



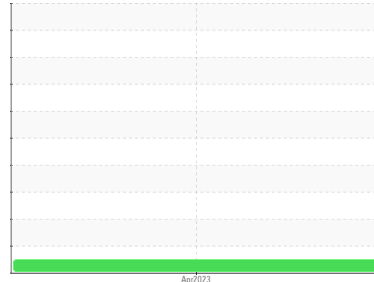
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**DHKCEWARTK5001421**  
 Component  
**Diesel Engine**  
 Fluid  
**DOOSAN 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a components first oil change.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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	history 1	history 2
Sample Number	Client Info		<b>WC0811283</b>	---	---
Sample Date	Client Info		<b>17 Apr 2023</b>	---	---
Machine Age	hrs	Client Info	<b>416</b>	---	---
Oil Age	hrs	Client Info	<b>416</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>50	<b>37</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---
Nickel	ppm	ASTM D5185(m)	>5	<b>7</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>3</b>	---
Lead	ppm	ASTM D5185(m)	>40	<b>22</b>	---
Copper	ppm	ASTM D5185(m)	>30	<b>234</b>	---
Tin	ppm	ASTM D5185(m)	>15	<b>8</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>1</b>	---
Barium	ppm	ASTM D5185(m)		<b>2</b>	---
Molybdenum	ppm	ASTM D5185(m)		<b>9</b>	---
Manganese	ppm	ASTM D5185(m)		<b>1</b>	---
Magnesium	ppm	ASTM D5185(m)		<b>11</b>	---
Calcium	ppm	ASTM D5185(m)		<b>2506</b>	---
Phosphorus	ppm	ASTM D5185(m)		<b>1024</b>	---
Zinc	ppm	ASTM D5185(m)		<b>1156</b>	---
Sulfur	ppm	ASTM D5185(m)		<b>3352</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>20</b>	---
Sodium	ppm	ASTM D5185(m)		<b>4</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>6</b>	---

## INFRA-RED

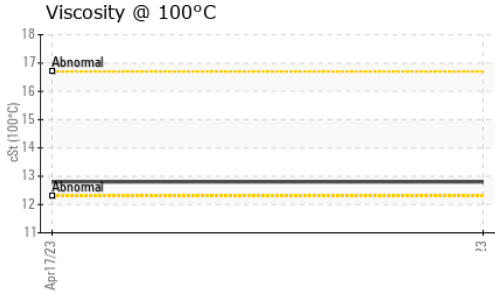
	method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>3	<b>0</b>	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.6</b>	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.0</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	---



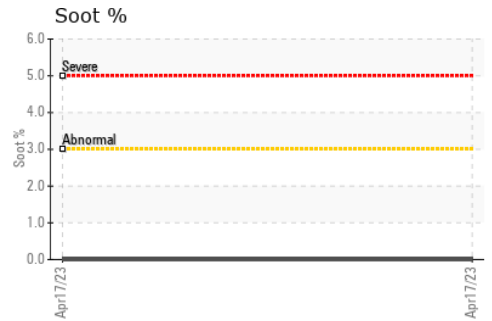
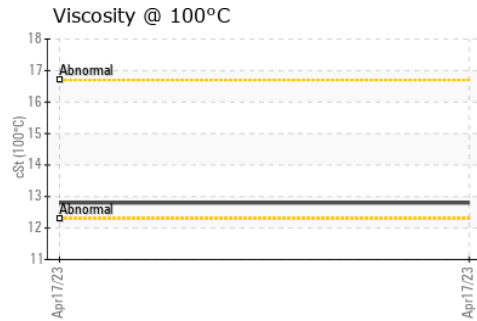
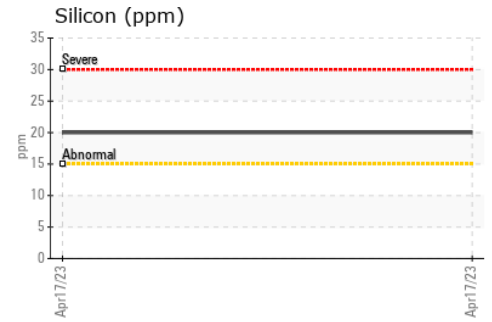
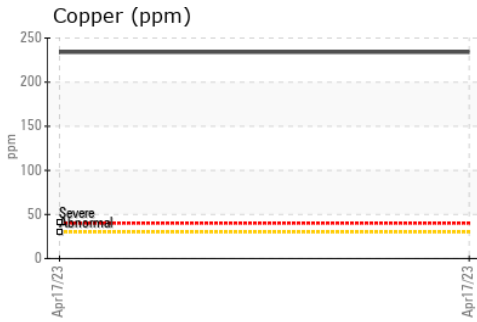
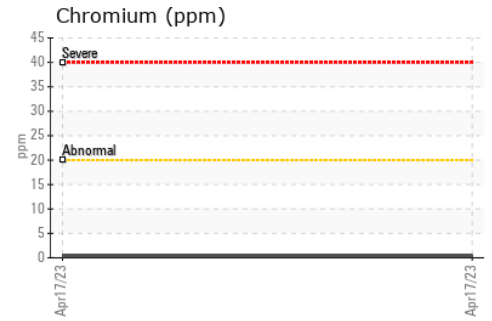
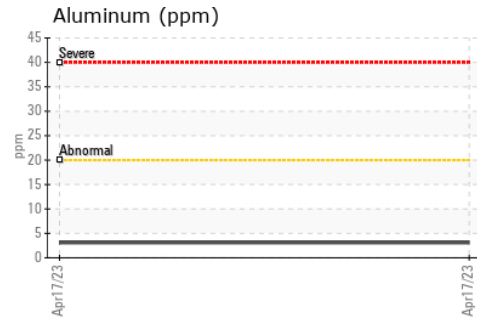
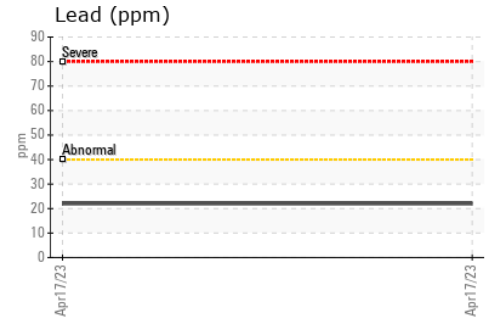
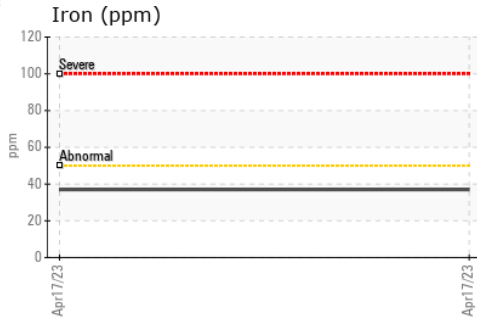
# OIL ANALYSIS REPORT



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)	12.8	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0811283      **Received** : 26 Apr 2023  
**Lab Number** : 02553563      **Diagnosed** : 26 Apr 2023  
**Unique Number** : 5566578      **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1

**C.G. EQUIPMENT**  
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 Guelph, ON  
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 Contact: Maureen McDonald  
 mmcdonald@cgequipment.com  
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 F: (519)837-2055

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.