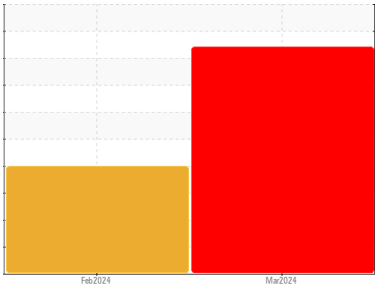
PROBLEM SUMMARY

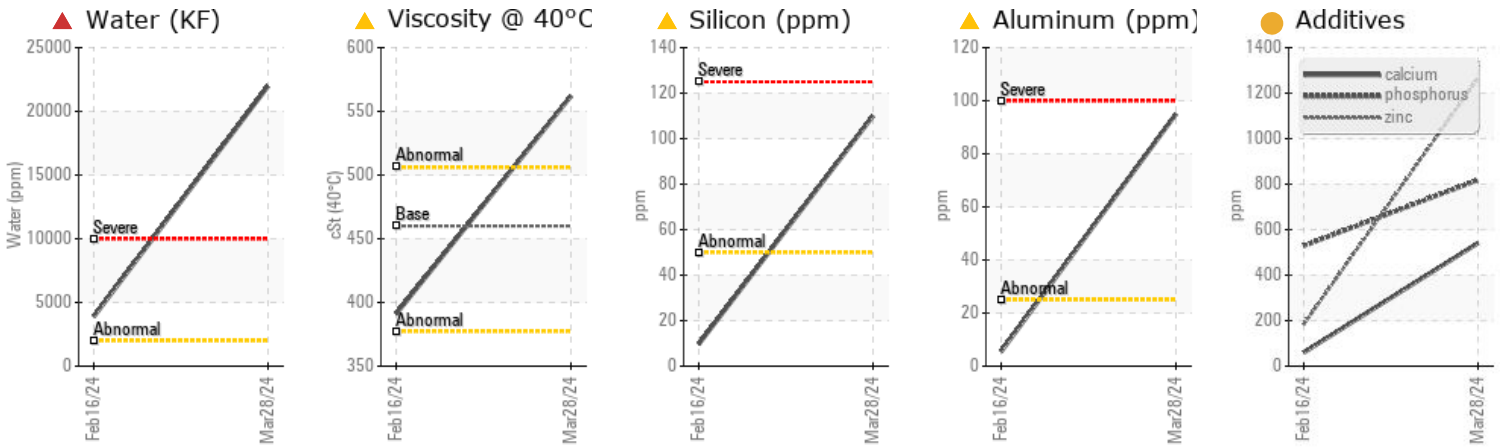
Sample Rating Trend



WATER

Machine Id
KHS L3 FILLER MAIN
Component
Gearbox
Fluid
KLUBER KLUBEROIL 4 UH1-460 N (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Aluminum	ppm	ASTM D5185(m)	>25	▲ **95**	6	---
Silicon	ppm	ASTM D5185(m)	>50	▲ **110**	10	---
Water	%	ASTM D6304*	>0.2	▲ **2.197**	▲ 0.389	---
ppm Water	ppm	ASTM D6304*	>2000	▲ **21975**	▲ 3890	---
Appearance	scalar	Visual*	NORML	▲ **MILKY**	▲ MILKY	---
Emulsified Water	scalar	Visual*	>0.2	▲ **1%**	▲ 1%	---
Visc @ 40°C	cSt	ASTM D7279(m)	460	▲ **562**	391	---

Customer Id: COC15BRA
Sample No.: WC0916679
Lab Number: 02626485
Test Package: IND 1

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.
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

WATER

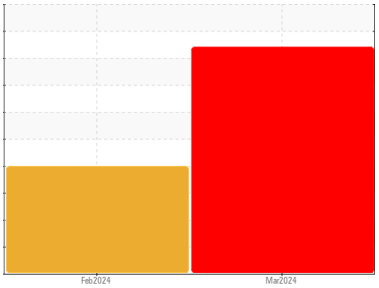
16 Feb 2024 Diag: Kevin Marson

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is a moderate concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KHS L3 FILLER MAIN
Component
Gearbox
Fluid
KLUBER KLUBEROIL 4 UH1-460 N (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear
Aluminum ppm levels are abnormal. Thrust washer and/or bearing/bushing wear is indicated.

Contamination
There is a high concentration of water present in the oil. There is a moderate concentration of dirt present in the oil. High amount of ingressed dirt has caused abrasive wear to the component.

Fluid Condition
The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. 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 as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0916679**	WC0906581	---
Sample Date		Client Info		**28 Mar 2024**	16 Feb 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	Changed	---
Sample Status				**SEVERE**	ABNORMAL	---

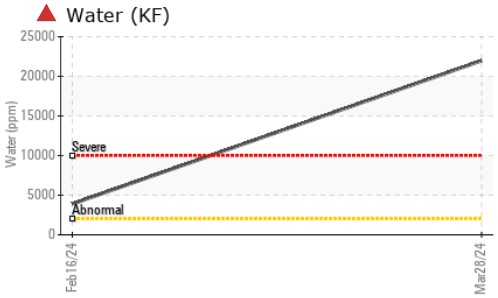
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	**24**	8	---
Chromium	ppm	ASTM D5185(m)	>15	**0**	0	---
Nickel	ppm	ASTM D5185(m)	>15	**<1**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>25	▲ **95**	6	---
Lead	ppm	ASTM D5185(m)	>100	**4**	<1	---
Copper	ppm	ASTM D5185(m)	>200	**50**	11	---
Tin	ppm	ASTM D5185(m)	>25	**3**	<1	---
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**2**	1	---
Barium	ppm	ASTM D5185(m)		**0**	0	---
Molybdenum	ppm	ASTM D5185(m)		**0**	0	---
Manganese	ppm	ASTM D5185(m)		**0**	0	---
Magnesium	ppm	ASTM D5185(m)		**3**	<1	---
Calcium	ppm	ASTM D5185(m)		● **541**	● 60	---
Phosphorus	ppm	ASTM D5185(m)		● **818**	529	---
Zinc	ppm	ASTM D5185(m)		● **1265**	● 184	---
Sulfur	ppm	ASTM D5185(m)		● **1125**	762	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

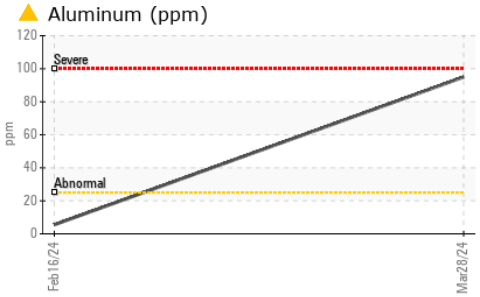
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	▲ **110**	10	---
Sodium	ppm	ASTM D5185(m)		**776**	21	---
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	---
Water	%	ASTM D6304*	>0.2	▲ **2.197**	▲ 0.389	---
ppm Water	ppm	ASTM D6304*	>2000	▲ **21975**	▲ 3890	---

OIL ANALYSIS REPORT

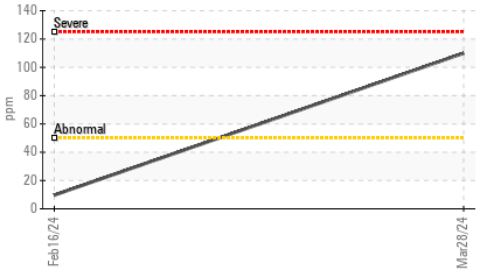
Water (KF)



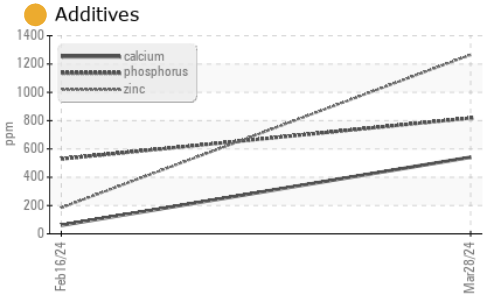
Aluminum (ppm)



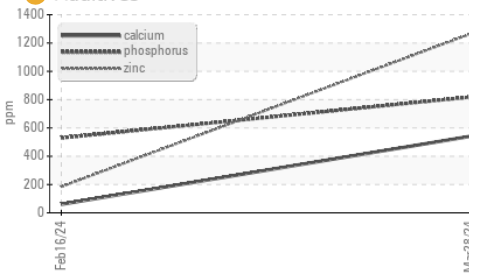
Silicon (ppm)



Additives

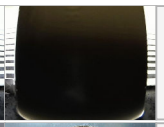


Additives



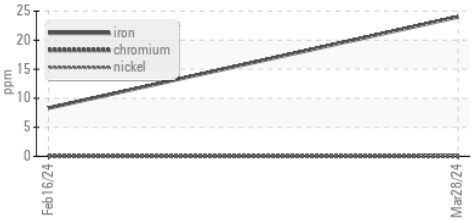
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	▲ HEAVY	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**VLITE**	NONE	---
Appearance	scalar	Visual*	NORML	▲ **MILKY**	▲ MILKY	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.2	▲ **1%**	▲ 1%	---
Free Water	scalar	Visual*		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	460	▲ **562**	391	---

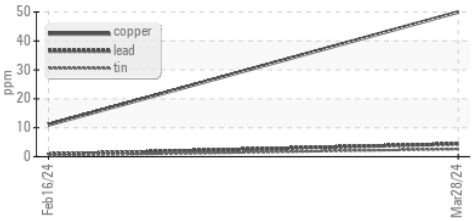
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

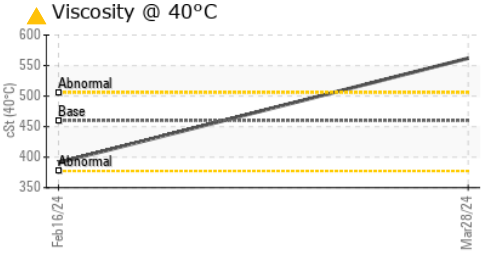
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0916679
Lab Number : 02626485
Unique Number : 5759617
Test Package : IND 1 (Additional Tests: KF)

Received : 03 Apr 2024
Tested : 04 Apr 2024
Diagnosed : 04 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.

COCA COLA CANADA BOTTLING LTD.
15 WEST CREEK BLVD
BRAMPTON, ON
CA L6T 5T4
Contact: Chandan Ahuja
cahuja@cokecanada.com
T: (635)440-5087
F: