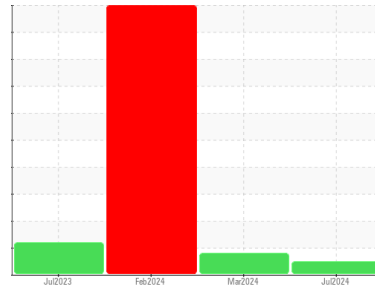




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**AF12-105-M21101 LOG RECEIVING DECK GEARBOX 1**  
 Component  
**Gear Drive**  
 Fluid  
**MOBIL MOBILGEAR SHC 150 (--- 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>WC0936663</b>	WC0874506	WC0891289
Sample Date	Client Info			<b>09 Jul 2024</b>	28 Mar 2024	22 Feb 2024
Machine Age	yrs	Client Info		<b>0</b>	6	5
Oil Age	yrs	Client Info		<b>0</b>	1	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>14</b>	25	▲ 6734
Iron	ppm	ASTM D5185m	>150	<b>3</b>	13	▲ 6268
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	▲ 88
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	▲ 40
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	0	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	8
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

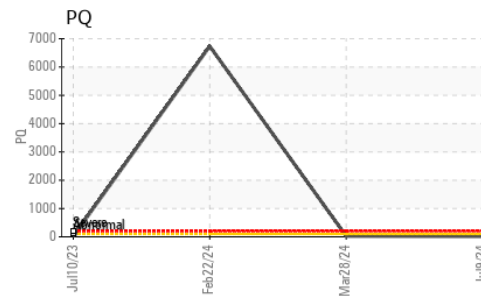
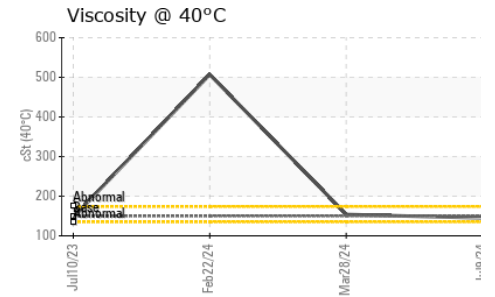
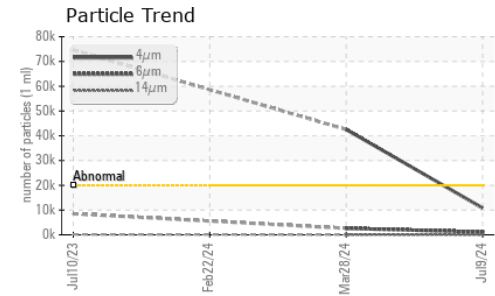
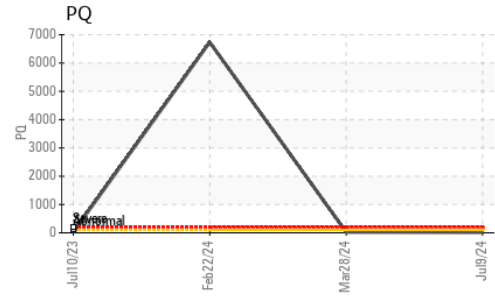
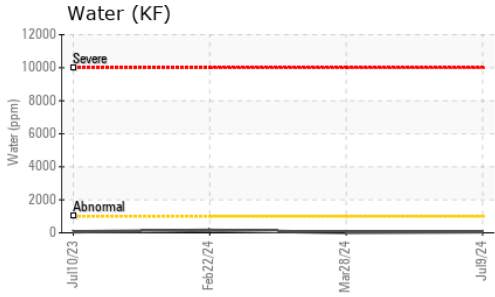
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	7
Manganese	ppm	ASTM D5185m		<b>0</b>	0	26
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m		<b>81</b>	218	60
Phosphorus	ppm	ASTM D5185m		<b>391</b>	445	609
Zinc	ppm	ASTM D5185m		<b>2</b>	0	25
Sulfur	ppm	ASTM D5185m		<b>1877</b>	2420	2199

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>24</b>	25	▲ 100
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304	>0.1	<b>0.006</b>	0.002	0.015
ppm Water	ppm	ASTM D6304	>1000	<b>61</b>	17	153

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>10830</b>	▲ 42522	---
Particles >6µm		ASTM D7647	>5000	<b>1129</b>	2616	---
Particles >14µm		ASTM D7647	>640	<b>21</b>	43	---
Particles >21µm		ASTM D7647	>160	<b>4</b>	10	---
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	---
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/17/12</b>	▲ 23/19/13	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.76</b>	0.68	1.34

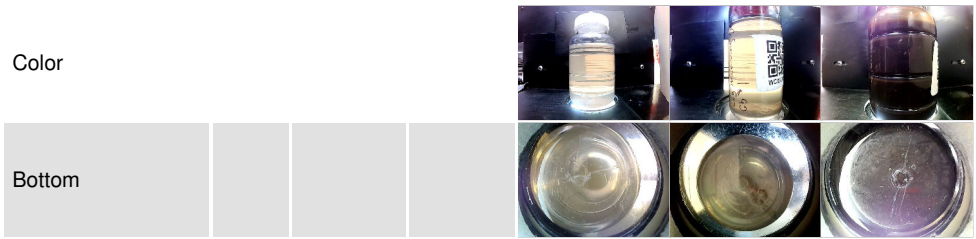
# OIL ANALYSIS REPORT



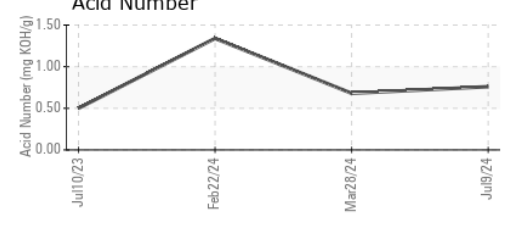
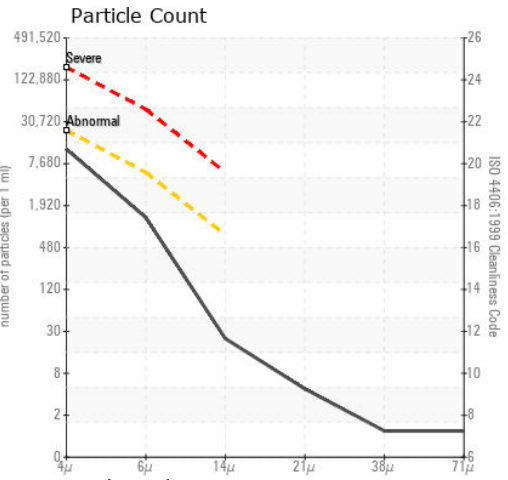
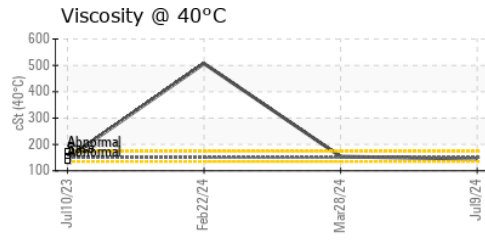
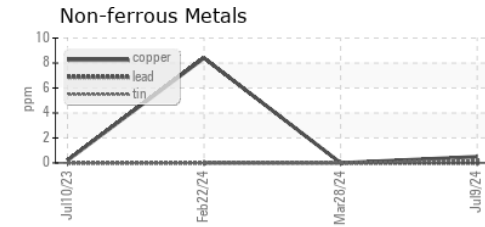
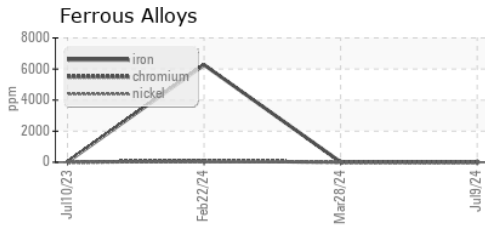
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ HEAVY
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	150	145	154 ▲ 507

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0936663      **Received** : 18 Jul 2024  
**Lab Number** : 06240309      **Tested** : 19 Jul 2024  
**Unique Number** : 11129143      **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : PLANT

**ARAUCO - GRAYLING**  
 5851 ARAUCO ROAD  
 GRAYLING, MI  
 US 49738  
 Contact: JOSEPH GREEN  
 joseph.green@arauco.com

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)