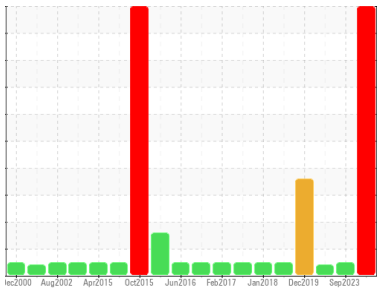
PROBLEM SUMMARY

Sample Rating Trend

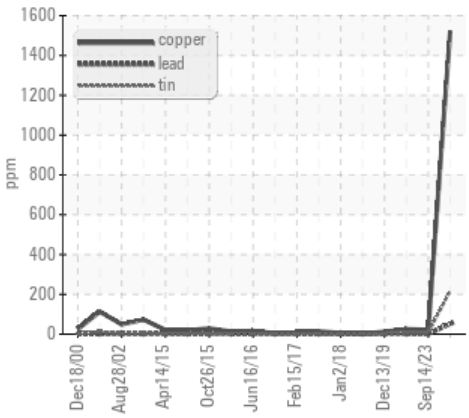


VISUAL METAL

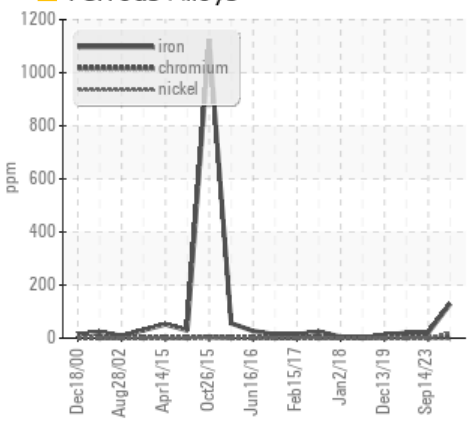
Area
11
Machine Id
11-0040-010-040 SANDER#2 GEARBOX#4
Component
11 Gearbox
Fluid
ESSO CYLESSTIC TK 680 (1 LTR)

COMPONENT CONDITION SUMMARY

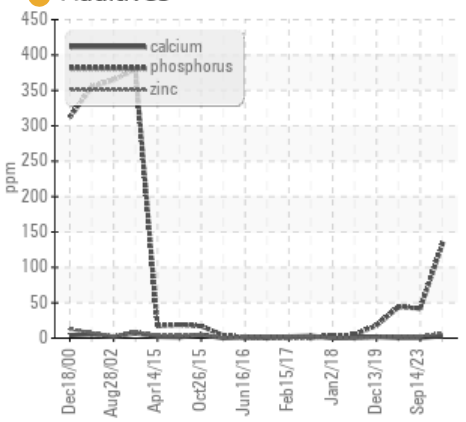
▲ Non-ferrous Metals



▲ Ferrous Alloys

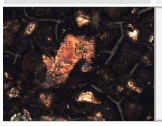


● Additives



RECOMMENDATION

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Nickel	ppm	ASTM D5185(m)	>15	▲ **21**	<1	<1
Lead	ppm	ASTM D5185(m)	>100	▲ **52**	1	1
Copper	ppm	ASTM D5185(m)	>200	▲ **1521**	22	25
Tin	ppm	ASTM D5185(m)	>25	▲ **218**	8	8
Yellow Metal	scalar	Visual*	NONE	▲ **MDHVY**	NONE	NONE
PrtFilter					*no image*	*no image*

Customer Id: MACPEM
Sample No.: WC0857970
Lab Number: 02630012
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

NORMAL

14 Sep 2023 Diag: Bill Quesnel

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

VISCOSITY

15 Jun 2023 Diag: Kevin Marson

Confirm the source of the lubricant being utilized for top-up/fill. 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 ISO 680 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

DEGRADATION

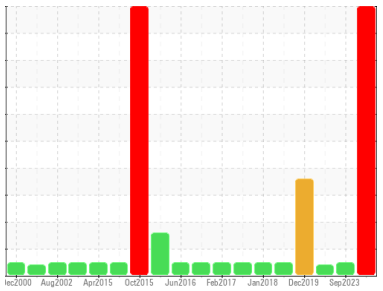
13 Dec 2019 Diag: Kevin Marson

We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. The high AN level of the oil indicates the presence of oxi-polymerized products. The AN level is much higher than the recommended limit. Viscosity of sample indicates oil is within ISO 680 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL

Area
11
Machine Id
11-0040-010-040 SANDER#2 GEARBOX#4
Component
11 Gearbox
Fluid
ESSO CYLESSTIC TK 680 (1 LTR)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0857970**	WC0820659	WC0820642
Sample Date		Client Info		**11 Mar 2024**	14 Sep 2023	15 Jun 2023
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**	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**82**	0	0
Iron	ppm	ASTM D5185(m)	>200	**129**	21	20
Chromium	ppm	ASTM D5185(m)	>15	**<1**	0	<1
Nickel	ppm	ASTM D5185(m)	>15	▲ **21**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**4**	<1	<1
Lead	ppm	ASTM D5185(m)	>100	▲ **52**	1	1
Copper	ppm	ASTM D5185(m)	>200	▲ **1521**	22	25
Tin	ppm	ASTM D5185(m)	>25	▲ **218**	8	8
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

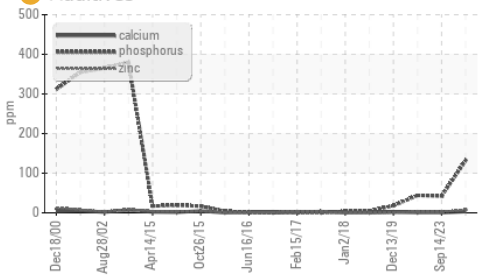
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**1**	<1	2
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**1**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	0	0
Calcium	ppm	ASTM D5185(m)		**3**	<1	<1
Phosphorus	ppm	ASTM D5185(m)		● **132**	42	44
Zinc	ppm	ASTM D5185(m)		**8**	2	2
Sulfur	ppm	ASTM D5185(m)		● **3920**	3954	4177
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**11**	4	4
Sodium	ppm	ASTM D5185(m)		**3**	1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	2

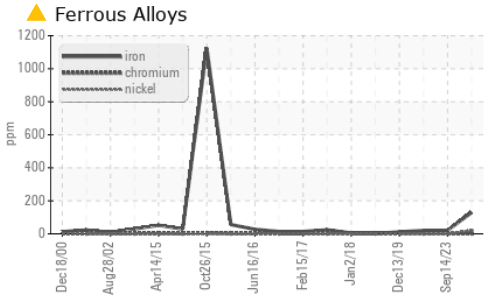
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**2.48**	3.01	2.82

OIL ANALYSIS REPORT

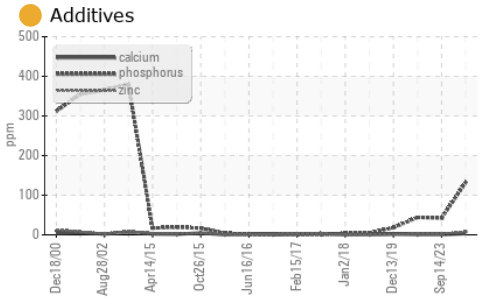
Additives



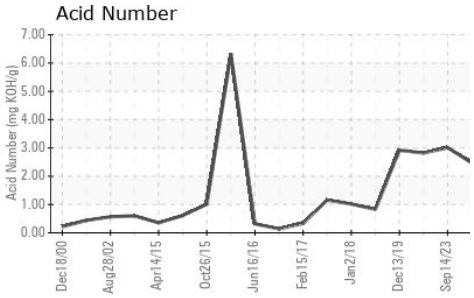
Ferrous Alloys



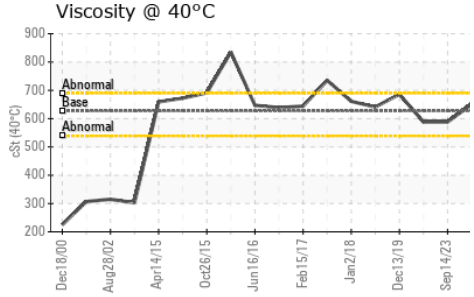
Additives



Acid Number

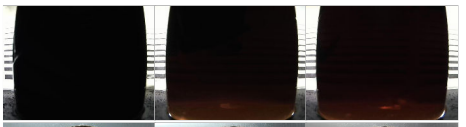
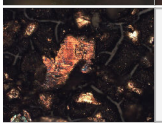


Viscosity @ 40°C



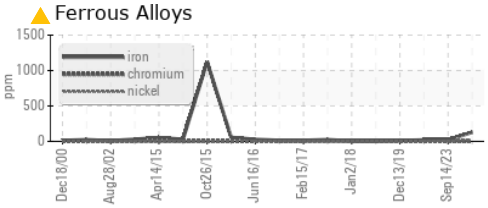
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	▲ **MDHVY**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
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*	>0.2	**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)	627	**650**	588	▲ 588

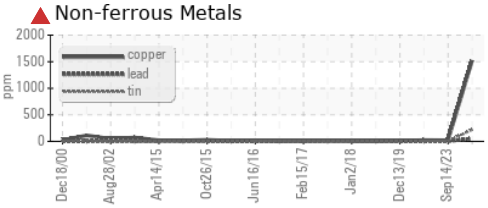
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter				*no image*	*no image*

GRAPHS

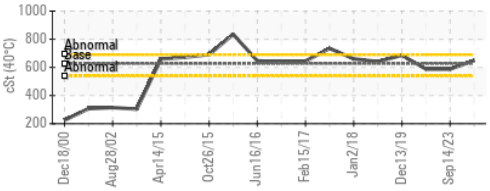
Ferrous Alloys



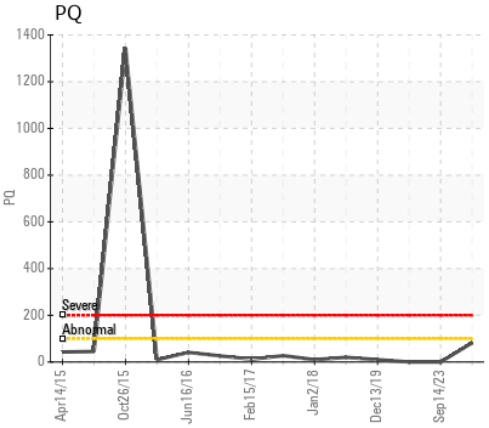
Non-ferrous Metals



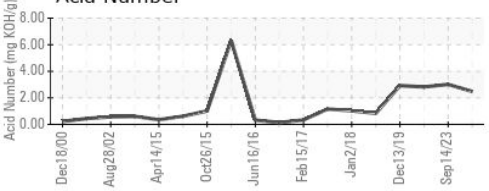
Viscosity @ 40°C



PQ



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0857970 **Received** : 18 Apr 2024
Lab Number : 02630012 **Tested** : 19 Apr 2024
Unique Number : 5763144 **Diagnosed** : 19 Apr 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: BottomAnalysis, FILTERPATCH, TAN Man)

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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