



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR 12M GDR201**  
 Component  
**Diesel Engine**  
 Fluid  
**SHELL 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>WC0886147</b>	---	---
Sample Date	Client Info		<b>05 Jan 2024</b>	---	---
Machine Age	hrs	Client Info	<b>17684</b>	---	---
Oil Age	hrs	Client Info	<b>250</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>15</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m) >2	<b>0</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>0</b>	---	---
Copper	ppm	ASTM D5185(m) >330	<b>2</b>	---	---
Tin	ppm	ASTM D5185(m) >15	<b>0</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)	<b>106</b>	---	---
Barium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	<b>17</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	<b>156</b>	---	---
Calcium	ppm	ASTM D5185(m)	<b>2006</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	<b>906</b>	---	---
Zinc	ppm	ASTM D5185(m)	<b>1034</b>	---	---
Sulfur	ppm	ASTM D5185(m)	<b>2785</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

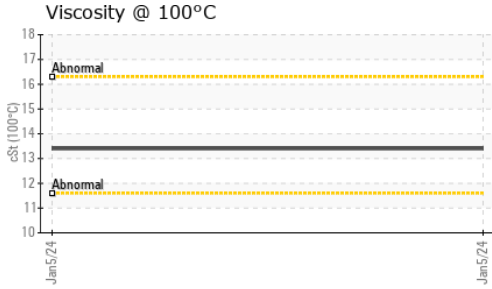
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	---	---
Sodium	ppm	ASTM D5185(m) >150	<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>6</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.5</b>	---	---
Nitration	Abs/cm	ASTM D7624* >20	<b>7.4</b>	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>22.2</b>	---	---

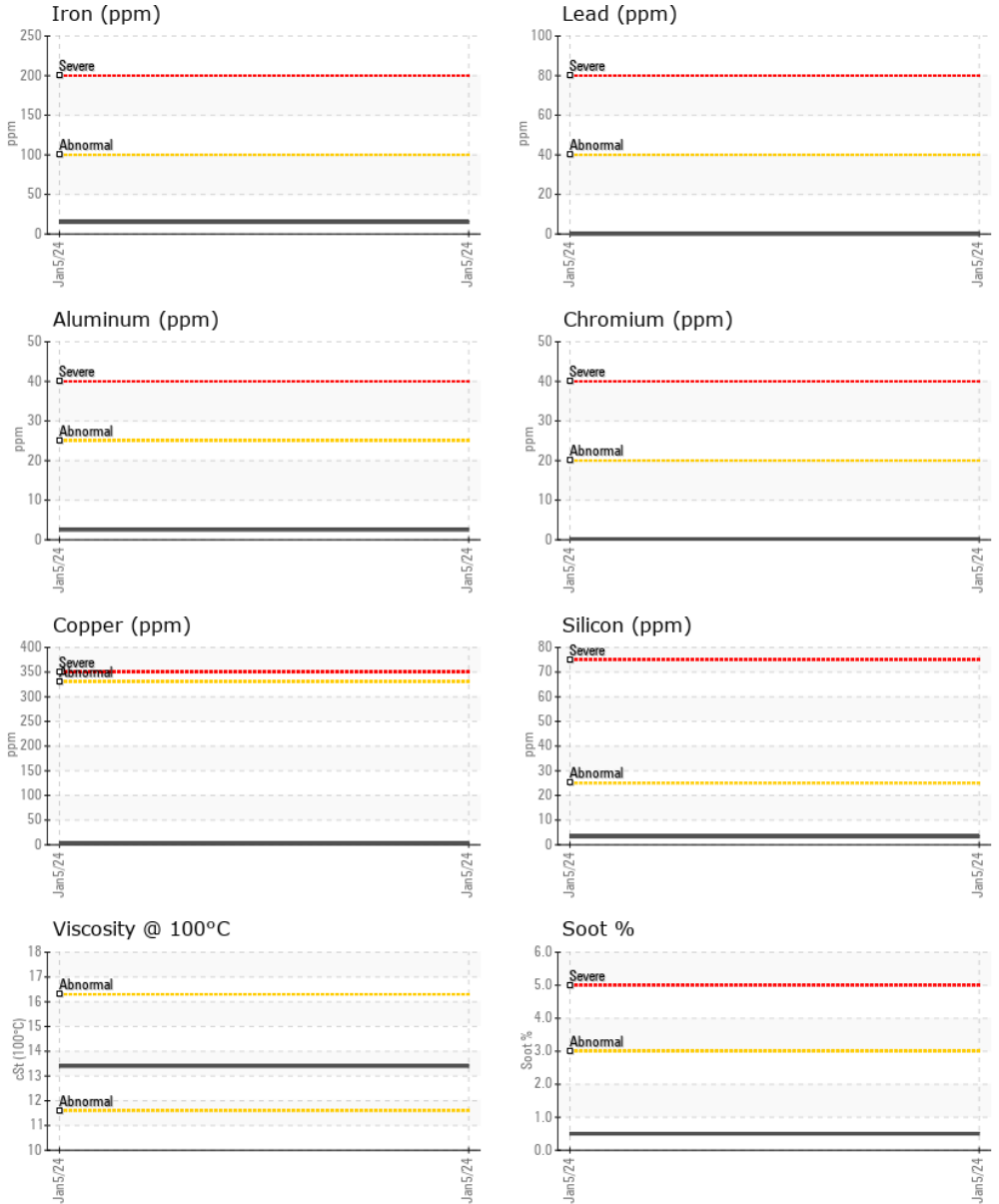


# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.5</b>	---	---
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.4</b>	---	---

## GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0886147  
**Lab Number** : 02609231  
**Unique Number** : 5710317  
**Test Package** : MOB 1

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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.