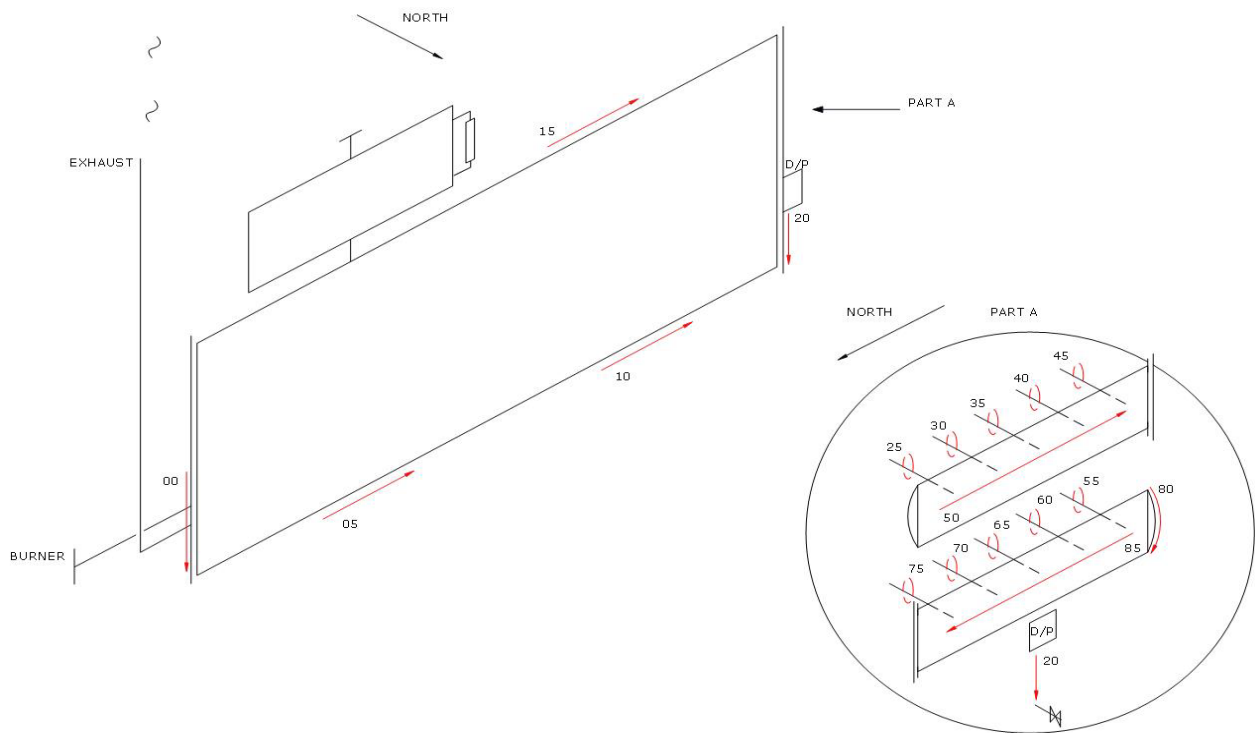


Location Name:	ANSELL	LSD:	03-32-050-19W5
Jur #:	A0625503	Equipment/Tag No.	V-240
Equipment Description:	LINE HEATER		
Manufacturer:	NWP INDUSTRIES INC.		
Serial Number:	NWP-08526-001-A	CRN:	V9651.2
Shell MAWP:	1480	PSI	Shell Design Temp: 200 °F
Tube MAWP:		PSI	Tube Design Temp: °F
Shell Material:	Unknown	Head Material:	Unknown
Shell Thickness:		mm	Head Thickness: mm
Corrosion Allowance:	0	mm	Date Built: 2013
Size:	1371.6	mm	Pipe / Rolled Plate:
RT:	RT-10%		

NOTES: SAP1000018239 54 X 192 1.5 MMBTU 18" FIRETUBE







Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: SEPT 19TH, 2015

Inspector: W. Gill

LSD:	03-32-050-19W5	Area:	ANSELL	Location:	FIELD
Jur #:	A0625503	Tag Number:	V-240	Vessel Name:	LINE HEATER
CRN:	V9651.2	Year Built:	2013	Serial Number:	NWP-08526-001-A
RT:	RT-10%	Vessel CA:	0.000 mm	Manufacturer:	NWP INDUSTRIES INC.
		Shell MAWP:	1480 PSI	Tube MAWP:	MAWTF: °F
			200 °F		Pipe/Plate
TML Description		Baseline		Material:	Unknown
00 HEAD		2015	Flag	CA	Nominal T Min
Shape:	Flat	Min		0.000	STCR mm/yr
OD:	1371.6	Avg			0.000
Spec:	ASME VIII Div.1	Comments:			Remaining Life:
					Retirement Date:
TML Description		Baseline		Material:	Unknown
05 SHELL		2015	Flag	CA	Nominal T Min
Shape:	Cylindrical	Min		0.000	STCR mm/yr
OD:	1371.6	Avg			0.000
Spec:	ASME VIII Div.1	Comments:			Remaining Life:
					Retirement Date:
TML Description		Baseline		Material:	Unknown
10 SHELL		2015	Flag	CA	Nominal T Min
Shape:	Cylindrical	Min		0.000	STCR mm/yr
OD:	1371.6	Avg			0.000
Spec:	ASME VIII Div.1	Comments:			Remaining Life:
					Retirement Date:
TML Description		Baseline		Material:	Unknown
15 SHELL		2015	Flag	CA	Nominal T Min
Shape:	Cylindrical	Min		0.000	STCR mm/yr
OD:	1371.6	Avg			0.000
Spec:	ASME VIII Div.1	Comments:			Remaining Life:
					Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: SEPT 19TH, 2015

Inspector: W. Gill

LSD: 03-32-050-19W5	Area: ANSELL	Location: FIELD
Jur #: A0625503	Tag Number: V-240	Vessel Name: LINE HEATER
CRN: V9651.2	Year Built: 2013	Serial Number: NWP-08526-001-A
RT: RT-10%	Vessel CA: 0.000 mm	Manufacturer: NWP INDUSTRIES INC.
	Shell MAWP: 1480 PSI	Tube MAWP: PSI
	MAWTF: 200 °F	MAWTF: °F
		Pipe/Plate 0
TML Description	Baseline	Material: Unknown
20 HEAD	2015	Flag
Shape: Flat	Min 9.53	CA 0.000
OD: 1371.6	Avg 9.63	Nominal
Spec: ASME VIII Div.1	Comments:	T Min
		STCR mm/yr
		LTCR mm/yr
		Remaining Life:
		Retirement Date:
TML Description	Baseline	Material: SA-106-B
25 NOZZLE	2015	Flag
Shape: 360° Circ	Min 8.41	CA 1.070
OD: 114.3	Avg 8.64	Nominal 8.560
Spec: ASME VIII Div.1	Comments: ASSUMED NOMINAL	T Min
		STCR mm/yr
		LTCR mm/yr
		Remaining Life:
		Retirement Date:
TML Description	Baseline	Material: SA-106-B
30 NOZZLE	2015	Flag
Shape: 360° Circ	Min 8.31	CA 1.070
OD: 114.3	Avg 8.56	Nominal 8.560
Spec: ASME VIII Div.1	Comments: ASSUMED NOMINAL	T Min
		STCR mm/yr
		LTCR mm/yr
		Remaining Life:
		Retirement Date:
TML Description	Baseline	Material: SA-106-B
35 NOZZLE	2015	Flag
Shape: 360° Circ	Min 8.33	CA 1.070
OD: 114.3	Avg 8.53	Nominal 8.560
Spec: ASME VIII Div.1	Comments: ASSUMED NOMINAL	T Min
		STCR mm/yr
		LTCR mm/yr
		Remaining Life:
		Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: SEPT 19TH, 2015

Inspector: W. Gill

LSD:	03-32-050-19W5	Area:	ANSELL	Location:	FIELD
Jur #:	A0625503	Tag Number:	V-240	Vessel Name:	LINE HEATER
CRN:	V9651.2	Year Built:	2013	Serial Number:	NWP-08526-001-A
RT:	RT-10%	Vessel CA:	0.000 mm	Manufacturer:	NWP INDUSTRIES INC.
		Shell MAWP:	1480 PSI	Tube MAWP:	MAWTF: 200 °F
					Pipe/Plate
					0
TML Description		Baseline		Material: SA-106-B	
40	NOZZLE	2015	Flag	CA	Nominal
Shape:	360° Circ	Min	8.36	7.490	1.070
OD:	114.3	Avg	8.69		8.560
Spec:	ASME VIII Div.1	Comments:	ASSUMED NOMINAL		
				T Min	STCR mm/yr
					0.000
				LTCR mm/yr	0.102
				Remaining Life:	
				Retirement Date:	
TML Description		Baseline		Material: SA-106-B	
45	NOZZLE	2015	Flag	CA	Nominal
Shape:	360° Circ	Min	8.20	7.490	1.070
OD:	114.3	Avg	8.56		8.560
Spec:	ASME VIII Div.1	Comments:	ASSUMED NOMINAL		
				T Min	STCR mm/yr
					0.000
				LTCR mm/yr	0.178
				Remaining Life:	
				Retirement Date:	
TML Description		Baseline		Material: SA-106-B	
50	PIPING	2015	Flag	CA	Nominal
Shape:	Straight Pipe	Min	14.96	13.179	1.883
OD:	273.05	Avg	15.29		15.062
Spec:	ASME B31.3	Comments:	ASSUMED NOMINAL		
				T Min	STCR mm/yr
					0.000
				LTCR mm/yr	0.051
				Remaining Life:	
				Retirement Date:	
TML Description		Baseline		Material: SA-106-B	
55	NOZZLE	2015	Flag	CA	Nominal
Shape:	360° Circ	Min	8.43	7.490	1.070
OD:	114.3	Avg	8.69		8.560
Spec:	ASME VIII Div.1	Comments:	ASSUMED NOMINAL		
				T Min	STCR mm/yr
					0.000
				LTCR mm/yr	0.063
				Remaining Life:	
				Retirement Date:	



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: SEPT 19TH, 2015

Inspector: W. Gill

LSD:	03-32-050-19W5	Area:	ANSELL	Location:	FIELD
Jur #:	A0625503	Tag Number:	V-240	Vessel Name:	LINE HEATER
CRN:	V9651.2	Year Built:	2013	Serial Number:	NWP-08526-001-A
RT:	RT-10%	Vessel CA:	0.000 mm	Manufacturer:	NWP INDUSTRIES INC.
		Shell MAWP:	1480 PSI	Tube MAWP:	MAWTF: °F
			MAWTF: 200 °F		Pipe/Plate 0
TML Description		Baseline			Material: SA-106-B
60 NOZZLE		2015	Flag	CA	Nominal T Min
Shape: 360° Circ	Min	8.38	7.490	1.070	8.560
OD: 114.3	Avg	8.74			
Spec: ASME VIII Div.1	Comments:	ASSUMED NOMINAL			STCR mm/yr
					0.000
					LTCCR mm/yr
					0.089
					Remaining Life:
					Retirement Date:
TML Description		Baseline			Material: SA-106-B
65 NOZZLE		2015	Flag	CA	Nominal T Min
Shape: 360° Circ	Min	8.51	7.490	1.070	8.560
OD: 114.3	Avg	8.74			
Spec: ASME VIII Div.1	Comments:	ASSUMED NOMINAL			STCR mm/yr
					0.000
					LTCCR mm/yr
					0.025
					Remaining Life:
					Retirement Date:
TML Description		Baseline			Material: SA-106-B
70 NOZZLE		2015	Flag	CA	Nominal T Min
Shape: 360° Circ	Min	8.38	7.490	1.070	8.560
OD: 114.3	Avg	8.64			
Spec: ASME VIII Div.1	Comments:	ASSUMED NOMINAL			STCR mm/yr
					0.000
					LTCCR mm/yr
					0.089
					Remaining Life:
					Retirement Date:
TML Description		Baseline			Material: SA-106-B
75 NOZZLE		2015	Flag	CA	Nominal T Min
Shape: 360° Circ	Min	8.41	7.490	1.070	8.560
OD: 114.3	Avg	8.76			
Spec: ASME VIII Div.1	Comments:	ASSUMED NOMINAL			STCR mm/yr
					0.000
					LTCCR mm/yr
					0.076
					Remaining Life:
					Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: SEPT 19TH, 2015

Inspector: W. Gill

LSD:	03-32-050-19W5	Area:	ANSELL	Location:	FIELD
Jur #:	A0625503	Tag Number:	V-240	Vessel Name:	LINE HEATER
CRN:	V9651.2	Year Built:	2013	Serial Number:	NWP-08526-001-A
RT:	RT-10%	Vessel CA:	0.000 mm	Manufacturer:	NWP INDUSTRIES INC.
		Shell MAWP:	1480 PSI	MAWTF:	200 °F
				Tube MAWP:	PSI
					°F
					Pipe/Plate
					0
TML Description			Baseline	Material: A-234-WPB	
80	PIPING	2015		Flag	CA
				Nominal	T Min
Shape:	Ellipsoidal	Min	13.59	13.179	1.883
				15.062	
OD:	273.05	Avg	14.15		
Spec:	ASME B31.3	Comments:			
TML Description			Baseline	Material: SA-106-B	
85	PIPING	2015		Flag	CA
				Nominal	T Min
Shape:	Straight Pipe	Min	14.94	13.179	1.883
				15.062	
OD:	273.05	Avg	15.32		
Spec:	ASME B31.3	Comments:	ASSUMED NOMINAL		