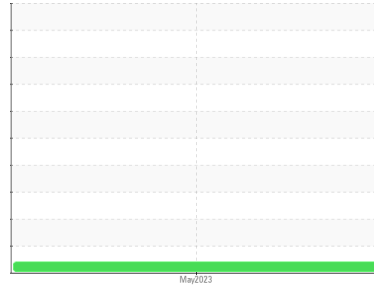




# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**DHKCEBBSOM000290**

Component  
**Diesel Engine**

Fluid  
**DOOSAN 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was specified as DOOSAN 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

### Wear

Metal levels are typical for a components first oil change.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### ▲ Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>WC0811263</b>	---	---
Sample Date	Client Info	<b>26 May 2023</b>	---	---
Machine Age	hrs	Client Info	<b>493</b>	---
Oil Age	hrs	Client Info	<b>493</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history 1	history 2		
Iron	ppm	ASTM D5185(m)	>50	<b>24</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>&lt;1</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>16</b>	---	---
Copper	ppm	ASTM D5185(m)	>30	<b>653</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</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	history 1	history 2		
Boron	ppm	ASTM D5185(m)		<b>6</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>4</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>11</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>2352</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>996</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>1101</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>3290</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

method	limit/base	current	history 1	history 2		
Silicon	ppm	ASTM D5185(m)	>15	<b>10</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>3</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Fuel	%	ASTM D7593*	>3.0	<b>0.9</b>	---	---
Glycol	%	ASTM D7922*		<b>0.0</b>	---	---

## INFRA-RED

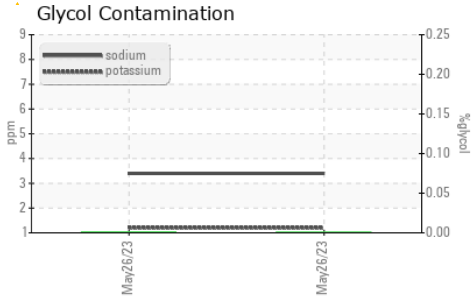
method	limit/base	current	history 1	history 2		
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.5</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.4</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.8</b>	---	---



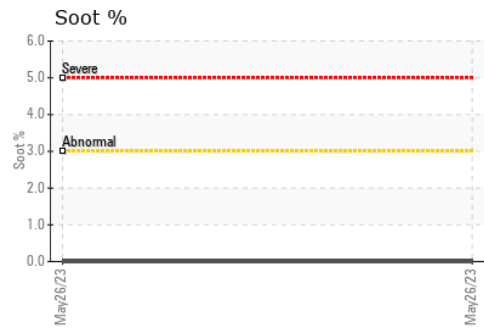
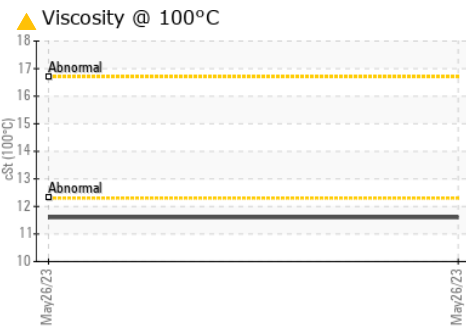
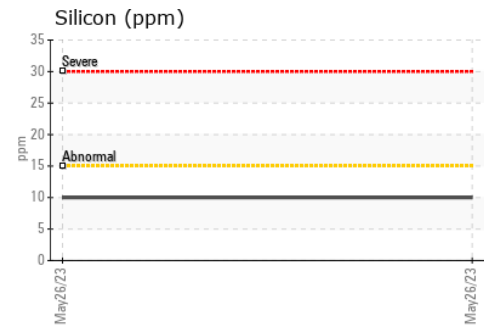
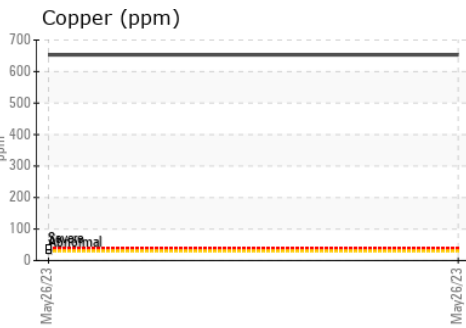
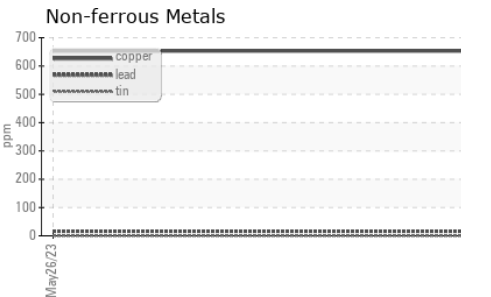
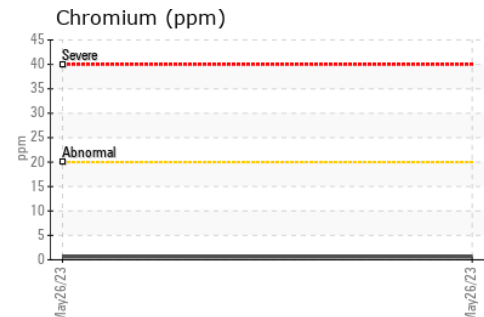
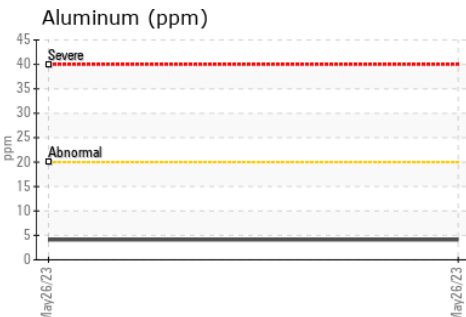
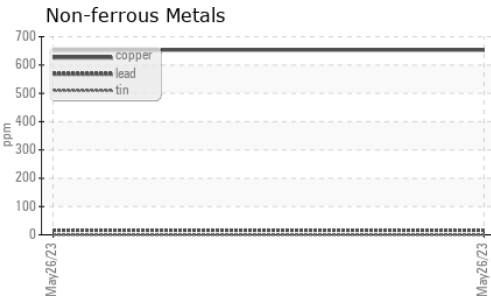
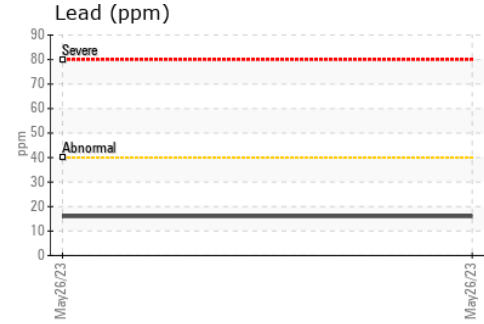
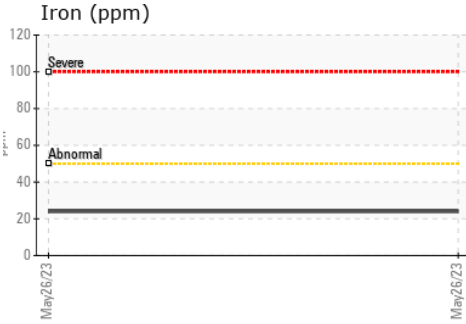
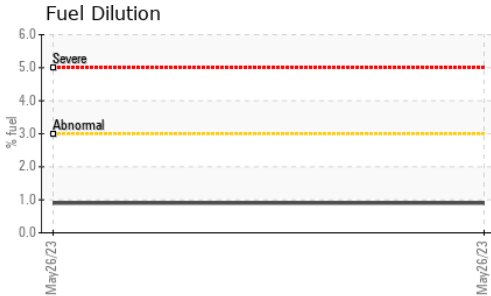
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 11.6	---	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0811263      **Received** : 09 Jun 2023  
**Lab Number** : 02563044      **Diagnosed** : 12 Jun 2023  
**Unique Number** : 5592085      **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel )

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.

**C.G. EQUIPMENT**  
 7367 Wellington Rd. 30, Unit A  
 Guelph, ON  
 CA N0M 2T0  
 Contact: Maureen McDonald  
 mmcdonald@cgequipment.com  
 T:  
 F: (519)837-2055