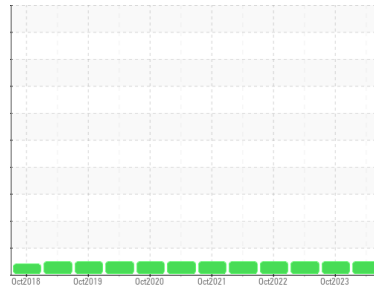




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**[604237975 SDR]**

Machine Id

**UPPER CRMB CRACKER SUMITOMO (S/N 20077277)**

Component

**Gearbox**

Fluid

**GEAR OIL ISO 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0854584</b>	WC0854357	WC0605334
Sample Date	Client Info		<b>06 Apr 2024</b>	20 Oct 2023	16 Apr 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>&lt;1</b>	2	4
Chromium	ppm	ASTM D5185m >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	<1	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 15	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 15	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m 50	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m 50	<b>9</b>	9	13
Phosphorus	ppm	ASTM D5185m 350	<b>207</b>	105	177
Zinc	ppm	ASTM D5185m 100	<b>2</b>	0	13
Sulfur	ppm	ASTM D5185m 12500	<b>2673</b>	2402	3162

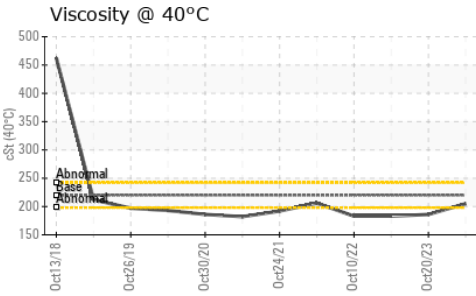
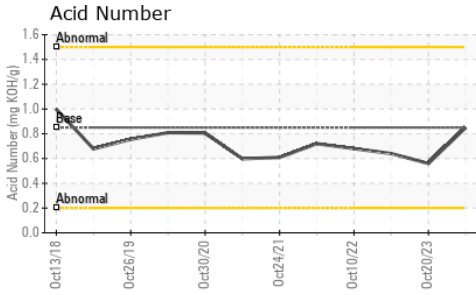
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>3</b>	11	9
Sodium	ppm	ASTM D5185m	<b>2</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.85</b>	0.56	0.64

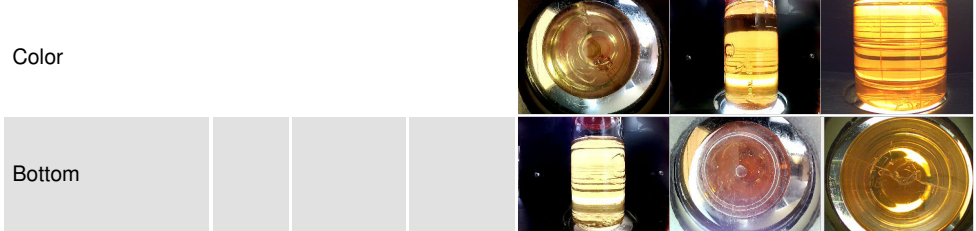
# OIL ANALYSIS REPORT



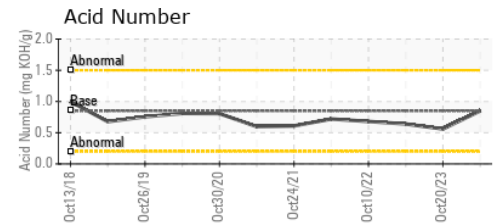
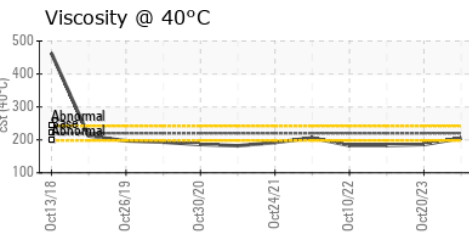
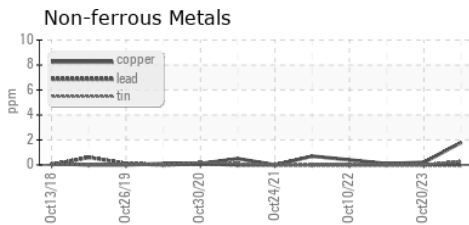
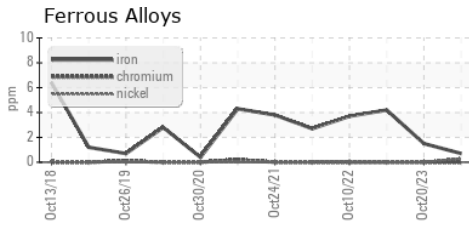
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	<b>205</b>	186	183

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0854584      **Received** : 16 Apr 2024  
**Lab Number** : **06150546**      **Tested** : 17 Apr 2024  
**Unique Number** : 10980624      **Diagnosed** : 18 Apr 2024 - Don Baldrige  
**Test Package** : IND 2

**MARS CHOCOLATE**  
 2019 NORTH OAK PARK  
 CHICAGO, IL  
 US 60707  
 Contact: TONY FIORE  
 tony.fiore@effem.com  
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 F:

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)