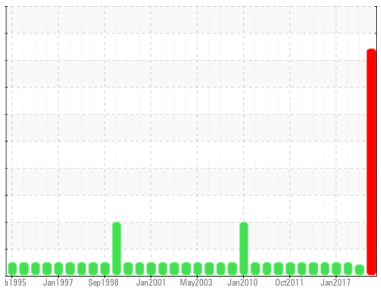
PROBLEM SUMMARY

Sample Rating Trend

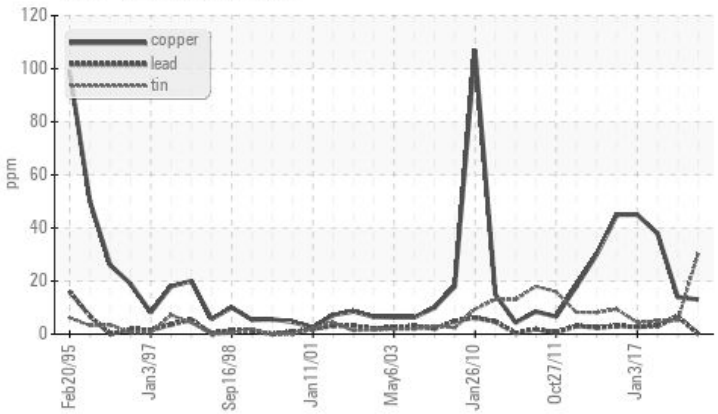


WEAR

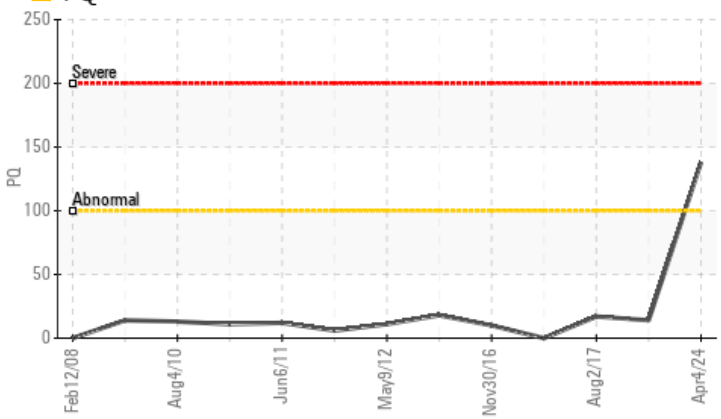
Area
63 STEAM GENERATING & DISTRIBUTION
Machine Id
Power Boiler F.D. Fan - Inboard Bearing (S/N 632501)
Component
Inboard Bearing
Fluid
ESSO NUTO H ISO 68 (1 GAL)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ PQ



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
PQ		ASTM D8184*		▲ 138	14	17
Tin	ppm	ASTM D5185(m)	>10	▲ 30	5	5
Antimony	ppm	ASTM D5185(m)		▲ 2	<1	<1

Customer Id: STANAC
Sample No.: WC
Lab Number: 02628228
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

VISCOSITY

13 Feb 2019 Diag: Kevin Marson

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

NORMAL

02 Aug 2017 Diag: Wes Davis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

NORMAL

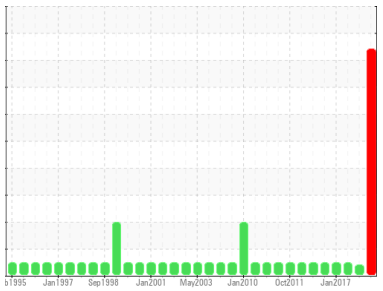
03 Jan 2017 Diag: Wes Davis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
63 STEAM GENERATING & DISTRIBUTION
Machine Id
Power Boiler F.D. Fan - Inboard Bearing (S/N 632501)
Component
Inboard Bearing
Fluid
ESSO NUTO H ISO 68 (1 GAL)

DIAGNOSIS

▲ Recommendation
We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

▲ Wear
Tin ppm levels are severe. PQ levels are abnormal. Antimony ppm levels are marginal. Bearing wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC**	WC	WC980017
Sample Date		Client Info		**04 Apr 2024**	13 Feb 2019	02 Aug 2017
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		▲ **138**	14	17
Iron	ppm	ASTM D5185(m)	>200	**136**	6	2
Chromium	ppm	ASTM D5185(m)	>5	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**<1**	0	0
Titanium	ppm	ASTM D5185(m)	>5	**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>50	**<1**	7	3
Copper	ppm	ASTM D5185(m)	>150	**13**	14	38
Tin	ppm	ASTM D5185(m)	>10	▲ **30**	5	5
Antimony	ppm	ASTM D5185(m)		▲ **2**	<1	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	<1	0

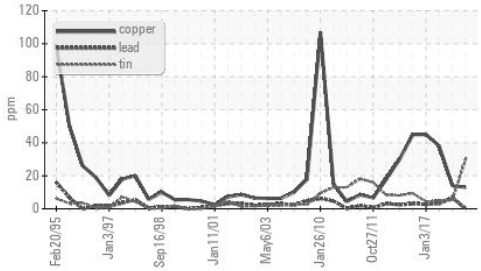
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	0	0
Barium	ppm	ASTM D5185(m)	0	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	5	**<1**	<1	0
Calcium	ppm	ASTM D5185(m)	50	**52**	49	57
Phosphorus	ppm	ASTM D5185(m)	330	**329**	333	355
Zinc	ppm	ASTM D5185(m)	420	**423**	431	447
Sulfur	ppm	ASTM D5185(m)	3100	**6414**	7226	2707
Lithium	ppm	ASTM D5185(m)		**<1**	0	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**22**	2	3
Sodium	ppm	ASTM D5185(m)		**<1**	<1	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	<1

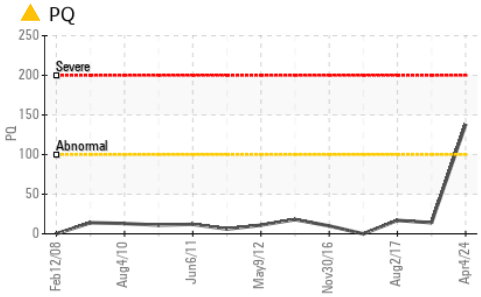
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	**0.53**	0.536	0.396

OIL ANALYSIS REPORT

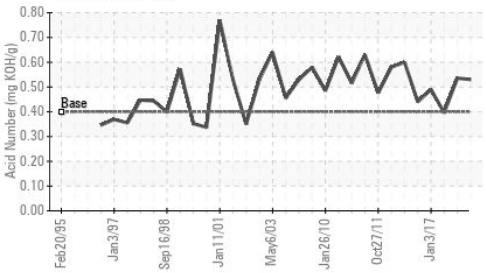
Non-ferrous Metals



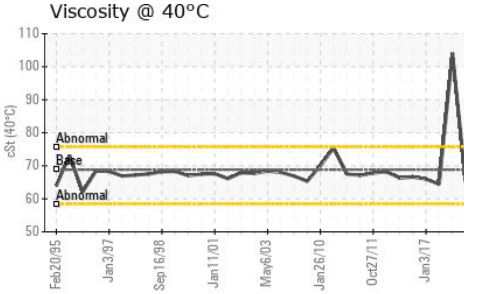
PQ



Acid Number

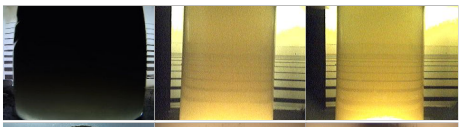
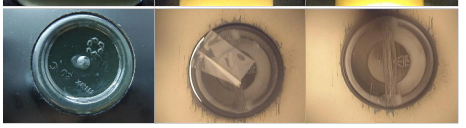


Viscosity @ 40°C



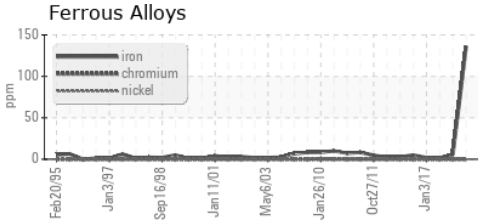
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	**65.3**	▲ 104	64.4

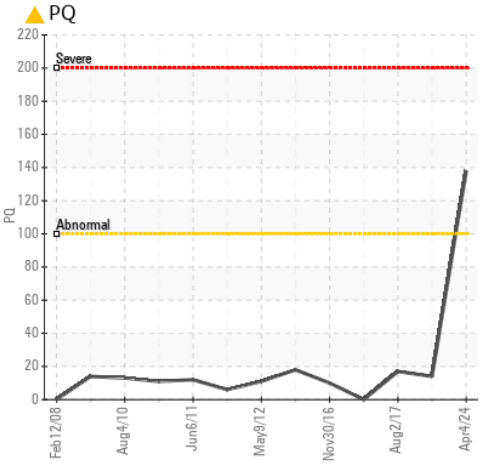
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

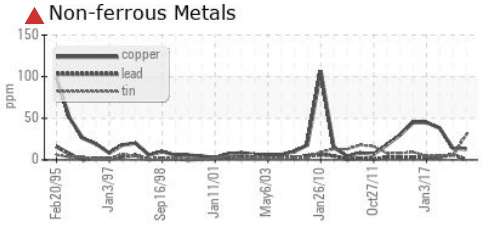
Ferrous Alloys



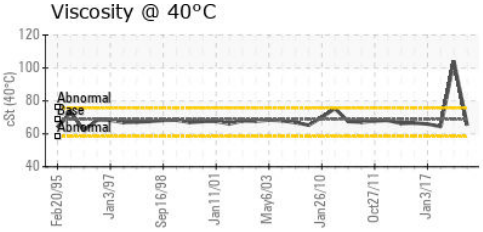
PQ



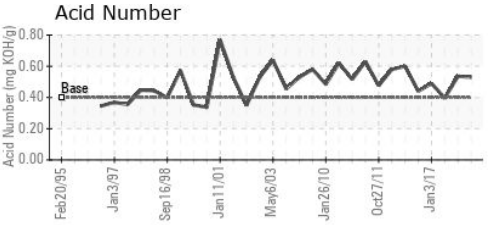
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02628228
Unique Number : 5761360
Test Package : IND 2 (Additional Tests: TAN Man)

Received : 11 Apr 2024
Tested : 11 Apr 2024
Diagnosed : 11 Apr 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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