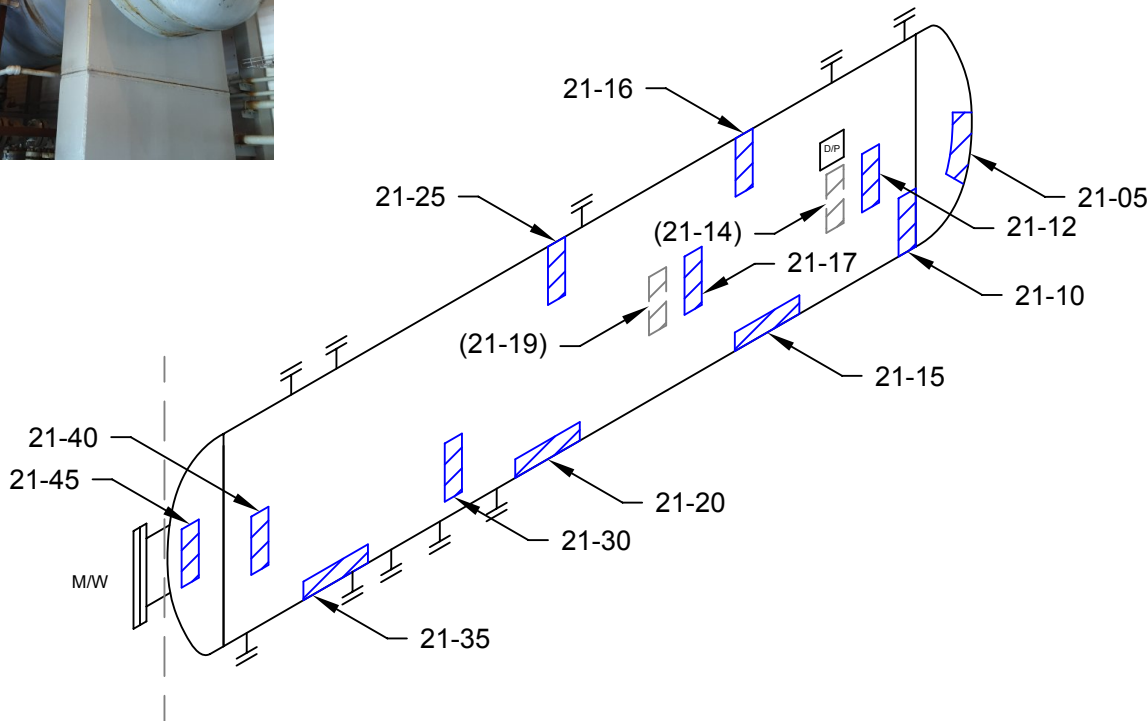


ITEM:

INLET SEPARATOR

483171



ASSET INTEGRITY
SYLVAN LAKE, AB (403) 887-3562
PIPELINE INTEGRITY
WHITECOURT, AB (780) 778-5584
NON-DESTRUCTIVE TESTING
GRANDE PRAIRIE, AB (780) 518-9757

TECHNICIAN:

JORDAN BRENTON
SNT LEVEL I
SNT-TC-1A

DATE: 2/02/16

DWG: 21

CLIENT: HUSKY ENERGY

LSD: 06-22-057-20-W5M

INSPECTOR : KEITH COURNEYEA

LOCATION : PINE CREEK

DISTRICT UNIT : NORTHERN ALBERTA

BLDG/SKID : D-11

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 # : 483171

CRN # : P8150.2

SERIAL # : 7751-03

MANUFACTURER : NATCO CANADA LTD.

DATE BUILT : 2002

CLIENT ID / TAG : 66172348

M.A.W.P : 1480 PSI

M.A.W.T. : 100° F

JOINT EFFICIENCY/RT : RT 1

STRESS RELIEVED : YES

INSULATED : NO

MANWAY : YES

VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	54"	2.252"	SA-516-70	.125"
VESSEL SHELL	54"	2.252"	SA-516-70	.125"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

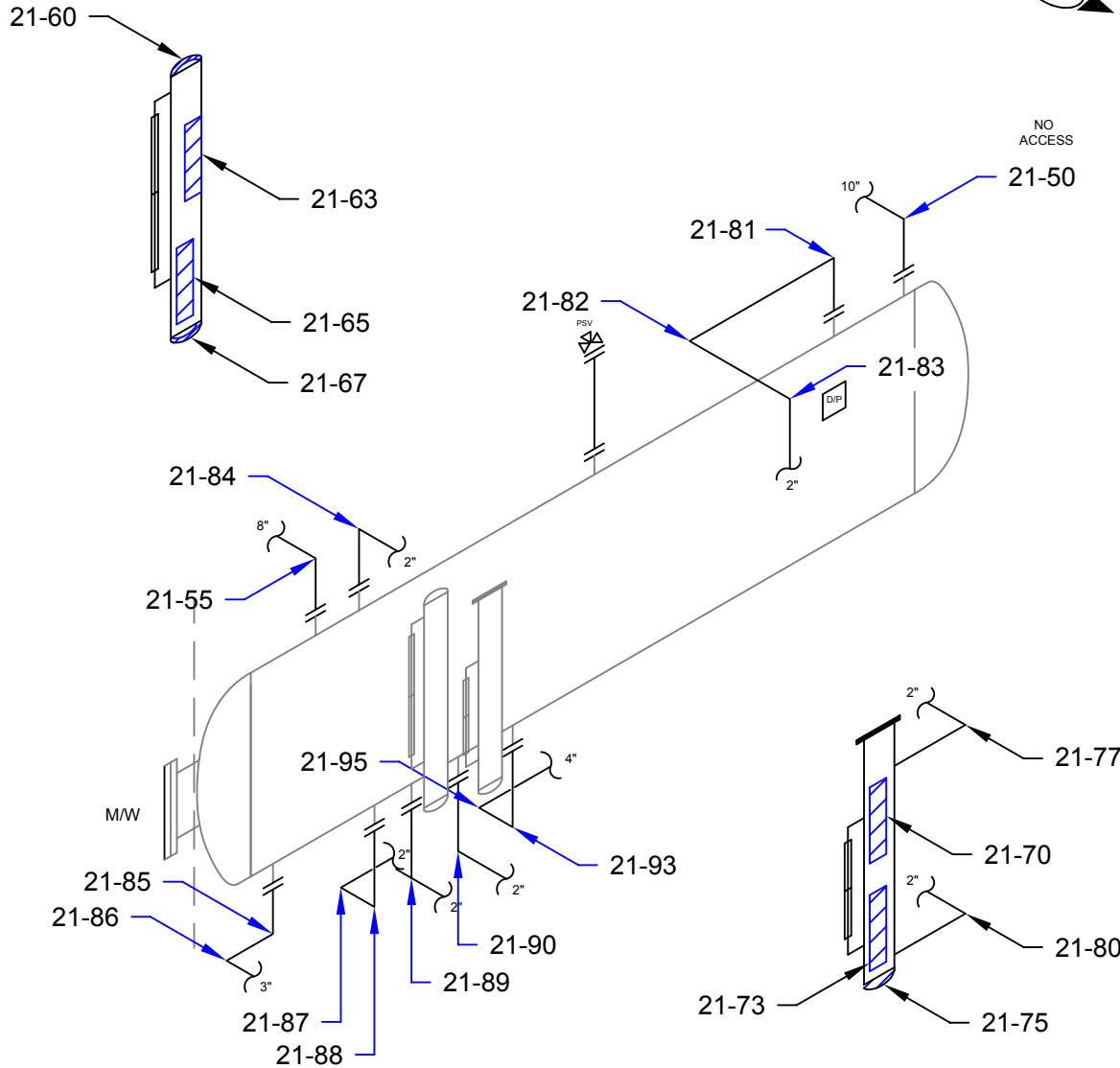
PROJECT:

C52186

ITEM:

INLET SEPARATOR - PIPING

483171



MWS
 MOUNTAIN WEST SERVICES
 ASSET INTEGRITY SYLVAN LAKE, AB (403) 887-3562
 PIPELINE INTEGRITY WHITECOURT, AB (780) 778-5584
 NON-DESTRUCTIVE TESTING GRANDE PRAIRIE, AB (780) 518-9757

TECHNICIAN:
JORDAN BRENTON
 SNT LEVEL I
 SNT-TC-1A

DATE: 2/02/16	DWG # 21A
CLIENT:	HUSKY ENERGY
LSID:	06-22-057-20-W5M
INSPECTOR :	KEITH COURNEYEA
LOCATION :	PINE CREEK
DISTRICT UNIT :	NORTHERN ALBERTA
BLDG/SKID :	D-11
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
21-50	10.75"	80	.594"	1480 PSI	100°F	-
21-55	8.625"	XS	.500"	"	"	"
21-60	4.50"	40	.237"	"	"	"
21-63	"	"	"	"	"	"
21-65	"	"	"	"	"	"
21-67	"	"	"	"	"	"
21-70	"	"	"	"	"	"
21-73	"	"	"	"	"	"
21-75	"	"	"	"	"	"
21-77	2.375"	XS	.218"	"	"	"
21-80	"	"	"	"	"	"
21-81-82	"	"	"	"	"	"
21-83-84	"	"	"	"	"	"
21-85-86	3.50"	40	.216"	"	"	"
21-87-88	2.375"	XS	.218"	"	"	"
21-89-90	"	"	"	"	"	"
21-93-95	4.50"	40	.237"	"	"	"

COMMENTS:
 21-55 UNSAFE ACCESS DUE TO HEIGHT RESTRICTIONS

PROJECT:
C52186



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480 MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0 MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250	

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-05	Head	Baseline	64.5	64.9	65	65	65.3	65.3	2016	65	64.5	57.2	3.2	46.9	2017	2036	
Shape	Ellipsoidal	shell Side	Previous	Comments-->													
OD	1371.6	Current	64.5	64.9	65	65	65.3	65.3	2016	65	64.5						
Spec.	VIII Div 1			ST Loss MPY						OK							
Material	SA 516 - 70			LT Loss MPY						0							
21-10	Shell	Baseline	59.2	59	59	59.1	58.8	58.7	2016	59	58.7	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.2	59	59	59.1	58.8	58.7	2016	59	58.7						
Spec.	VIII Div 1			ST Loss MPY						OK							
Material	SA 516 - 70			LT Loss MPY						0							
21-12	Shell	Baseline	59.4	59.3	59.3	59.3	59.3	59.4	2016	59.3	59.3	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.4	59.3	59.3	59.3	59.3	59.4	2016	59.3	59.3						
Spec.	VIII Div 1			ST Loss MPY						OK							
Material	SA 516 - 70			LT Loss MPY						0							
21-14	Shell	Baseline	59.4	59.4	59.4	59.4	59.4	59.4	2016	59.4	59.4	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.4	59.4	59.4	59.4	59.4	59.4	2016	59.4	59.4						
Spec.	VIII Div 1			ST Loss MPY						OK							
Material	SA 516 - 70			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480 MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0 MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250	

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-15	Shell	Baseline	59.3	59.3	59.5	59.4	59.4	59.3	2016	59.4	59.3	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.3	59.3	59.5	59.4	59.4	59.3	2016	59.4	59.3						
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 516 - 70			LT Loss MPY						0							
21-16	Shell	Baseline	59.9	59.9	59.8	59.7	59.7	59.6	2016	59.8	59.6	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.9	59.9	59.8	59.7	59.7	59.6	2016	59.8	59.6						
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 516 - 70			LT Loss MPY						0							
21-17	Shell	Baseline	59.4	59.4	59.4	59.3	59.4	59.4	2016	59.4	59.3	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.4	59.4	59.4	59.3	59.4	59.4	2016	59.4	59.3						
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 516 - 70			LT Loss MPY						0							
21-19	Shell	Baseline	59.4	59.4	59.5	59.4	59.4	59.4	2016	59.4	59.4	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.4	59.4	59.5	59.4	59.4	59.4	2016	59.4	59.4						
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 516 - 70			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-20	Shell	Baseline	59.3	59.3	59.2	59.3	59.2	59.1	2016	59.2	59.1	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.3	59.3	59.2	59.3	59.2	59.1	2016	59.2	59.1						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							
21-25	Shell	Baseline	59.1	59.4	59.9	59.4	59.4	59.4	2016	59.5	59.1	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.1	59.4	59.9	59.4	59.4	59.4	2016	59.5	59.1						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							
21-30	Shell	Baseline	59.3	59.2	59.2	59.2	59.2	59.2	2016	59.2	59.2	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.3	59.2	59.2	59.2	59.2	59.2	2016	59.2	59.2						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							
21-35	Shell	Baseline	59.4	59.4	59.2	59.5	59.2	59.3	2016	59.3	59.2	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	59.4	59.4	59.2	59.5	59.2	59.3	2016	59.3	59.2						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480 MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0 MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250	

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-40	Shell	Baseline	58.4	58.3	58.8	58.7	59.2	58.4	2016	58.6	58.3	57.2	3.2	48.7	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	1371.6	Current	58.4	58.3	58.8	58.7	59.2	58.4	2016	58.6	58.3						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							
21-45	Head	Baseline	64.3	64.2	64.4	64.5	64.7	64.4	2016	64.4	64.2	57.2	3.2	46.9	2017	2036	
Shape	Ellipsoidal	shell Side	Previous	Comments-->													
OD	1371.6	Current	64.3	64.2	64.4	64.5	64.7	64.4	2016	64.4	64.2						
Spec.	VIII Div 1			ST Loss MPY									OK				
Material	SA 516 - 70			LT Loss MPY						0							
21-55	Piping	Baseline	12.3	12.5	12.5	12.8	12.9	12.9	2016	12.7	12.3	12.7	1.6	7.8	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	219.1	Current	12.3	12.5	12.5	12.8	12.9	12.9	2016	12.7	12.3						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-60	Piping	Baseline	5	5.1	5.1	5.1	5.1	5.2	2016	5.1	5	6	0.8	4.1	2017	2036	
Shape	Ellipsoidal	shell Side	Previous	Comments-->													
OD	114.3	Current	5	5.1	5.1	5.1	5.1	5.2	2016	5.1	5						
Spec.	B31.3			ST Loss MPY									Caution				
Material	A 234 - WPB			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description		Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date	
			1	2	3	4	5	6									
21-63	Piping	Baseline	6.1	6.1	6.1	6.1	6.1	5.9	2016	6.1	5.9	6	0.8	4.1	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	114.3	Current	6.1	6.1	6.1	6.1	6.1	5.9	2016	6.1	5.9						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0							
21-65	Piping	Baseline	6	6	6	5.9	5.9	5.9	2016	6	5.9	6	0.8	4.1	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	114.3	Current	6	6	6	5.9	5.9	5.9	2016	6	5.9						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0							
21-67	Piping	Baseline	5.3	5.3	5.3	5.3	5.3	5.3	2016	5.3	5.3	6	0.8	4.1	2017	2036	
Shape	Ellipsoidal	shell Side	Previous	Comments-->													
OD	114.3	Current	5.3	5.3	5.3	5.3	5.3	5.3	2016	5.3	5.3						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0							
21-70	Piping	Baseline	5.9	5.9	5.9	6	5.9	5.9	2016	5.9	5.9	6	0.8	4.1	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	114.3	Current	5.9	5.9	5.9	6	5.9	5.9	2016	5.9	5.9						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description		Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date	
			1	2	3	4	5	6									
21-73	Piping	Baseline	5.8	5.9	5.8	5.8	5.8	5.8	2016	5.8	5.8	6	0.8	4.1	2017	2036	
Shape	Cylindrical	shell Side	Previous	Comments-->													
OD	114.3	Current	5.8	5.9	5.8	5.8	5.8	5.8	2016	5.8	5.8						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 106 - B			LT Loss MPY						0							
21-75	Piping	Baseline	5.3	5.3	5.3	5.3	5.3	5.3	2016	5.3	5.3	6	0.8	4.1	2017	2036	
Shape	Ellipsoidal	shell Side	Previous	Comments-->													
OD	114.3	Current	5.3	5.3	5.3	5.3	5.3	5.3	2016	5.3	5.3						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0							
21-77	Piping	Baseline	4.9	5.1	4.9	5	5.1	4.9	2016	5	4.9	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	4.9	5.1	4.9	5	5.1	4.9	2016	5	4.9						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0							
21-80	Piping	Baseline	5.2	5.2	5.3	5.6	5.4	5.4	2016	5.3	5.2	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.2	5.2	5.3	5.6	5.4	5.4	2016	5.3	5.2						
Spec.	B31.3			ST Loss MPY						OK							
Material	A 234 - WPB			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-81	Piping	Baseline	5.5	5.5	5.3	5.3	5.3	5	2016	5.3	5	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.5	5.5	5.3	5.3	5.3	5	2016	5.3	5						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-82	Piping	Baseline	5.1	5.2	5	5	5	5	2016	5	5	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.1	5.2	5	5	5	5	2016	5	5						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-83	Piping	Baseline	5	5	4.9	5.1	4.9	5.1	2016	5	4.9	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5	5	4.9	5.1	4.9	5.1	2016	5	4.9						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-84	Piping	Baseline	5.7	5.6	5.7	5.6	5.7	5.6	2016	5.6	5.6	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.7	5.6	5.7	5.6	5.7	5.6	2016	5.6	5.6						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-85	Piping	Baseline	5.2	5.2	5.2	5.1	5.4	5.4	2016	5.2	5.1	5.5	0.7	3.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	88.9	Current	5.2	5.2	5.2	5.1	5.4	5.4	2016	5.2	5.1						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-86	Piping	Baseline	5.6	5.6	5.5	5.5	5.3	5.3	2016	5.5	5.3	5.5	0.7	3.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	88.9	Current	5.6	5.6	5.5	5.5	5.3	5.3	2016	5.5	5.3						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-87	Piping	Baseline	5.3	5.2	5.1	5.2	5.2	5.2	2016	5.2	5.1	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.3	5.2	5.1	5.2	5.2	5.2	2016	5.2	5.1						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							
21-88	Piping	Baseline	5.2	5.4	5.4	5.4	5.2	5.2	2016	5.3	5.2	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	5.2	5.4	5.4	5.4	5.2	5.2	2016	5.3	5.2						
Spec.	B31.3			ST Loss MPY									OK				
Material	A 234 - WPB			LT Loss MPY						0							



ULTRASONIC CORROSION SURVEY (METRIC)

Survey Name: HUSKY ENERGY

LSD:	06-22-057-20W5	Dwg: 21	Vessel Number: 483171	Manufacturer: NATCO CANADA LTD.	Survey Date: 2/02/16	
District Unit:	NORTHERN ALBERTA		Vessel Name: INLET SEPARATOR	Serial Number: 7751-03	Inspector: KEITH COURNEYEA	
Location:	PINE CREEK		Year Built: 2002	Shell MAWP PSI: 1480	MAWT F: 100	Process: SOUR
Skid:	D-11		Tag Number: 66172348	Tube MAWP PSI: 0	MAWT F: 0	Project #: C52186
			CRN: P8150.2	Vessel CA: 0.1250		

Band	Description			Readings						Year	Avg mm	Min mm	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
21-89	Piping	Baseline	4.9	4.9	5	5.1	5.2	5.2	2016	5.1	4.9	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	4.9	4.9	5	5.1	5.2	5.2	2016	5.1	4.9						
Spec.	B31.3			ST Loss MPY													
Material	A 234 - WPB			LT Loss MPY						0							
21-90	Piping	Baseline	4.9	4.9	4.9	4.9	5.1	5.2	2016	5	4.9	5.5	0.7	2.2	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	60.3	Current	4.9	4.9	4.9	4.9	5.1	5.2	2016	5	4.9						
Spec.	B31.3			ST Loss MPY													
Material	A 234 - WPB			LT Loss MPY						0							
21-93	Piping	Baseline	6	6.1	6	6.1	6.1	5.9	2016	6.1	5.9	6	0.8	4.1	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	114.3	Current	6	6.1	6	6.1	6.1	5.9	2016	6.1	5.9						
Spec.	B31.3			ST Loss MPY													
Material	A 234 - WPB			LT Loss MPY						0							
21-95	Piping	Baseline	5.5	5.6	5.6	5.7	5.6	5.5	2016	5.6	5.5	6	0.8	4.1	2017	2036	
Shape	90° Elbow	shell Side	Previous	Comments-->													
OD	114.3	Current	5.5	5.6	5.6	5.7	5.6	5.5	2016	5.6	5.5						
Spec.	B31.3			ST Loss MPY													
Material	A 234 - WPB			LT Loss MPY						0							