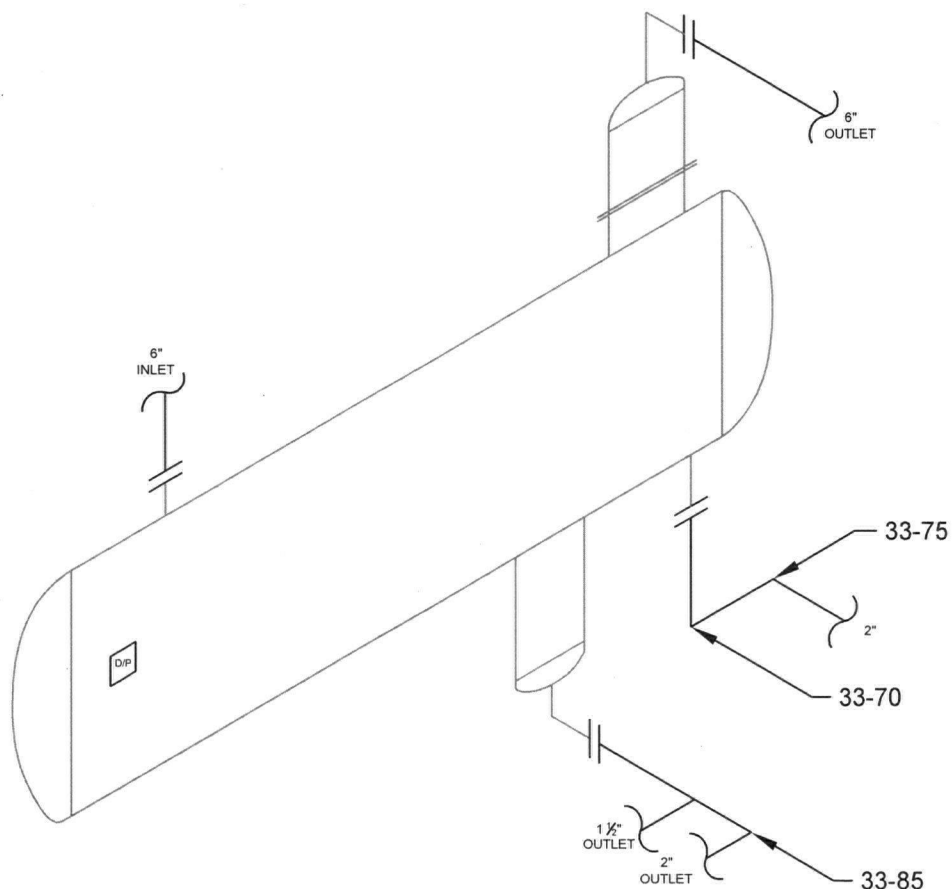


DWG # 33A

SURFACE TEMP:	AMBIENT
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[illegible]

PROJECT:
C30138



PRESSURE CALCULATIONS

Vessel Description: Inlet Separator
Manufacturer: Toromont Process Systems
Service: Sweet
Vessel PRN: A571608
CRN: U0192.213
Serial number: 12306200
Location: 07-27-051-19W5M
Ansell Gas Plant

Entered by: Bob Marchak
Date: Jan. 9, 2008

Diameter: 48 inches
Length: 192 inches
MAWP: 390 psi
MDMT: -20 °F
Tan/Tan

SHELL Thickness: 0.625 nomimal
Material: SA-516-70N plate

HEAD Thickness: 0.563 nomimal
Material: SA-516-70N

Cylindrical Shell

$$t_{\text{MIN}} = PR / SE - 0.6 P$$

$$P = SE t / R + 0.6 t$$

t = actual wall thickness, inches

Boot Head

P = design pressure (MAWP), psi

17114 S = stress value of material, psi

SA-106-B

1 E = joint efficiency, Table UW-12

Seamless

R = inside radius, inches

0.0625 CA = corrosion allowance, inches

$$t_{\text{MIN}} = 0.000 \text{ inches}$$

(MINIMUM ALLOWABLE W.T.)

$$P = \#DIV/0! \text{ psi}$$

(PRESSURE RATING AT CURRENT W.T.)

2:1 Ellipsoidal Heads

$$t_{\text{MIN}} = PD / 2 SE - 0.2 P$$

$$P = 2 SE t / D + 0.2 t$$

0.412 t = actual wall thickness, inches

Boot Head

390 P = design pressure (MAWP), psi

17114 S = stress value of material, psi

SA234WPB

0.7 E = joint efficiency, Table UW-12

Spot RT

11.75 D = inside diameter, inches

0.0625 CA = corrosion allowance, inches

$$t_{\text{MIN}} = 0.192 \text{ inches}$$

(MINIMUM ALLOWABLE W.T.)

$$P = 834.265 \text{ psi}$$

(PRESSURE RATING AT CURRENT W.T.)

PRESSURE CALCULATIONS

Vessel Description:	Inlet Separator	Entered by:	Bob Marchak
Manufacturer:	Toromont Process Systems	Date:	Jan. 9, 2008
Service:	Sweet		
Vessel PRN	A571608	Diameter	48 inches
CRN	U0192.213	Length	192 inches Tan/Tan
Serial number	12306200	MAWP	390 psi
Location :	07-27-051-19W5M	MDMT	-20 °F
	Ansell Gas Plant		

SHELL	Thickness:	0.625	nomimal	HEAD	Thickness:	0.563	nomimal
	Material:	SA-516-70N	plate		Material:	SA-516-70N	

Corrosion Rate

$$\text{LTCR} = t(\text{initial}) - t(\text{actual}) / \text{time (yrs) between } t(\text{initial}) \text{ and } t(\text{actual})$$

0.500 $t(\text{initial})$ = last noted wall thickness, inches

0.412 $t(\text{actual})$ = actual measured wall thickness, inches

1 T = years between $t(l)$ and $t(c)$

LTCR = 0.0880 inches/yr

Long Term Corrosion Rate

Remaining Life

$$\text{R.L.} = t(\text{actual}) - t(\text{required}) / \text{Corrosion Rate}$$

0.412 $t(\text{actual})$ = actual measured thickness, inches

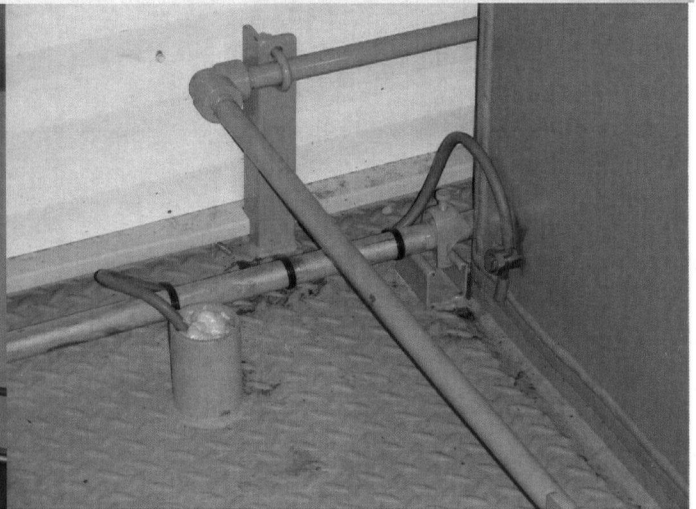
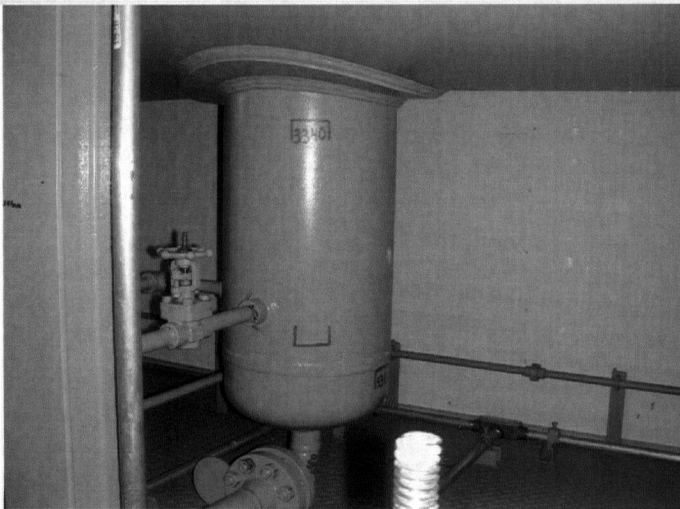
0.192 $t(\text{required})$ = required thickness before corrosion allowance, inches

0.0880 C.R. = worst case between LTCR and STCR, inches/year

R.L. = 2.5 years

Remaining Life

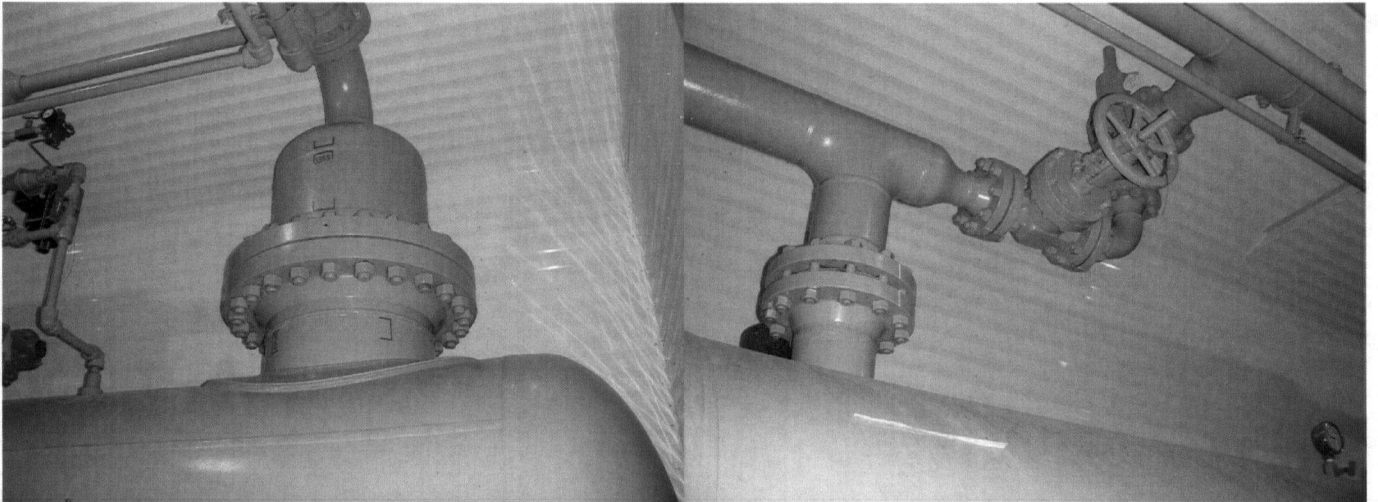
V-101 Drum Photos, A571608



V-101 Drum Photos, A571608



V-101 Drum Photos, A571608



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

1. Manufactured and certified by Toromont Process Systems, 10121 Barlow Trail NE, Calgary, Alberta, Canada, T3J 3C6 0571408
(Name and address of manufacturer)
Manufactured for Husky Energy Inc. 707 - 8th Avenue S.W. Calgary, Alberta T2P 3G7
(Name and address of purchaser)
3. Location of installation Site: Ansell Gas Plant
(Name and address)
4. Type Horizontal 12306200 U0192.213 12306-401 Rev0 - 2007
(Horiz. or vert., tank) (Mfg'r's serial No.) (CRN) (Drawing No.) (Natl. 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 2004
to 2006
Addenda (Date) Code Case Nos. Special Service per UG-120(d)
6. Shell: SA516-70N .625" 0.0625" 3' 10.75" 16' -0"
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)
7. Seams: Type 1 Full 1.0 - Type 1 Spot .70 2
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) No. of Courses
8. Heads: (a) Matl. SA516-70N (b) Matl. SA516-70N
(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)	End	0.5625"	0.0625"	-	-	SE 2:1	-	-	-	Concave
(b)	Datum End	0.5625"	0.0625"	-	-	SE 2:1	-	-	-	Concave

If removable, bolts used (describe other fastenings) -

9. MAWP 390 - psi at max. temp. 150 °F.
(internal) (external) (Mat'l. Spec. No., Gr., Size, No.)
Min. design metal temp. -20 °F at 390 Psi. Hydro., pneu., or comb. test pressure 507 psi.
(internal) (external)

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
			SEE	ATTACHED	U4	FORM		

11. Supports: Skirt No Lugs No Legs No Other Saddle Attached Shell & 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 the report: -
(Name of part, item number, Mfg'r's. name and identifying stamp)
Item: V101 Volume: 228 Cubic Feet Vessel Type: Inlet Separator Construction Drawing: 12306-401 Rev.1B
Impact Testing: Exempt, per UG-20(f)

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. 33,658
expires November 26, 2008

Date 22 Mar 07 Co. name Toromont Process Systems Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Toromont Process Systems 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 March 22/07 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 employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his 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 7/3/07 Signed [Signature] Commissions active
(Authorized Inspector) (Natl Board (incl. endorsements), State, Prov. and No.)

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

1. Manufactured and certified by Toromont Process Systems, 10121 Barlow Trail NE, Calgary, Alberta, Canada, T3J 3C6
(Name and address of manufacturer)

2. Manufactured for Husky Energy Inc. 707 - 8th Avenue S.W. Calgary, Alberta T2P 3G7
(Name and address of purchaser)

Location of Installation Site: Ansell Gas Plant

4. Type: Horizontal Inlet Separator 12306200
(Horiz., vert., or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

U0192.213 (CRN)	12306-401 Rev0 (Drawing No.)	- (Nat'l. Bd. No.)	2007 (Year built)
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Remarks

[illegible]

Certificate of Authorization: Type "U" No. 33,658 Expires November 26, 2008

Date 22 Mar 07 Name Toromont Process Systems Signed [Signature]
(Manufacturer) (Representative)

7/3/32 Name Mr. Thompson Commissions alt 5-
(Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov. and No.)

① 571608



TOP MOUNT PROCESS SYSTEMS

W
RIZ

390 150

390 150

20 390

12306200 2007

100 0092.23