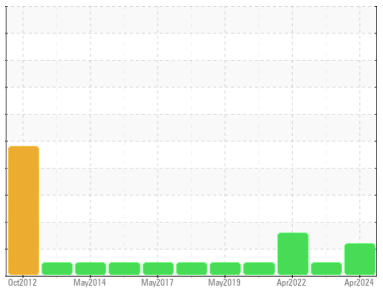
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area

[603954462 SDR]

Machine Id

K CHOC SHR MIXING (S/N 20061147)

Component

Gearbox

Fluid

GEAR OIL ISO 320 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

An increase in the iron level is noted. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0854591**	WC0605751	WC0605649
Sample Date		Client Info		**06 Apr 2024**	22 Apr 2023	30 Apr 2022
Machine Age	mls	Client Info		**0**	0	0
Oil Age	mls	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	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
Iron	ppm	ASTM D5185m	>200	**107**	<1	9
Chromium	ppm	ASTM D5185m	>15	**<1**	0	0
Nickel	ppm	ASTM D5185m	>15	**1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>25	**9**	0	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	<1
Copper	ppm	ASTM D5185m	>200	**2**	0	0
Tin	ppm	ASTM D5185m	>25	**<1**	0	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

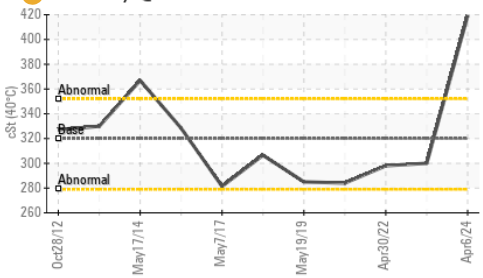
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**0**	0	2
Barium	ppm	ASTM D5185m	15	**0**	0	0
Molybdenum	ppm	ASTM D5185m	15	**0**	0	0
Manganese	ppm	ASTM D5185m		**2**	0	<1
Magnesium	ppm	ASTM D5185m	50	**3**	0	2
Calcium	ppm	ASTM D5185m	50	**15**	3	6
Phosphorus	ppm	ASTM D5185m	350	**196**	201	353
Zinc	ppm	ASTM D5185m	100	**146**	2	12
Sulfur	ppm	ASTM D5185m	12500	**2588**	1827	1110

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**41**	4	▲ 74
Sodium	ppm	ASTM D5185m		**4**	0	0
Potassium	ppm	ASTM D5185m	>20	**4**	<1	<1

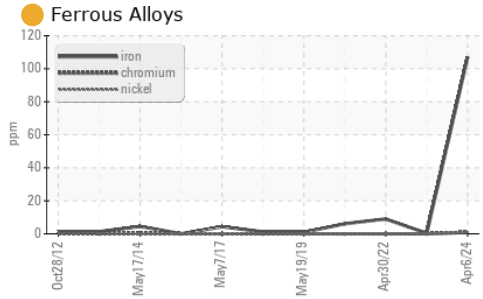
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	**0.70**	0.75	0.55

OIL ANALYSIS REPORT

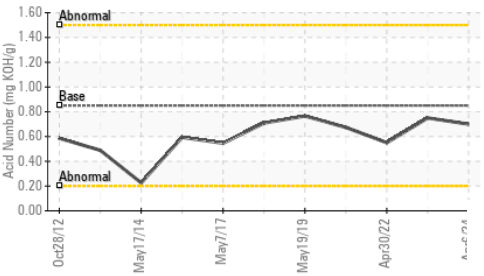
Viscosity @ 40°C



Ferrous Alloys

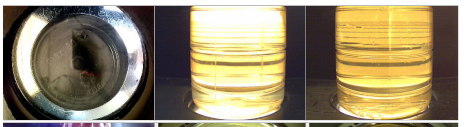
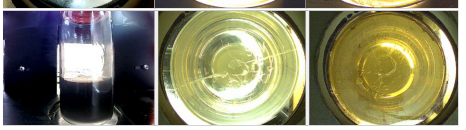


Acid Number



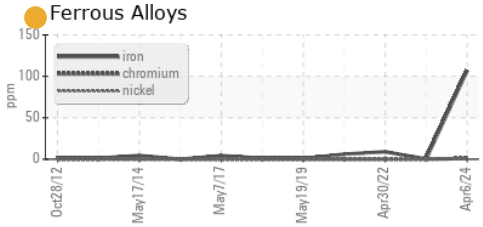
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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 D445	320	**419**	300	298

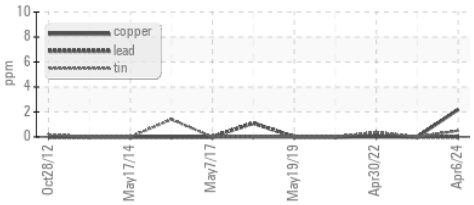
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

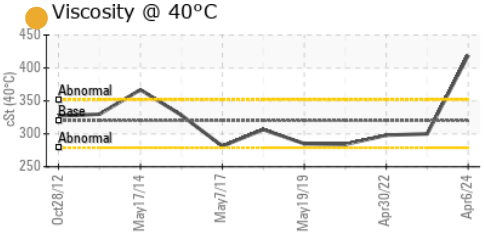
Ferrous Alloys



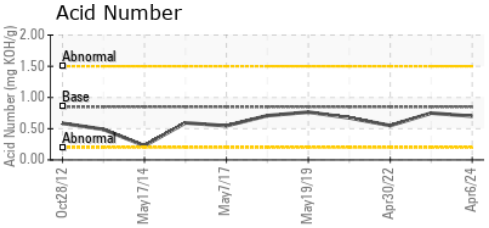
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0854591
Lab Number : 06150543
Unique Number : 10980621
Test Package : IND 2

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 18 Apr 2024 - Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

MARS CHOCOLATE
2019 NORTH OAK PARK
CHICAGO, IL
US 60707
Contact: TONY FIORE
tony.fiore@effem.com
T: (773)745-2279
F: