



# OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area  
**CARS**  
 Machine Id  
**CARS09MAY2024-245**  
 Component  
**Gearbox**  
 Fluid  
**QUALIFYING OIL 47 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0685913</b>	---	---
Sample Date	Client Info		<b>09 May 2024</b>	---	---
Machine Age	mls	Client Info	<b>0</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>0</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>1</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	---	---
Lead	ppm	ASTM D5185m >50	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >200	<b>0</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>0</b>	---	---
Barium	ppm	ASTM D5185m	<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>761</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>1</b>	---	---
Calcium	ppm	ASTM D5185m	<b>6</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>1521</b>	---	---
Zinc	ppm	ASTM D5185m	<b>2</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>41564</b>	---	---

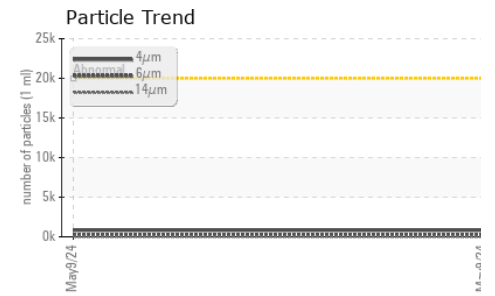
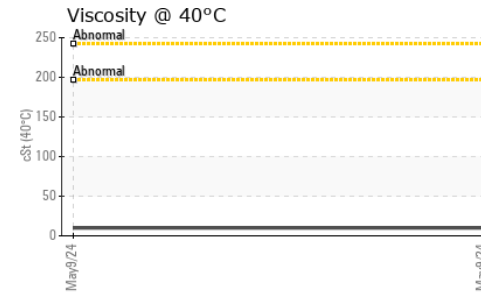
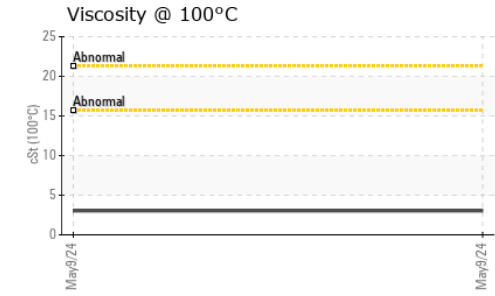
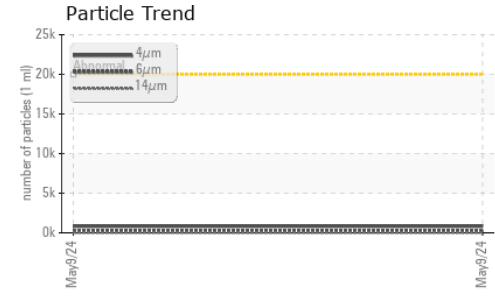
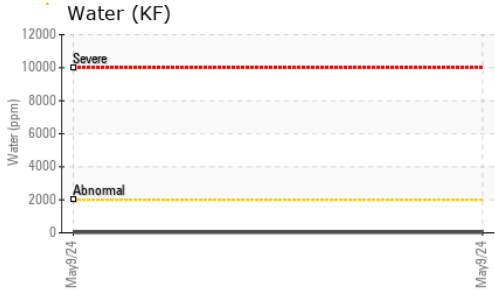
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Water	%	ASTM D6304 >0.2	<b>0.003</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>28</b>	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>823</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>166</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>16</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>6</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>17/15/11</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>▲ 4.185</b>	---	---





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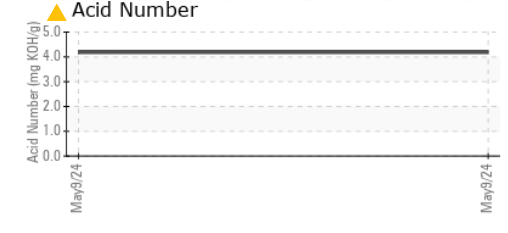
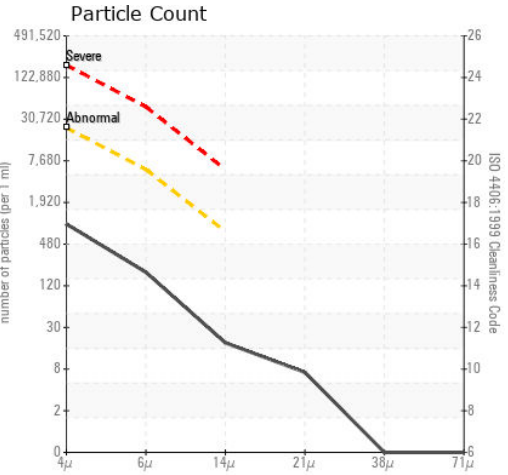
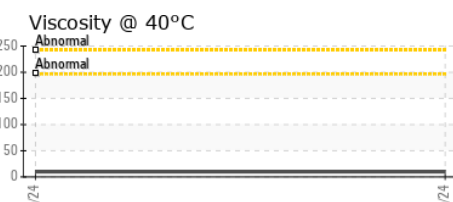
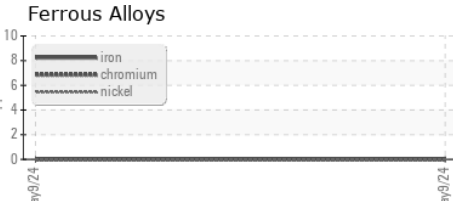
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	9.90	---	---
Visc @ 100°C	cSt	ASTM D445	3.03	---	---
Viscosity Index (VI)	Scale	ASTM D2270	181	---	---

### SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0685913      **Received** : 14 May 2024  
**Lab Number** : 06179272      **Tested** : 16 May 2024  
**Unique Number** : 11030598      **Diagnosed** : 17 May 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**COMPLIANCE and RESEARCH SERVICES**  
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 PLAINFIELD, NJ  
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 blending@complianceandresearch.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)