



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4548-1**

Component  
**1 Gearbox**

Fluid  
**CASTROL OPTIGEAR SYNTHETIC RO 150 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry update for oil type.

### 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>WC0920073</b>	---	---
Sample Date	Client Info			<b>12 Apr 2024</b>	---	---
Machine Age	mls	Client Info		<b>61075</b>	---	---
Oil Age	mls	Client Info		<b>11075</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>8</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>11</b>	---	---
Lead	ppm	ASTM D5185m	>50	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>200	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

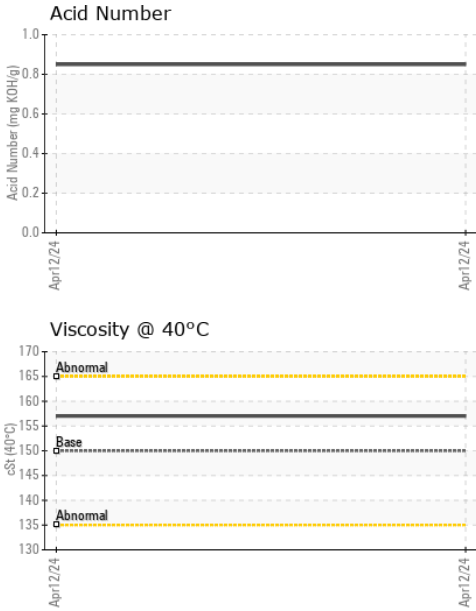
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>6</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>1170</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>311</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>262</b>	---	---
Zinc	ppm	ASTM D5185m		<b>6</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>21670</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>20</b>	---	---
Sodium	ppm	ASTM D5185m		<b>6</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---

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



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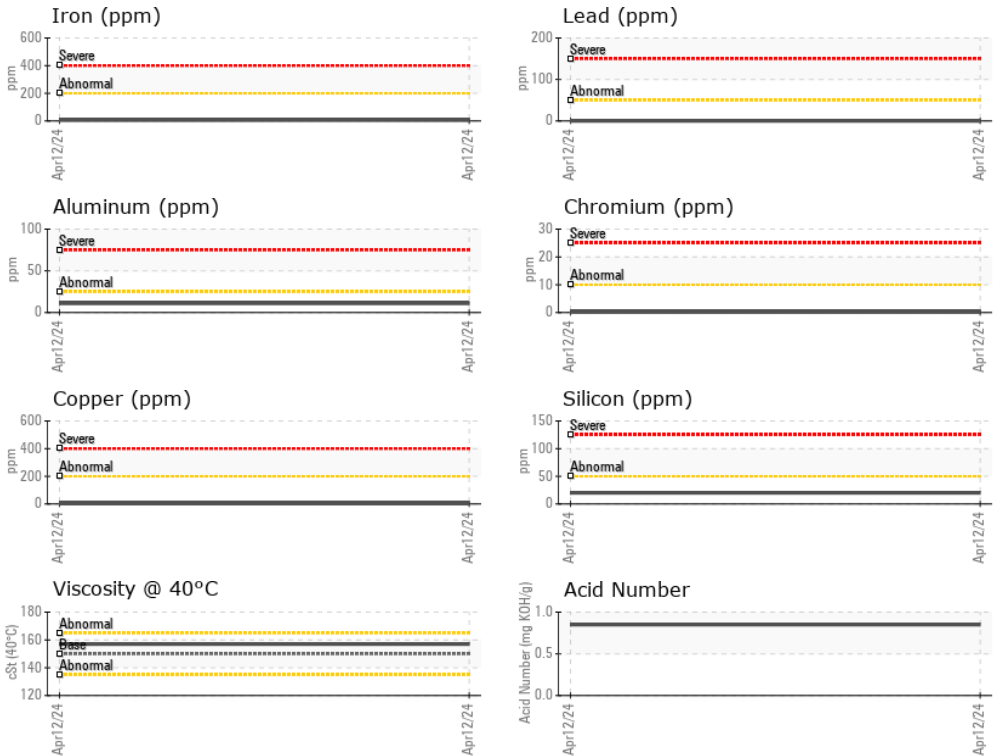
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	150	<b>157</b>	---	---

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0920073  
**Lab Number** : 06178965  
**Unique Number** : 11030291  
**Test Package** : MOB 2

**Received** : 14 May 2024  
**Tested** : 05 Jun 2024  
**Diagnosed** : 05 Jun 2024 - Doug Bogart

**ALSTOM C/O NEW JERSEY TRANSIT**  
 1148 NEWARK TURNPIKE  
 KEARNY, NJ  
 US 07032

Contact: DAVE GILBERT  
 david.gilbert@alstomgroup.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)

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