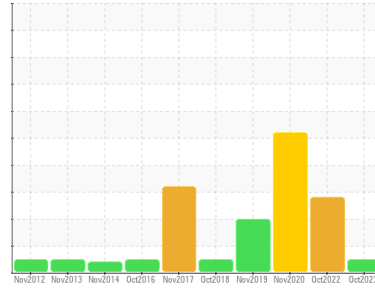




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**[603681472 SDR]**  
 Machine Id  
**SWM DIS PMP (S/N 20046213)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (--- GAL)**

## DIAGNOSIS

### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### 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>WC0562272</b>	WC0605323	WC0440609
Sample Date	Client Info	<b>23 Oct 2023</b>	30 Oct 2022	01 Nov 2020
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	<b>0</b>	▲ 235	96
Chromium	ppm	ASTM D5185m >15	<b>0</b>	2	<1
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	2	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >200	<b>0</b>	5	3
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	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	<1
Barium	ppm	ASTM D5185m 15	<b>0</b>	<1	2
Molybdenum	ppm	ASTM D5185m 15	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	2	1
Magnesium	ppm	ASTM D5185m 50	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m 50	<b>2</b>	2	2
Phosphorus	ppm	ASTM D5185m 350	<b>405</b>	392	385
Zinc	ppm	ASTM D5185m 100	<b>0</b>	60	52
Sulfur	ppm	ASTM D5185m 12500	<b>574</b>	790	509

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<b>2</b>	▲ 179	● 328
Sodium	ppm	ASTM D5185m	<b>0</b>	3	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0

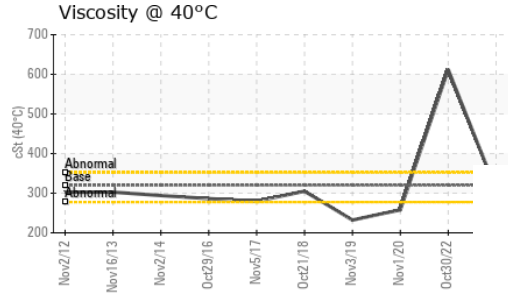
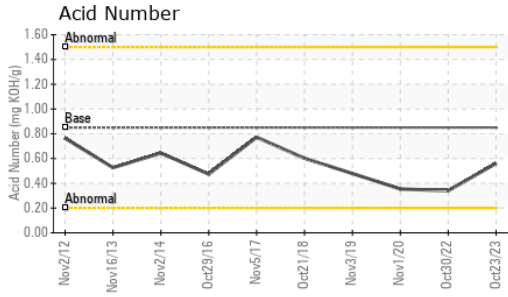
## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	<b>0.56</b>	0.34	0.354

## VISUAL

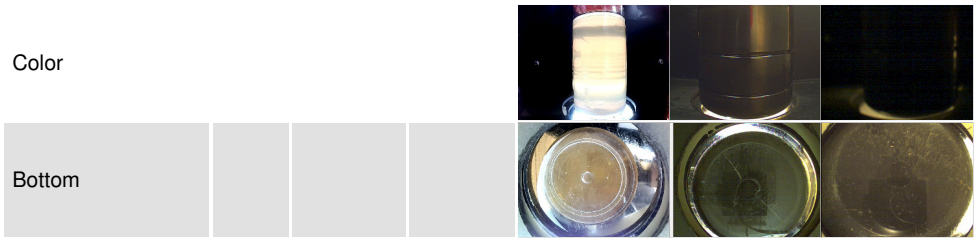
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	LIGHT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

# OIL ANALYSIS REPORT

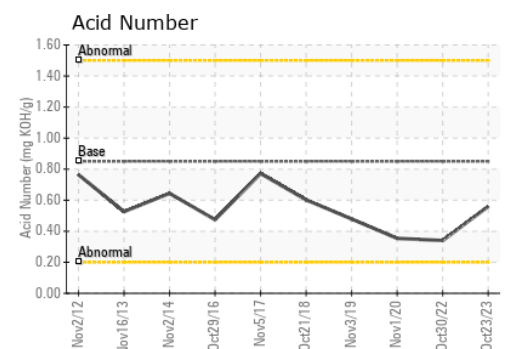
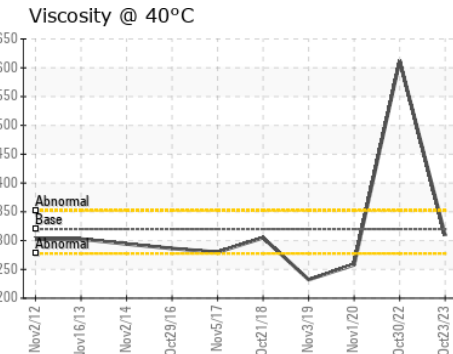
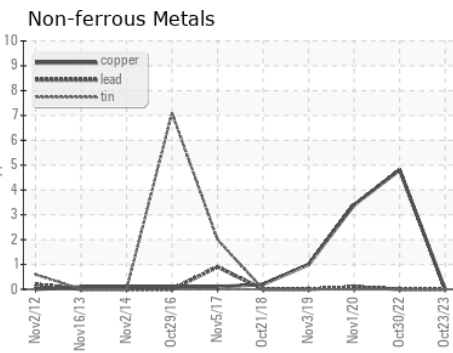
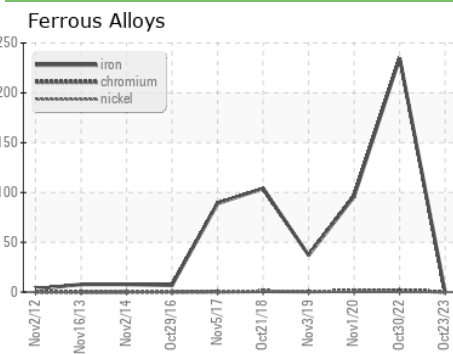


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	309	▲ 612	▲ 258

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0562272 **Received** : 15 Nov 2023  
**Lab Number** : 06008488 **Diagnosed** : 17 Nov 2023  
**Unique Number** : 10742250 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

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