

BOILER INSPECTION REPORT

LSD 07-27-51-19W5 Date June 19, 2018 SAP Equipment ID 66036249 Report #20180619GGA

BOILER STATIC DATA									
Plant Ansell Plant				Op Unit		System			
Prov. Insp. # 451152		NB#		CRN M7035.2		Equip Tag # F-801			
Equipment Description High Temp Glycol Heating Boiler						Serial # 99160			
Manufacturer Heattec Inc						Vessel Class			
Internal Access YES		NO		Description		Year Built 1999			
BOILER PROPER									
MAWP 200		kPa / psi		@ 700		°C / °F		MDMT °C / °F	
CODE ASME Section 1				Fluid Service Sweet/Sour		PWHT :			
Operating Pressure kPa / psi				Operating Temperature °C / °F					
Diameter 5"		Length		(T/T) 721 ft mm/in		OAL mm / in		Vertical Horizontal	
Shell Mat'I		SA 106-B		Thickness Sch 40 mm / in		Corr Allowance mm / in			
Head Mat'I				Thickness mm / in		Corr Allowance mm / in			
Internal Coating: YES NO				Internal Clad YES NO		Capacity m ³			
Manway YES NO				Inspection Port YES NO		Skirt Legs Saddle			
Nozzle Rating		300 lb ANSI		Painted YES NO		Insulated YES NO			
ECONOMIZER									
MAWP		kPa / psi		@		°C / °F		MDMT °C / °F	
CODE				Fluid Service Sweet/Sour		PWHT :			
Operating Pressure kPa / psi				Operating Temperature °C / °F					
Diameter		Length		(T/T) mm/in		OAL mm / in		Vertical Horizontal	
Shell Mat'I				Thickness mm / in		Corr Allowance mm / in			
Head Mat'I				Thickness mm / in		Corr Allowance mm / in			
Internal Coating: YES NO				Internal Clad YES NO		Capacity m ³			
Manway YES NO				Inspection Port YES NO		Skirt Legs Saddle			
Nozzle Rating		lb ANSI		Painted YES NO		Insulated YES NO			
PSV STATIC DATA									
Serial No.	Location		Set Pressure	Capacity SCFM / Lbs/Hr / GPM	Manufacturer	Model / Type	Service Date / Company		
PSV DETAILS									
	Type (Thread/Flange)			ANSI Rating			Size (mm)		
PRD Inlet									
PRD Outlet									

INSPECTION SUMMARY

The boiler is fit for continued service.
 The viewport internal pipe has high temperature corrosion, noted in past with no change in 2018.
 The burner has some light fouling at the bottom, noted in previous inspections with no change in 2018.
 The burner refractory has some minor damage near the burner and minor spalling on outer edge this is also noted in previous inspection with no change in 2018.
 The PSV's were removed for servicing at the time of inspection
 Guided wave was also completed on the coil. No indications were noted.

RECOMMENDATIONS

NONCONFORMANCES / INSPECTION DEFICIENCIES

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INSPECTION PLANNING

Inspection Strategy	Availability	Inspection Interval
Inspection Date June 19, 2018	Date of Last Inspect June 5, 2016	Date of Next Inspect June 2021

REPORT CERTIFICATION

The signatures below certify that inspections/tests have been completed in accordance with the identified inspection strategy and that the specified equipment is considered fit for service until the date of next inspection.

Inspected by	Greg Guenette	Date	June 21, 2018
Company	Husky Energy	IBPV #	334
Reviewed and Approved by	Greg Guenette	API #	47818
		Date	June 21-2018
		IBPV #	334
		API #	47818
Criticality Assessment Rerun	Inspection Planning Rerun		
Assessed Next Inspection Date			

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DETAILED INSPECTION VISUAL EXTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)				
V2	General Corrosion	Good	Viewport		Minor external corrosion around viewport, noted in old inspections no change
V3	General Leaks	Good			
V4	Vibration	Good			Out of service for inspection
V5	Dissimilar Flange Rating	N/A			
V6	Heads/Ladder/Stairway	Good	Burner shack		Stairs into shack in good condition
V7	Ladder/Stairway/Platforms	N/A			
V8	Guy Wires	N/A			
V9	Electrical Ground	OK			
V10	Painted Inactive Corrosion	Good			
V11	Coating/Painting	Good			
V12	Expansion Joint or Bellows	N/A			
V13	Gauge/Site Glass	Good	Viewport		Free and clear
V14	Shell	Good			
V15	Jacket	N/A			
V21	Support Other (Please explain)	Good			Piles and skid in good condition
V22	Foundation	N/A			
V23	Anchor Bolts	N/A			
V24	Saddle/Skirt	Good	Saddles		
V25	Davit	N/A			
V26	Fireproofing	N/A			
V31	Connections Other (Please explain)				
V32	Small Branches	Good			
V33	Nozzles	Good			
V34	Manways	Good			
V35	Reinforcing Pads	N/A			
V36	Inadequate Thread Engagement	N/A			
V37	Bolting	N/A			Blinds installed
V38	Flanges	OK			
V39	Leak Clamps	N/A			
V41	Insulation Other (Please explain)	Good	External piping		Good condition
V42	Damage	N/A			
V43	Penetrations	N/A			
V44	Insulation Jacket	N/A			
V45	Banding	N/A			
V46	Seals/Joints	N/A			
V51	Relief Devices Other (Please explain)	OK			PRD were removed at time of inspection
V52	Corrosion	Good			
V53	Leaks				
V54	Restricted Inlet/Outlet	N/A			
V55	Manual Operation Lever	N/A			

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DETAILED INSPECTION VISUAL INTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)				
V2	Corrosion (depth, length, width)	Good	Coil		Minor surface corrosion, this has been noted in previous reports no change
V3	Erosion	N/A			
V4	Distortion	N/A			
V5	Blisters	N/A			
V6	Deposits	Good	Burner		
V7	Heads	N/A			
V8	Welds	Good			
V9	Nozzles	Good			
V10	Shell	Good			Covered with blanket
V11	Gasket Surfaces	N/A			No access
V21	Internals Other (Please explain)				
V22	Demister	N/A			
V23	Baffle/Wier	N/A			
V24	Sparger	N/A			
V25	Thermowells	N/A			
V26	Metallic Linings	N/A			
V27	Nonmetallic Linings	N/A			
V30	Other Welded Attachments	Good	Supports		Tube to shell supports are in good condition
V31	Tubes	Good			
V32	Tube sheet	N/A			

Magnetic Particle Equipment records

Procedure #	Description			
Manufacturer	Model	Serial #	Current Type	Mag Part Type
Lighting	Material + Grade	Thickness	Cal Block SN	Cal Due Date

Liquid Penetrant Equipment records

Procedure #	Description				
Penetrant	Solvent	Developer	Cleaner	Lighting	Material Grade + Thickness

DETAILED INSPECTION OTHER TECHNIQUES

ID	Location	Observation/Measurement	Acceptance Criteria	NCR	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Ultrasonic Equipment records

Procedure #	Description			
Test Unit	Instrument Mfr	Model #	Serial #	Cal Due Date
Probe	Frequency	Probe SN	Probe Diameter	Couplant
Cal Block	Cal Block Size	Cal Block SN	Cal Block Mtl	

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DETAILED INSPECTION UT THICKNESS

CML	Nom. Thk	Current Reading	Short Term Corr Rate	Long Term Corr Rate	Remaining Life	Comments

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PHOTOS



NAMEPLATE



A NUMBER



OVERVIEW



COIL



BURNER