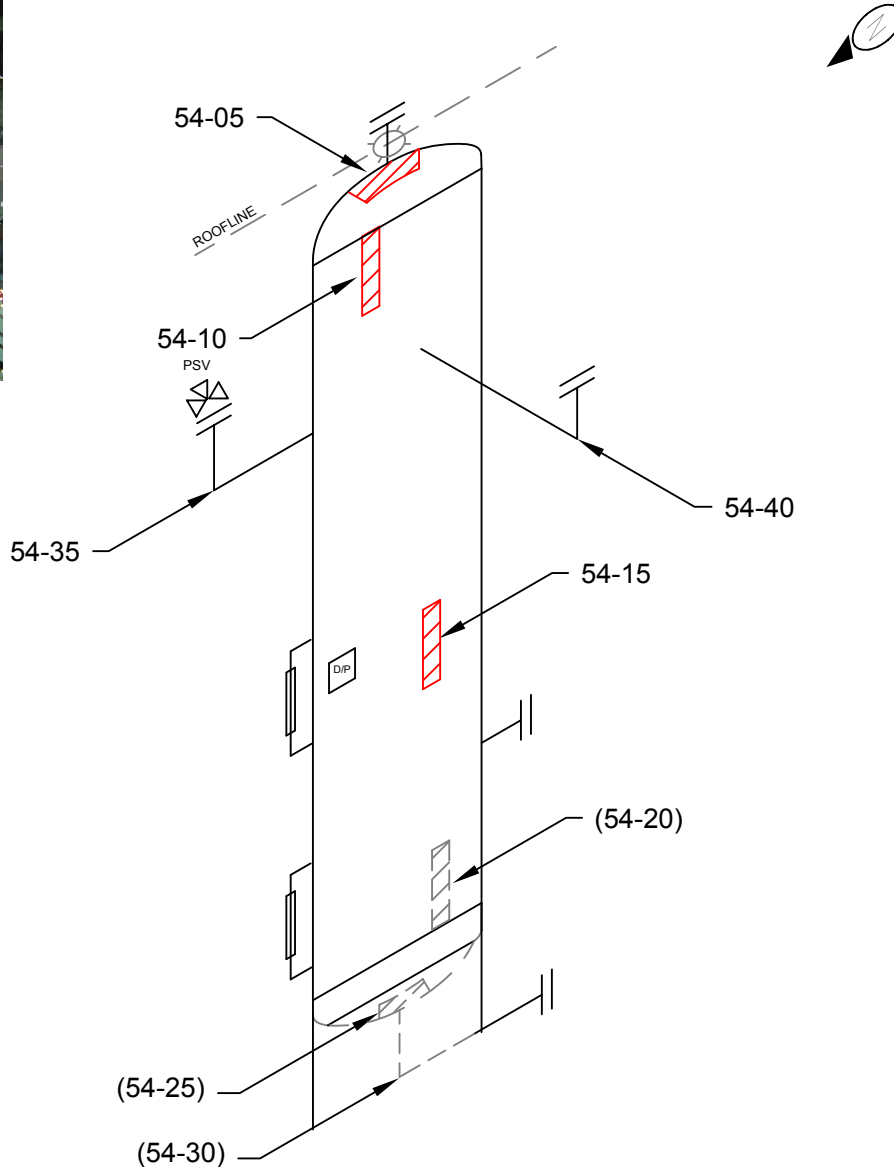


ITEM:

**SEPARATOR**

A 0231047



COMMENTS:

PROJECT:  
**C70099**



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

TECHNICIAN:

STEVE GILLINGHAM  
SNT LEVEL II  
CGSB 48.9712  
LEVEL II # 11441

DATE: **01/28/11**

DWG # **54**

CLIENT: **CNRL**

LSD: **14-31-073-09-W6M**

INSPECTOR : RAJ KHAN

LOCATION : VALHALLA

DISTRICT UNIT : WEST COUNTY

BLDG/SKID : SKD 0207

PROCESS : SOUR

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 0231047**

CRN # : F6671.2

SERIAL # : 1582-V400D

MANUFACTURER : ABAX ENERGY

DATE BUILT : 1985

CLIENT ID / TAG : -

M.A.W.P. : 1376 PSI

M.A.W.T. : 180 °F

JOINT EFFICIENCY/RT : RT 1

STRESS RELIEVED : YES

INSULATED : NO

MANWAY : NO

**VESSEL SPECIFICATIONS**

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	30"	1.233"	SA-516-70	.125"
VESSEL SHELL	30"	1.375"	SA-516-70	.125"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-





# ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-31-073-09W6	Dwg: 54	Vessel Number: A0231047	Manufacturer: ABAX ENERGY	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: SEPARATOR	Serial Number: 1582-V400D	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1985	Shell MAWP PSI: 1376 MAWT F: 180	Process: SOUR
Skid: SKD0207		Tag Number: -	Tube MAWP PSI: 0 MAWT F: 0	Project #: C70099
		CRN: F6671.2	Vessel CA: 0.1250	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date	
			1	2	3	4	5	6									
54-05	Top	Head	Baseline	1.342	1.341	1.334	1.338	1.342	1.347	2006	1.341	1.334	1.2330	0.1250	1.0911	2012	2031
Shape	Ellipsoidal	Shell Side	Previous	1.342	1.341	1.334	1.338	1.342	1.347	2006	1.341	1.334	Comments-->				
OD	30		Current	1.342	1.341	1.334	1.338	1.342	1.347	2011	1.341	1.334					
Spec.	VIII Div 1									ST Loss MPY	0.000	OK					
Material	SA 516 - 70									LT Loss MPY	0.000						
54-10	Upper	Shell	Baseline	1.383	1.402	1.405	1.400	1.396	1.398	2006	1.397	1.383	1.3750	0.1250	1.1244	2012	2031
Shape	Cylindrical	Shell Side	Previous	1.383	1.402	1.405	1.400	1.396	1.398	2006	1.397	1.383	Comments-->				
OD	30		Current	1.383	1.402	1.405	1.400	1.396	1.398	2011	1.397	1.383					
Spec.	VIII Div 1									ST Loss MPY	0.000	OK					
Material	SA 516 - 70									LT Loss MPY	0.000						
54-15	Mid	Shell	Baseline	1.397	1.397	1.395	1.394	1.395	1.394	2006	1.395	1.394	1.3750	0.1250	1.1244	2012	2031
Shape	Cylindrical	Shell Side	Previous	1.397	1.397	1.395	1.394	1.395	1.394	2006	1.395	1.394	Comments-->				
OD	30		Current	1.397	1.397	1.395	1.394	1.395	1.394	2011	1.395	1.394					
Spec.	VIII Div 1									ST Loss MPY	0.000	OK					
Material	SA 516 - 70									LT Loss MPY	0.000						
54-20	Lower	Shell	Baseline	1.390	1.391	1.392	1.395	1.395	1.375	2006	1.390	1.375	1.3750	0.1250	1.1244	2012	2031
Shape	Cylindrical	Shell Side	Previous	1.390	1.391	1.392	1.395	1.395	1.375	2006	1.390	1.375	Comments-->				
OD	30		Current	1.390	1.391	1.392	1.395	1.391	1.375	2011	1.389	1.375					
Spec.	VIII Div 1									ST Loss MPY	0.000	OK					
Material	SA 516 - 70									LT Loss MPY	0.000						



# ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-31-073-09W6	Dwg: 54	Vessel Number: A0231047	Manufacturer: ABAX ENERGY	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: SEPARATOR	Serial Number: 1582-V400D	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1985	Shell MAWP PSI: 1376 MAWT F: 180	Process: SOUR
Skid: SKD0207		Tag Number: -	Tube MAWP PSI: 0 MAWT F: 0	Project #: C70099
		CRN: F6671.2	Vessel CA: 0.1250	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date	
			1	2	3	4	5	6									
54-25	Bottom	Head	Baseline	1.357	1.286	1.318	1.286	1.280	1.251	2006	1.296	1.251	1.2330	0.1250	1.0911	2012	2031
Shape	Ellipsoidal	Shell Side	Previous	1.357	1.286	1.318	1.286	1.280	1.251	2006	1.296	1.251	Comments-->				
OD	30		Current	1.334	1.286	1.318	1.286	1.280	1.251	2011	1.293	1.251	SHALLOW PITTING				
Spec.	VIII Div 1												ST Loss MPY 0.000				
Material	SA 516 - 70												OK				
													LT Loss MPY 0.000				
54-30	Drain	Nozzle	Baseline	0.315	0.263	0.233	0.233	0.248	0.273	2006	0.261	0.233	0.3430	0.1250	0.0822	2012	2014
Shape	90° Elbow	Shell Side	Previous	0.315	0.263	0.233	0.233	0.248	0.273	2006	0.261	0.233	Comments-->				
OD	2.375		Current	0.291	0.263	0.233	0.233	0.164	0.136	2011	0.220	0.136	LOW READINGS OF 0.136" @ LEFT OF APEX OF 90 SHALLOW PITTING				
Spec.	VIII Div 1												ST Loss MPY 0.019				
Material	SA 234 - WPB												Caution				
													LT Loss MPY 0.019				
54-35		Nozzle	Baseline	0.369	0.350	0.352	0.371	0.376	0.376	2006	0.366	0.350	0.2810	0.1250	0.0651	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.369	0.350	0.352	0.371	0.376	0.376	2006	0.366	0.350	Comments-->				
OD	1.9		Current	0.369	0.350	0.352	0.347	0.344	0.344	2011	0.351	0.344					
Spec.	VIII Div 1												ST Loss MPY 0.001				
Material	SA 234 - WPB												OK				
													LT Loss MPY 0.001				
54-40		Nozzle	Baseline	0.537	0.543	0.550	0.564	0.558	0.561	2006	0.552	0.537	0.5310	0.1250	0.1673	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.537	0.543	0.550	0.564	0.558	0.561	2006	0.552	0.537	Comments-->				
OD	4.5		Current	0.537	0.543	0.550	0.564	0.555	0.555	2011	0.551	0.537					
Spec.	VIII Div 1												ST Loss MPY 0.000				
Material	SA 234 - WPB												OK				
													LT Loss MPY 0.000				



# ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-31-073-09W6	Dwg: 54	Vessel Number: A0231047	Manufacturer: ABAX ENERGY	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: SEPARATOR	Serial Number: 1582-V400D	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1985	Shell MAWP PSI: 1376 MAWT F: 180	Process: SOUR
Skid: SKD0207		Tag Number: -	Tube MAWP PSI: 0 MAWT F: 0	Project #: C70099
		CRN: F6671.2	Vessel CA: 0.1250	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
			1	2	3	4	5	6								
54-45	Piping	Baseline	0.319	0.305	0.303	0.301	0.301	0.308	2006	0.306	0.301	0.3370	0.0421	0.1497	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.319	0.305	0.303	0.301	0.301	0.308	2006	0.306	0.301	Comments-->			
OD	4.5		Current	0.292	0.288	0.288	0.288	0.290	0.289	2011	0.289	0.288				
Spec.	B31.3									ST Loss MPY	0.003	Caution				
Material	A 234 - WPB									LT Loss MPY	0.003					
54-50	Piping	Baseline	0.319	0.304	0.308	0.290	0.307	0.319	2006	0.308	0.290	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.319	0.304	0.308	0.290	0.307	0.319	2006	0.308	0.290	Comments-->			
OD	2.375		Current	0.302	0.290	0.298	0.290	0.289	0.288	2011	0.293	0.288				
Spec.	B31.3									ST Loss MPY	0.000	Caution				
Material	A 234 - WPB									LT Loss MPY	0.000					
54-55	Piping	Baseline	0.314	0.317	0.322	0.307	0.308	0.314	2006	0.314	0.307	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.314	0.317	0.322	0.307	0.308	0.314	2006	0.314	0.307	Comments-->			
OD	2.375		Current	0.291	0.316	0.302	0.306	0.308	0.301	2011	0.304	0.291				
Spec.	B31.3									ST Loss MPY	0.003	Caution				
Material	A 234 - WPB									LT Loss MPY	0.003					
54-60	Piping	Baseline	0.318	0.311	0.304	0.304	0.309	0.325	2006	0.312	0.304	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.318	0.311	0.304	0.304	0.309	0.325	2006	0.312	0.304	Comments-->			
OD	2.375		Current	0.315	0.294	0.302	0.304	0.309	0.308	2011	0.305	0.294				
Spec.	B31.3									ST Loss MPY	0.002	Caution				
Material	A 234 - WPB									LT Loss MPY	0.002					



# ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 14-31-073-09W6	Dwg: 54	Vessel Number: A0231047	Manufacturer: ABAX ENERGY	Survey Date: 1/29/11
District Unit: WEST COUNTY		Vessel Name: SEPARATOR	Serial Number: 1582-V400D	Inspector: RAJ KHAN
Location: VALHALLA		Year Built: 1985	Shell MAWP PSI: 1376 MAWT F: 180	Process: SOUR
Skid: SKD0207		Tag Number: -	Tube MAWP PSI: 0 MAWT F: 0	Project #: C70099
		CRN: F6671.2	Vessel CA: 0.1250	

Band	Description		Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
			1	2	3	4	5	6								
54-65	Piping	Baseline	0.330	0.321	0.316	0.317	0.322	0.329	2006	0.323	0.316	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.330	0.321	0.316	0.317	0.322	0.329	2006	0.323	0.316	Comments-->			
OD	2.375		Current	0.317	0.309	0.303	0.298	0.297	0.312	2011	0.306	0.297				
Spec.	B31.3									ST Loss MPY	0.004	Caution				
Material	A 234 - WPB									LT Loss MPY	0.004					
54-70	Piping	Baseline	0.318	0.316	0.308	0.303	0.307	0.329	2006	0.314	0.303	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.318	0.316	0.308	0.303	0.307	0.329	2006	0.314	0.303	Comments-->			
OD	2.375		Current	0.318	0.312	0.307	0.302	0.294	0.306	2011	0.307	0.294				
Spec.	B31.3									ST Loss MPY	0.002	Caution				
Material	A 234 - WPB									LT Loss MPY	0.002					
54-75	Piping	Baseline	0.357	0.346	0.339	0.332	0.335	0.339	2006	0.341	0.332	0.3430	0.0429	0.0790	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.357	0.346	0.339	0.332	0.335	0.339	2006	0.341	0.332	Comments-->			
OD	2.375		Current	0.335	0.325	0.323	0.318	0.335	0.336	2011	0.329	0.318				
Spec.	B31.3									ST Loss MPY	0.003	OK				
Material	A 234 - WPB									LT Loss MPY	0.003					
54-80	Piping	Baseline	0.275	0.278	0.278	0.278	0.284	0.281	2006	0.279	0.275	0.3000	0.0375	0.1164	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.275	0.278	0.278	0.278	0.284	0.281	2006	0.279	0.275	Comments-->			
OD	3.5		Current	0.275	0.271	0.270	0.278	0.280	0.280	2011	0.276	0.270				
Spec.	B31.3									ST Loss MPY	0.001	OK				
Material	A 234 - WPB									LT Loss MPY	0.001					