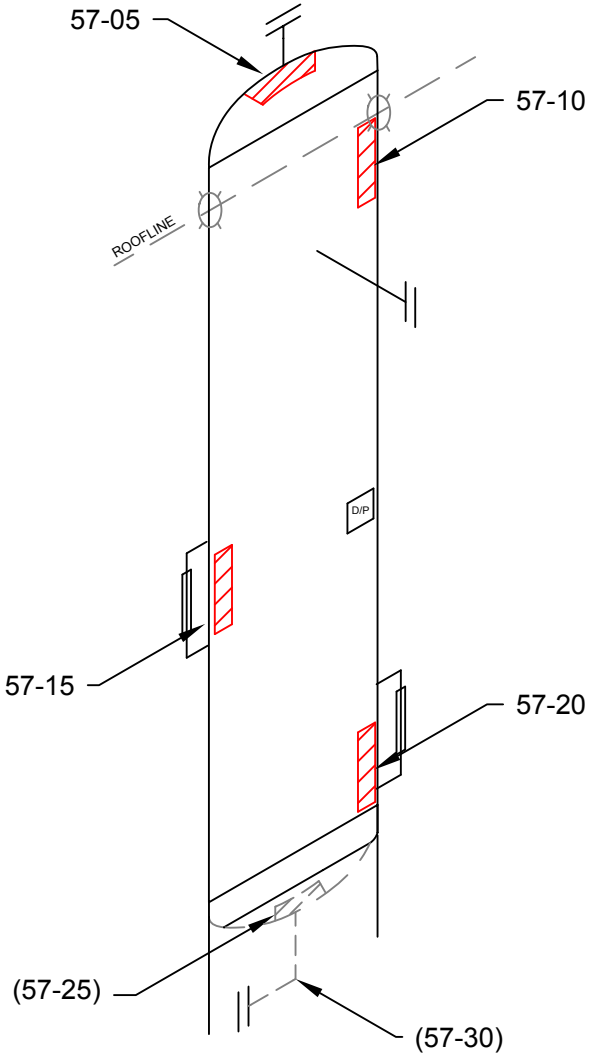
ITEM: **SEPARATOR** **A 0438986**



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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 #	**57**
CLIENT:	**CNRL**
LSD:	**08-31-073-09-W6M**
INSPECTOR :	RAJ KHAN
LOCATION :	VALHALLA
DISTRICT UNIT :	WEST COUNTY
BLDG/SKID :	SKD 0208
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 0438986**
CRN # :	N0293.2
SERIAL # :	V-2878A1
MANUFACTURER :	OPSCO
DATE BUILT :	1998
CLIENT ID / TAG :	-
M.A.W.P. :	1475 PSI
M.A.W.T. :	250 °F
JOINT EFFICIENCY/RT :	RT 1
STRESS RELIEVED :	YES
INSULATED :	NO
MANWAY :	NO

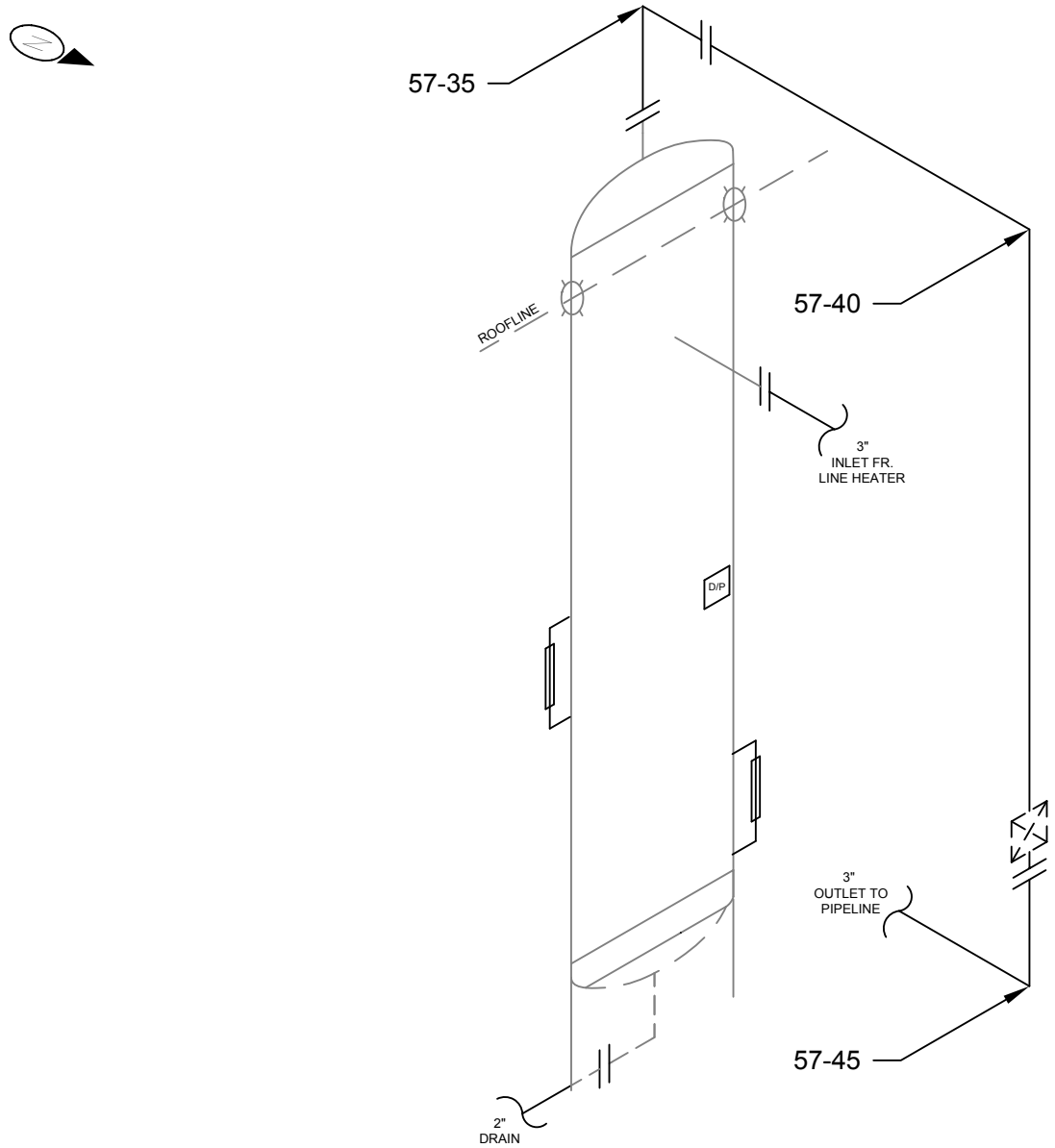
VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	24"	1.074"	SA-516-70	.125"
VESSEL SHELL	24"	1.125"	SA-516-70	.125"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

PROJECT: **C70099**

ITEM: **SEPARATOR - PIPING** A 0438986



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TECHNICIAN:

STEVE GILLINGHAM
SNT LEVEL II
CGSB 48.9712
LEVEL II # 11441

DATE: 01/28/11	**DWG #** 57A
CLIENT:	CNRL
LSD:	08-31-073-09-W6M
INSPECTOR :	RAJ KHAN
LOCATION :	VALHALLA
DISTRICT UNIT :	WEST COUNTY
BLDG/SKID :	SKD 0208
PROCESS :	SOUR
CODE :	ASME B31.3
SPECIFICATION :	AS PER ASME SE 797
TECHNIQUE :	UT 1-1, REV .1
METHOD :	UT CONTINUOUS / A SCAN
SURFACE COND :	PAINTED
SURFACE TEMP :	AMBIENT

PIPING INFORMATION

PIPING ID	SIZE	SCH	NOM	M.A.W.P. (VESSEL)	M.A.W.T. (VESSEL)	FLANGE RATING
57-35	3.5"	XS	.300"	1475 PSI	250 °F	-
57-40	"	"	"	"	"	"
57-45	"	"	"	"	"	"

COMMENTS:

PROJECT: C70099

ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

						Survey Date:	1/29/11
LSD:	08-31-073-09W6 Dwg: 57	Vessel Number:	A0438986	Manufacturer:	OPSCO	Inspector:	RAJ KHAN
District Unit:	WEST COUNTY	Vessel Name:	SEPARATOR	Serial Number:	V-2878A1	Process:	SOUR
Location:	VALHALLA	Year Built:	1998	Shell MAWP PSI:	1475 MAWT F: 250	Project #:	C70099
Skid:	SKD0208	Tag Number:	-	Tube MAWP PSI:	0 MAWT F: 0		
		CRN:	N0293.2	Vessel CA:	0.1250		

Band	Description			Readings 1	2	3	4	5	6	Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
57-05	Top	Head	**Baseline**	1.109	1.109	1.110	1.105	1.109	1.109	2006	1.109	1.105	1.0740	0.1250	0.8118	2012	2031
Shape	Ellipsoidal	Shell Side	**Previous**	1.109	1.109	1.110	1.105	1.109	1.109	2006	1.109	1.105	Comments-->				
OD	24		**Current**	1.109	1.069	1.110	1.105	1.109	1.109	2011	1.102	1.069					
Spec.	VIII Div 1								**ST Loss MPY**		0.007		OK				
Material	SA 516 - 70								**LT Loss MPY**		0.007						
57-10	Upper	Shell	**Baseline**	1.128	1.133	1.135	1.136	1.136	1.138	2006	1.134	1.128	1.1250	0.1250	0.8392	2012	2031
Shape	Cylindrical	Shell Side	**Previous**	1.128	1.133	1.135	1.136	1.136	1.138	2006	1.134	1.128	Comments-->				
OD	24		**Current**	1.128	1.133	1.135	1.136	1.136	1.138	2011	1.134	1.128					
Spec.	VIII Div 1								**ST Loss MPY**		0.000		OK				
Material	SA 516 - 70								**LT Loss MPY**		0.000						
57-15	Mid	Shell	**Baseline**	1.152	1.153	1.153	1.153	1.154	1.126	2006	1.149	1.126	1.1250	0.1250	0.8392	2012	2031
Shape	Cylindrical	Shell Side	**Previous**	1.152	1.153	1.153	1.153	1.154	1.126	2006	1.149	1.126	Comments-->				
OD	24		**Current**	1.152	1.153	1.153	1.141	1.136	1.126	2011	1.144	1.126					
Spec.	VIII Div 1								**ST Loss MPY**		0.000		OK				
Material	SA 516 - 70								**LT Loss MPY**		0.000						
57-20	Lower	Shell	**Baseline**	1.154	1.153	1.159	1.156	1.156	1.153	2006	1.155	1.153	1.1250	0.1250	0.8392	2012	2031
Shape	Cylindrical	Shell Side	**Previous**	1.154	1.153	1.159	1.156	1.156	1.153	2006	1.155	1.153	Comments-->				
OD	24		**Current**	1.154	1.153	1.159	1.156	1.156	1.153	2011	1.155	1.153					
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

						Survey Date:	1/29/11
LSD:	08-31-073-09W6 Dwg: 57	Vessel Number:	A0438986	Manufacturer:	OPSCO	Inspector:	RAJ KHAN
District Unit:	WEST COUNTY	Vessel Name:	SEPARATOR	Serial Number:	V-2878A1	Process:	SOUR
Location:	VALHALLA	Year Built:	1998	Shell MAWP PSI:	1475 MAWT F: 250	Project #:	C70099
Skid:	SKD0208	Tag Number:	-	Tube MAWP PSI:	0 MAWT F: 0		
		CRN:	N0293.2	Vessel CA:	0.1250		

Band	Description			Readings 1	2	3	4	5	6	Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
57-25	Bottom	Head	**Baseline**	1.105	1.107	1.106	1.086	1.092	1.089	2006	1.098	1.086	1.0740	0.1250	0.8118	2012	2031
Shape	Ellipsoidal	Shell Side	**Previous**	1.105	1.107	1.106	1.086	1.092	1.089	2006	1.098	1.086	Comments-->				
OD	24		**Current**	1.095	1.072	1.094	1.086	1.088	1.088	2011	1.087	1.072					
Spec.	VIII Div 1								**ST Loss MPY**		0.003		OK				
Material	SA 516 - 70								**LT Loss MPY**		0.003						
57-30	Drain	Nozzle	**Baseline**	0.294	0.294	0.291	0.287	0.294	0.294	2006	0.292	0.287	0.3430	0.1250	0.0768	2012	2031
Shape	90° Elbow	Shell Side	**Previous**	0.294	0.294	0.291	0.287	0.294	0.294	2006	0.292	0.287	Comments-->				
OD	2.375		**Current**	0.293	0.290	0.285	0.275	0.281	0.280	2011	0.284	0.275					
Spec.	VIII Div 1								**ST Loss MPY**		0.002		OK				
Material	SA 234 - WPB								**LT Loss MPY**		0.002						
57-35		Piping	**Baseline**	0.290	0.293	0.291	0.290	0.291	0.295	2006	0.292	0.290	0.3000	0.0375	0.1245	2012	2031
Shape	90° Elbow	Shell Side	**Previous**	0.290	0.293	0.291	0.290	0.291	0.295	2006	0.292	0.290	Comments-->				
OD	3.5		**Current**	0.284	0.278	0.270	0.282	0.276	0.293	2011	0.281	0.270					
Spec.	B31.3								**ST Loss MPY**		0.004		OK				
Material	A 234 - WPB								**LT Loss MPY**		0.004						
57-40		Piping	**Baseline**	0.279	0.278	0.274	0.274	0.277	0.284	2006	0.278	0.274	0.3000	0.0375	0.1245	2012	2031
Shape	90° Elbow	Shell Side	**Previous**	0.279	0.278	0.274	0.274	0.277	0.284	2006	0.278	0.274	Comments-->				
OD	3.5		**Current**	0.275	0.265	0.271	0.263	0.268	0.266	2011	0.268	0.263					
Spec.	B31.3								**ST Loss MPY**		0.002		OK				
Material	A 234 - WPB								**LT Loss MPY**		0.002						

ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

						Survey Date:	1/29/11
LSD:	08-31-073-09W6 Dwg: 57	Vessel Number:	A0438986	Manufacturer:	OPSCO	Inspector:	RAJ KHAN
District Unit:	WEST COUNTY	Vessel Name:	SEPARATOR	Serial Number:	V-2878A1	Process:	SOUR
Location:	VALHALLA	Year Built:	1998	Shell MAWP PSI:	1475 MAWT F: 250	Project #:	C70099
Skid:	SKD0208	Tag Number:	-	Tube MAWP PSI:	0 MAWT F: 0		
		CRN:	N0293.2	Vessel CA:	0.1250		

Band	Description			Readings 1	2	3	4	5	6	Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
57-45		Piping	**Baseline**	0.293	0.295	0.293	0.295	0.295	0.293	2006	0.294	0.293	0.3000	0.0375	0.1245	2012	2031
Shape	90° Elbow	Shell Side	**Previous**	0.293	0.295	0.293	0.295	0.295	0.293	2006	0.294	0.293	Comments-->				
OD	3.5		**Current**	0.293	0.290	0.283	0.281	0.281	0.290	2011	0.286	0.281					
Spec.	B31.3								**ST Loss MPY**		0.002		OK				
Material	A 234 - WPB								**LT Loss MPY**		0.002						