



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**AF12-250-M83403 COOLING WHEEL 4 TURNING MOTOR 1**  
 Component  
**Gear Drive**  
 Fluid  
**MOBIL MOBILGEAR SHC 220 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

### 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>WC0848194</b>	---	---
Sample Date	Client Info		<b>12 Sep 2023</b>	---	---
Machine Age	mths	Client Info	<b>60</b>	---	---
Oil Age	mths	Client Info	<b>12</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>16</b>	---	---
Iron	ppm	ASTM D5185m >150	<b>4</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>4</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>496</b>	---	---
Zinc	ppm	ASTM D5185m	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>3676</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>16</b>	---	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Water	%	ASTM D6304 >0.1	<b>0.002</b>	---	---
ppm Water	ppm	ASTM D6304 >1000	<b>16.5</b>	---	---

## FLUID CLEANLINESS

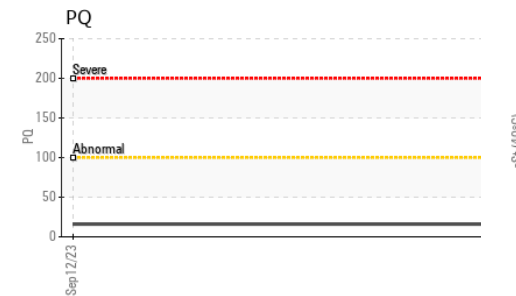
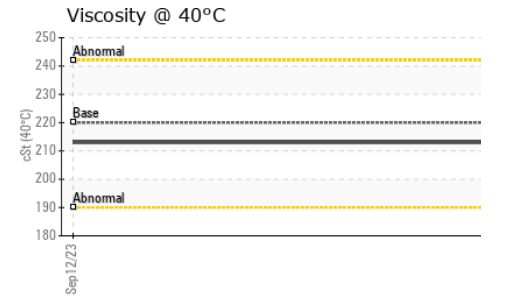
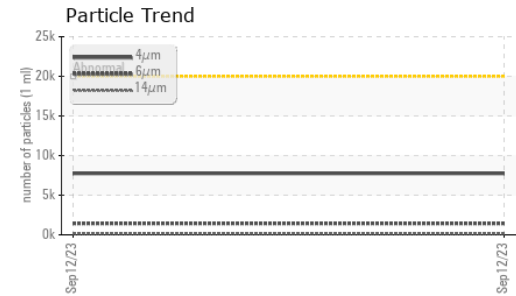
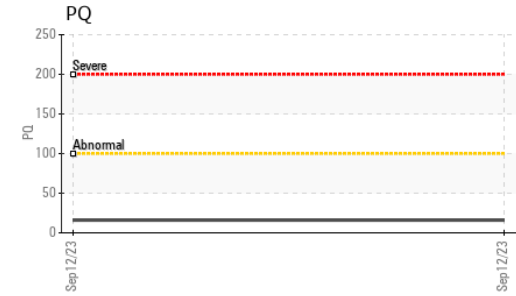
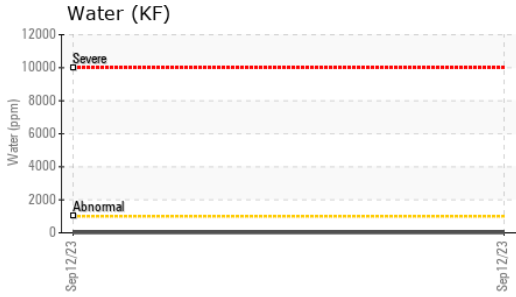
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>7744</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>1440</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>143</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>47</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>20/18/14</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.87</b>	---	---



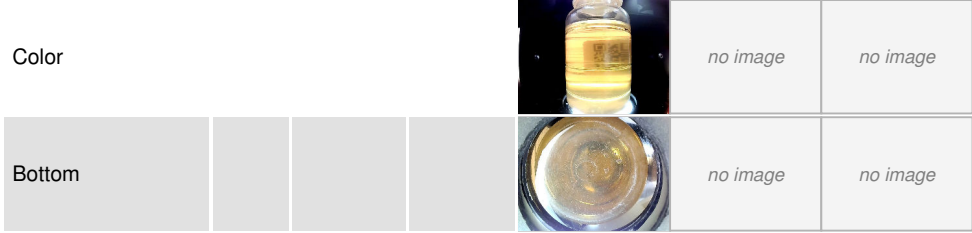
# OIL ANALYSIS REPORT



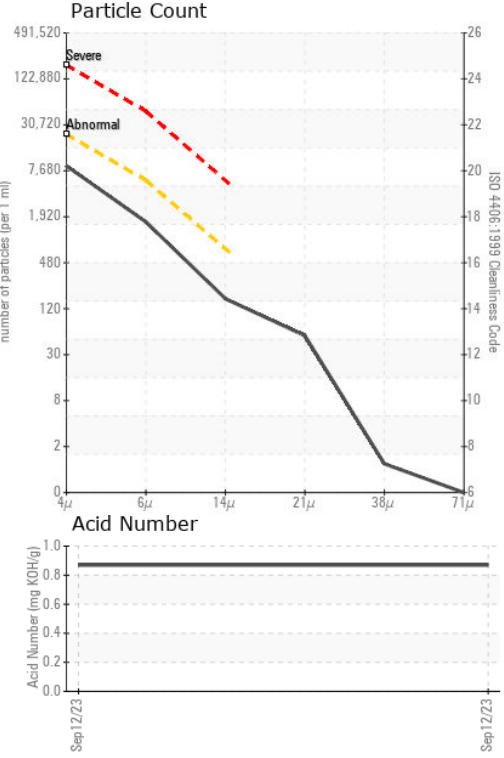
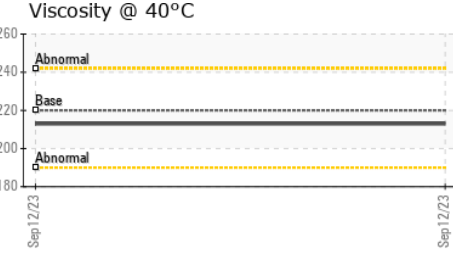
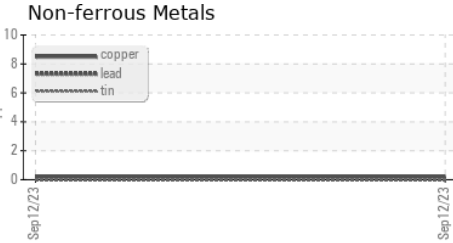
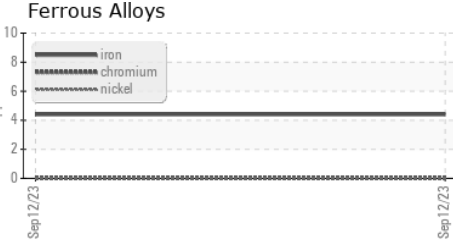
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	220	<b>213</b>	---	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0848194 **Received** : 28 Sep 2023  
**Lab Number** : **05963548** **Diagnosed** : 29 Sep 2023  
**Unique Number** : 10670099 **Diagnostician** : Wes Davis  
**Test Package** : PLANT

**ARAUCO - GRAYLING**  
 5851 ARAUCO ROAD  
 GRAYLING, MI  
 US 49738  
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 T:  
 F:

Certificate L2367  
 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)