



# OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Machine Id  
**093106**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 10W30 (10 LTR)**



## DIAGNOSIS

### Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

Light concentration of visible metal present.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC105094</b>	---	---
Sample Date	Client Info	<b>12 Jan 2024</b>	---	---
Machine Age	hrs Client Info	<b>3093</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	---	---
Water	WC Method >0.1	<b>NEG</b>	---	---
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185(m) >50	<b>15</b>	---	---
Chromium ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel ppm	ASTM D5185(m) >5	<b>&lt;1</b>	---	---
Titanium ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver ppm	ASTM D5185(m) >3	<b>0</b>	---	---
Aluminum ppm	ASTM D5185(m) >20	<b>4</b>	---	---
Lead ppm	ASTM D5185(m) >40	<b>&lt;1</b>	---	---
Copper ppm	ASTM D5185(m) >30	<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) 250	<b>1</b>	---	---
Barium ppm	ASTM D5185(m) 10	<b>0</b>	---	---
Molybdenum ppm	ASTM D5185(m) 100	<b>59</b>	---	---
Manganese ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium ppm	ASTM D5185(m) 450	<b>975</b>	---	---
Calcium ppm	ASTM D5185(m) 3000	<b>1079</b>	---	---
Phosphorus ppm	ASTM D5185(m) 1150	<b>1022</b>	---	---
Zinc ppm	ASTM D5185(m) 1350	<b>1194</b>	---	---
Sulfur ppm	ASTM D5185(m) 4250	<b>2691</b>	---	---
Lithium ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185(m) >15	<b>3</b>	---	---
Sodium ppm	ASTM D5185(m)	<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</b>	---	---
Nitration	Abs/cm ASTM D7624* >20	<b>8.0</b>	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	<b>19.2</b>	---	---



# OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



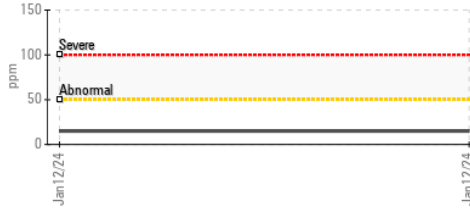
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	<b>15.4</b>	---	---

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar Visual*	NONE	<b>▲ VLITE</b>	---	---
Precipitate	scalar Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar Visual*	>0.1	<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)	10.9	<b>▲ 13.7</b>	---	---

## GRAPHS

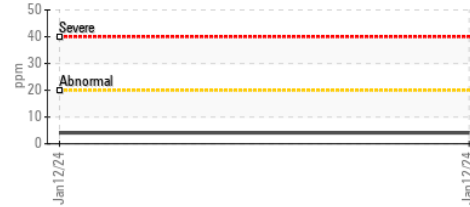
Iron (ppm)



Lead (ppm)



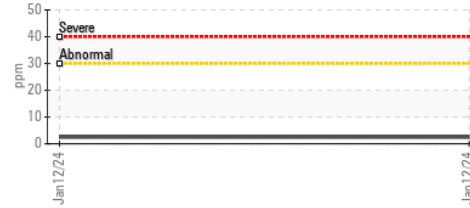
Aluminum (ppm)



Chromium (ppm)



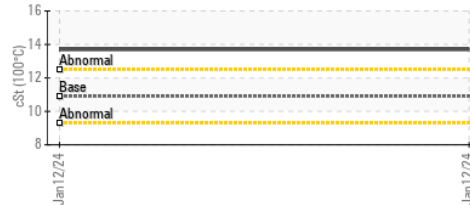
Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Soot %



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC105094 **Received** : 16 Jan 2024  
**Lab Number** : 02608859 **Tested** : 18 Jan 2024  
**Unique Number** : 5709945 **Diagnosed** : 18 Jan 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: BottomAnalysis, FILTERPATCH, Visual Contact)

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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.