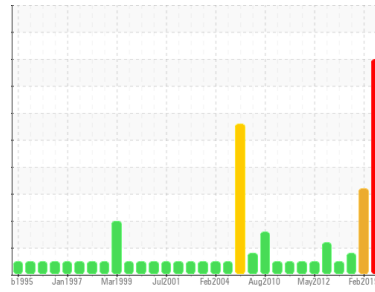




PROBLEM SUMMARY

Sample Rating Trend



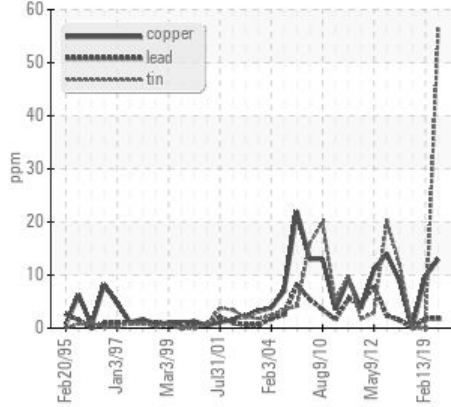
WEAR



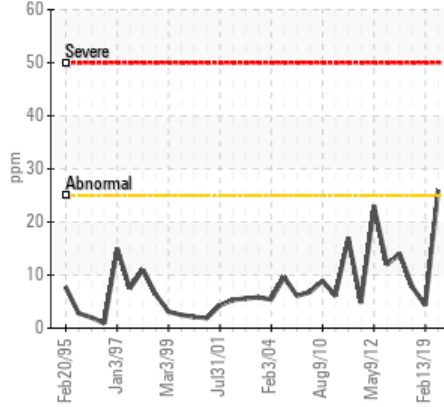
Area
63 STEAM GENERATING & DISTRIBUTION
 Machine Id
Power Boiler F.D. Fan - Outboard Bearing (S/N 632501)
 Component
Outboard Bearing
 Fluid
ESSO NUTO H ISO 68 (1 GAL)

COMPONENT CONDITION SUMMARY

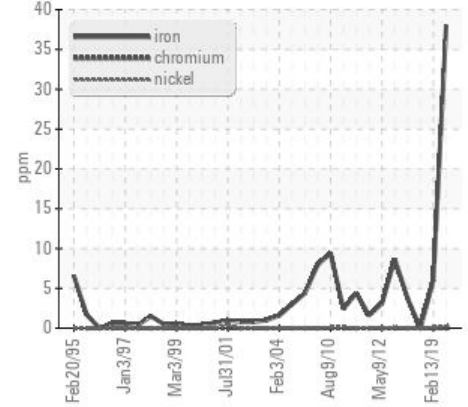
▲ Non-ferrous Metals



▲ Silicon (ppm)



Ferrous Alloys



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. 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	ATTENTION
Tin	ppm	ASTM D5185(m)	>10	▲ 56	0	0
Antimony	ppm	ASTM D5185(m)		▲ 4	0	0
Silicon	ppm	ASTM D5185(m)	>25	▲ 26	4	8

Customer Id: STANAC
 Sample No.: WC
 Lab Number: 02628229
 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.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

WATER



13 Feb 2019 Diag: Kevin Marson

We advise that you check for the source of water entry. 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. All component wear rates are normal. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

view report



ADDITIVES



02 Aug 2017 Diag: Kevin Marson

Due to this condition we recommend the following action... We advise an early resample to confirm this situation. NOTE: The current sample results do not match this unit's historical trend, indicating the sample may not be from this component/unit. All component wear rates are normal. There is no indication of any contamination in the component. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

view report



NORMAL



06 Jul 2016 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.

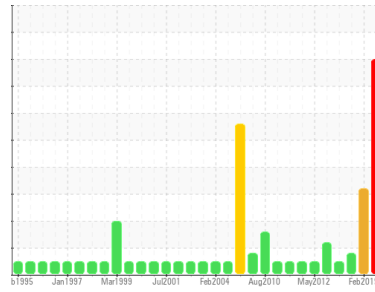
view report





OIL ANALYSIS REPORT

Sample Rating Trend



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

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. 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. Antimony ppm levels are abnormal. Bearing wear is indicated.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

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

Sample Number	Client Info	WC	WC	history1	history2
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	ATTENTION	

CONTAMINATION

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

WEAR METALS

PQ	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >200	38	6	0
Chromium	ppm	ASTM D5185(m) >5	0	0	0
Nickel	ppm	ASTM D5185(m) >5	<1	<1	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	0	0
Lead	ppm	ASTM D5185(m) >50	2	2	0
Copper	ppm	ASTM D5185(m) >150	13	10	<1
Tin	ppm	ASTM D5185(m) >10	▲ 56	0	0
Antimony	ppm	ASTM D5185(m)	▲ 4	0	0
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

Boron	ppm	ASTM D5185(m)	0	<1	<1	0
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	0
Magnesium	ppm	ASTM D5185(m)	5	1	<1	0
Calcium	ppm	ASTM D5185(m)	50	53	13	0
Phosphorus	ppm	ASTM D5185(m)	330	322	309	398
Zinc	ppm	ASTM D5185(m)	420	401	319	● 2
Sulfur	ppm	ASTM D5185(m)	3100	6883	6021	● 37
Lithium	ppm	ASTM D5185(m)		<1	0	<1

CONTAMINANTS

Silicon	ppm	ASTM D5185(m)	>25	▲ 26	4	8
Sodium	ppm	ASTM D5185(m)		1	78	0
Potassium	ppm	ASTM D5185(m)	>20	<1	11	<1

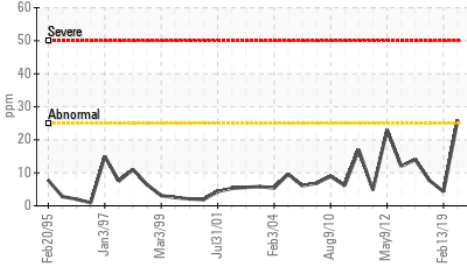
FLUID DEGRADATION

Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.55	0.389	0.439
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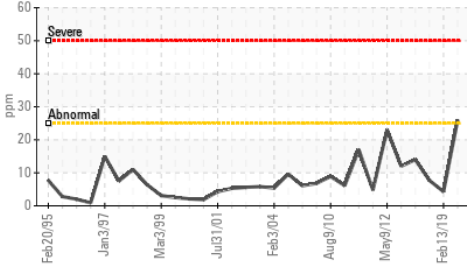


OIL ANALYSIS REPORT

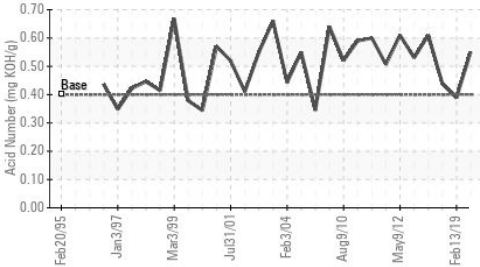
▲ Silicon (ppm)



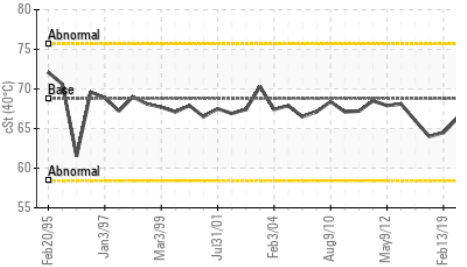
▲ Silicon (ppm)



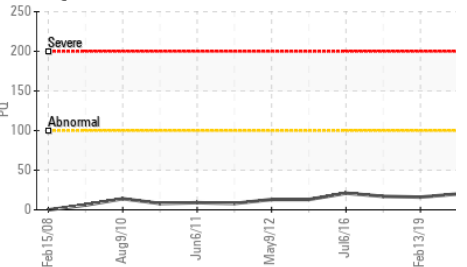
Acid Number



Viscosity @ 40°C



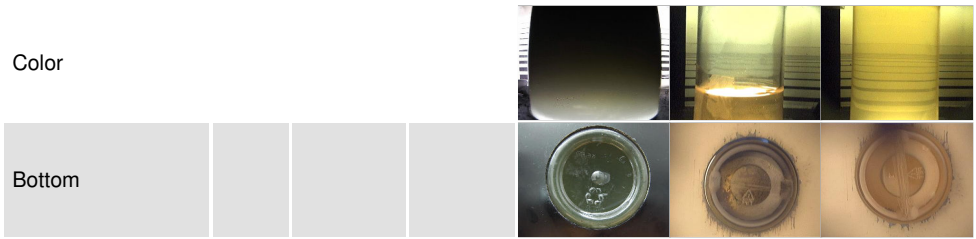
PQ



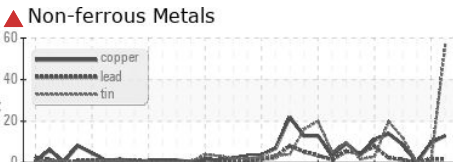
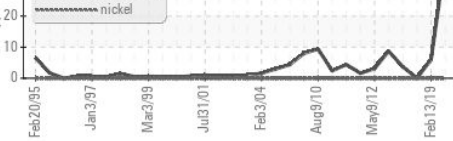
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	▲ 1%
Free Water	scalar	Visual*		NEG	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	66.3	64.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02628229
Unique Number : 5761361
Test Package : IND 2 (Additional Tests: TAN Man)

AV GROUP NB INC.
 103 PINDER ROAD,, NACKAWIC MILL
 NACKAWIC, NB
 CA E6G 1W4
 Contact: Basil Fadulalla
 basil.fadulalla@adityabirla.com

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.