



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR 411-9000 (S/N N/A)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (45 LTR)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0914639</b>	---	---
Sample Date	Client Info		<b>12 Mar 2024</b>	---	---
Machine Age	hrs	Client Info	<b>10188</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>22</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	---	---
Lead	ppm	ASTM D5185(m) >40	<b>1</b>	---	---
Copper	ppm	ASTM D5185(m) >330	<b>2</b>	---	---
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 250	<b>32</b>	---	---
Barium	ppm	ASTM D5185(m) 10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 100	<b>46</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m) 450	<b>624</b>	---	---
Calcium	ppm	ASTM D5185(m) 3000	<b>1574</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	<b>837</b>	---	---
Zinc	ppm	ASTM D5185(m) 1350	<b>940</b>	---	---
Sulfur	ppm	ASTM D5185(m) 4250	<b>2415</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

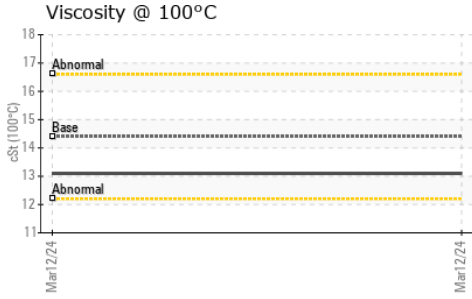
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	---	---
Sodium	ppm	ASTM D5185(m) >216	<b>4</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.1</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>7.7</b>	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>21.6</b>	---	---



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### FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Abs./1mm	ASTM D7414*	>25	---	---

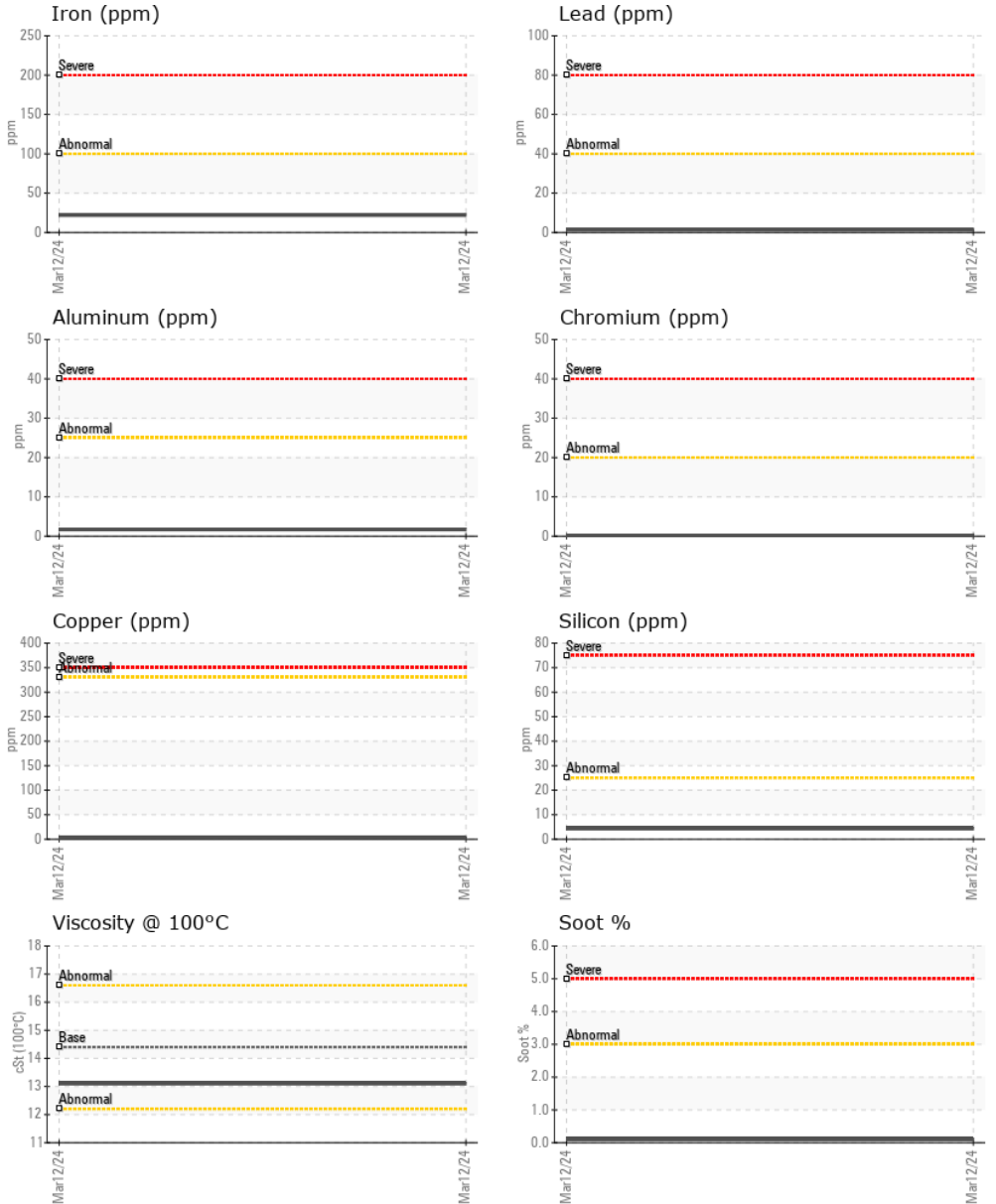
### VISUAL

Method	Limit/Base	Current	History1	History2
scalar	Visual*	>0.2	---	---
scalar	Visual*	NEG	---	---

### FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
cSt	ASTM D7279(m)	14.4	---	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0914639      **Received** : 18 Mar 2024  
**Lab Number** : 02622564      **Tested** : 18 Mar 2024  
**Unique Number** : 5747683      **Diagnosed** : 18 Mar 2024 - Wes Davis  
**Test Package** : MOB 1

**E.C. KING CONTRACTING**  
 2125 - 20TH AVENUE EAST  
 OWEN SOUND, ON  
 CA N4K 5P7  
 Contact: Daniel Fleet  
 daniel.fleet@millergroup.ca  
 T:  
 F: (519)371-2783

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.