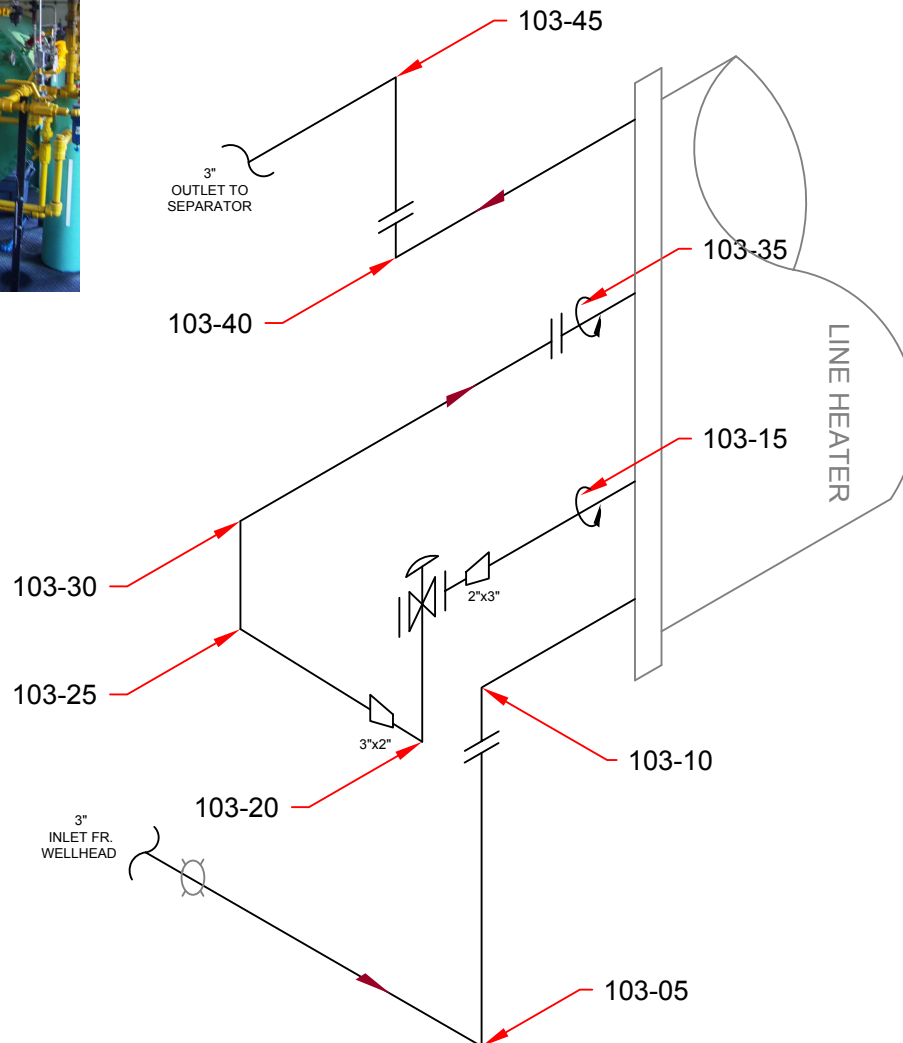


A 3138696



STEVE GILLINGHAM
SNT LEVEL II
CGSB 48.9712
LEVEL II # 11441

DWG # 103A

SURFACE TEMP : AMBIENT

PIPING INFORMATION

[illegible]

PROJECT:
C70099



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-33-074-11W6 Dwg: 103 Vessel Number: A3138696 Manufacturer: OPSCO Survey Date: 1/31/11
District Unit: WEST COUNTY Vessel Name: LINE HEATER - PIPING Serial Number: HC.42.2000.231.AB Inspector: RAJ KHAN
Location: VALHALLA Year Built: 1995 Shell MAWP PSI: 4695 MAWT F: 250 Process: SOUR
Skid: SKD0222 Tag Number: - Tube MAWP PSI: 2220 MAWT F: 250 Project #: C70099
CRN: N0291.2/N0292.2 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								
103-05	Piping	Baseline		0.423	0.410	0.413	0.413	0.424	0.439	2006	0.420	0.410	0.4380	0.0548	0.3677	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.423	0.410	0.413	0.413	0.424	0.439	2006	0.420	0.410	Comments-->				
OD	3.5		Current	0.423	0.410	0.413	0.413	0.424	0.420	2011	0.417	0.410					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 234 - WPB			LT Loss MPY							0.000						
103-10	Piping	Baseline		0.372	0.369	0.373	0.379	0.378	0.386	2006	0.376	0.369	0.4380	0.0548	0.3677	2012	2031
Shape	90° Elbow	Shell Side	Previous	0.372	0.369	0.373	0.379	0.378	0.386	2006	0.376	0.369	Comments-->				
OD	3.5		Current	0.372	0.369	0.373	0.379	0.378	0.379	2011	0.375	0.369					
Spec.	B31.3			ST Loss MPY							0.000		Caution				
Material	A 234 - WPB			LT Loss MPY							0.000						
103-15	Piping	Baseline		0.455	0.452	0.449	0.454	0.450	0.460	2006	0.453	0.449	0.4380	0.0548	0.3677	2012	2031
Shape	Cylindrical	Shell Side	Previous	0.455	0.452	0.449	0.454	0.450	0.460	2006	0.453	0.449	Comments-->				
OD	3.5		Current	0.455	0.452	0.449	0.454	0.450	0.460	2011	0.453	0.449					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 106 - B			LT Loss MPY							0.000						
103-20	Piping	Baseline		0.304	0.306	0.309	0.304	0.303	0.301	2006	0.305	0.301	0.3430	0.0429	0.1249	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.304	0.306	0.309	0.304	0.303	0.301	2006	0.305	0.301	Comments-->				
OD	2.375		Current	0.304	0.306	0.309	0.304	0.303	0.301	2011	0.305	0.301					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 234 - WPB			LT Loss MPY							0.000						



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-33-074-11W6 Dwg: 103 Vessel Number: A3138696 Manufacturer: OPSCO Survey Date: 1/31/11
District Unit: WEST COUNTY Vessel Name: LINE HEATER - PIPING Serial Number: HC.42.2000.231.AB Inspector: RAJ KHAN
Location: VALHALLA Year Built: 1995 Shell MAWP PSI: 4695 MAWT F: 250 Process: SOUR
Skid: SKD0222 Tag Number: - Tube MAWP PSI: 2220 MAWT F: 250 Project #: C70099
CRN: N0291.2/N0292.2 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								
103-25	Piping	Baseline		0.275	0.271	0.270	0.271	0.274	0.279	2006	0.273	0.270	0.3000	0.0375	0.1840	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.275	0.271	0.270	0.271	0.274	0.279	2006	0.273	0.270	Comments-->				
OD	3.5		Current	0.275	0.271	0.270	0.271	0.270	0.273	2011	0.272	0.270					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 234 - WPB			LT Loss MPY							0.000						
103-30	Piping	Baseline		0.278	0.276	0.274	0.273	0.276	0.278	2006	0.276	0.273	0.3000	0.0375	0.1840	2012	2031
Shape	90° Elbow	Tube Side	Previous	0.278	0.276	0.274	0.273	0.276	0.278	2006	0.276	0.273	Comments-->				
OD	3.5		Current	0.278	0.276	0.273	0.271	0.271	0.275	2011	0.274	0.271					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 234 - WPB			LT Loss MPY							0.000						
103-35	Piping	Baseline		0.284	0.285	0.288	0.286	0.284	0.286	2006	0.286	0.284	0.3000	0.0375	0.1840	2012	2031
Shape	Cylindrical	Tube Side	Previous	0.284	0.285	0.288	0.286	0.284	0.286	2006	0.286	0.284	Comments-->				
OD	3.5		Current	0.284	0.285	0.288	0.286	0.284	0.286	2011	0.286	0.284					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 106 - B			LT Loss MPY							0.000						
103-40	Piping	Baseline		0.287	0.286	0.286	0.287	0.291	0.293	2006	0.288	0.286	0.3000	0.0375	0.1840	2012	2031
Shape	45° Elbow	Tube Side	Previous	0.287	0.286	0.286	0.287	0.291	0.293	2006	0.288	0.286	Comments-->				
OD	3.5		Current	0.287	0.286	0.286	0.285	0.290	0.290	2011	0.287	0.285					
Spec.	B31.3			ST Loss MPY							0.000		OK				
Material	A 234 - WPB			LT Loss MPY							0.000						



ULTRASONIC CORROSION SURVEY

Survey Name: CNRL

LSD: 09-33-074-11W6 Dwg: 103 Vessel Number: A3138696 Manufacturer: OPSCO Survey Date: 1/31/11
District Unit: WEST COUNTY Vessel Name: LINE HEATER - PIPING Serial Number: HC.42.2000.231.AB Inspector: RAJ KHAN
Location: VALHALLA Year Built: 1995 Shell MAWP PSI: 4695 MAWT F: 250 Process: SOUR
Skid: SKD0222 Tag Number: - Tube MAWP PSI: 2220 MAWT F: 250 Project #: C70099
CRN: N0291.2/N0292.2 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								
103-45	Piping	Baseline		0.277	0.270	0.267	0.264	0.258	0.259	2006	0.266	0.258	0.3000	0.0375	0.1840	2012	2031
Shape	45° Elbow	Tube Side	Previous	0.277	0.270	0.267	0.264	0.258	0.259	2006	0.266	0.258	Comments-->				
OD	3.5		Current	0.264	0.260	0.267	0.264	0.258	0.259	2011	0.262	0.258					
Spec.	B31.3								ST Loss MPY		0.000		Caution				
Material	A 234 - WPB								LT Loss MPY		0.000						