



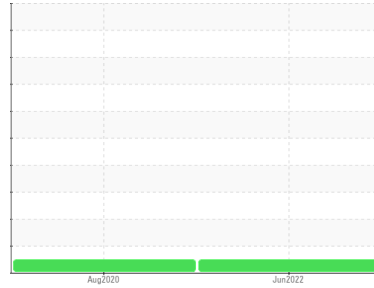
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**GARNISON OF MONTREAL [VQ6012]**  
 Machine Id  
**CATERPILLAR GD12159**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- LTR)**



## DIAGNOSIS

### Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

### Wear

Les taux d'usure de tous les composants sont normaux.

### Contamination

Il n'y a aucun indice de contamination dans l'huile.

### Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GD0005522</b>	GD0004257	---
Sample Date	Client Info		<b>30 Jun 2022</b>	27 Aug 2020	---
Machine Age	yrs	Client Info	<b>0</b>	0	---
Oil Age	yrs	Client Info	<b>1</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	N/A	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

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

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 250	<b>2</b>	15	---
Barium	ppm	ASTM D5185(m) 10	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m) 100	<b>57</b>	53	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m) 450	<b>973</b>	800	---
Calcium	ppm	ASTM D5185(m) 3000	<b>1082</b>	1369	---
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1026</b>	1079	---
Zinc	ppm	ASTM D5185(m) 1350	<b>1206</b>	1226	---
Sulfur	ppm	ASTM D5185(m) 4250	<b>2784</b>	2994	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

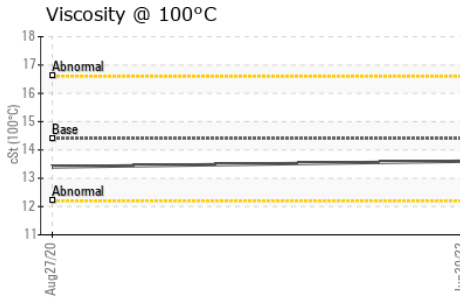
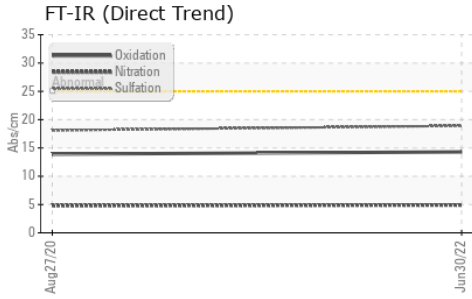
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>5</b>	10	---
Sodium	ppm	ASTM D5185(m) >158	<b>1</b>	<1	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624* >20	<b>4.9</b>	4.8	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>18.9</b>	18.1	---



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.3</b>	13.9

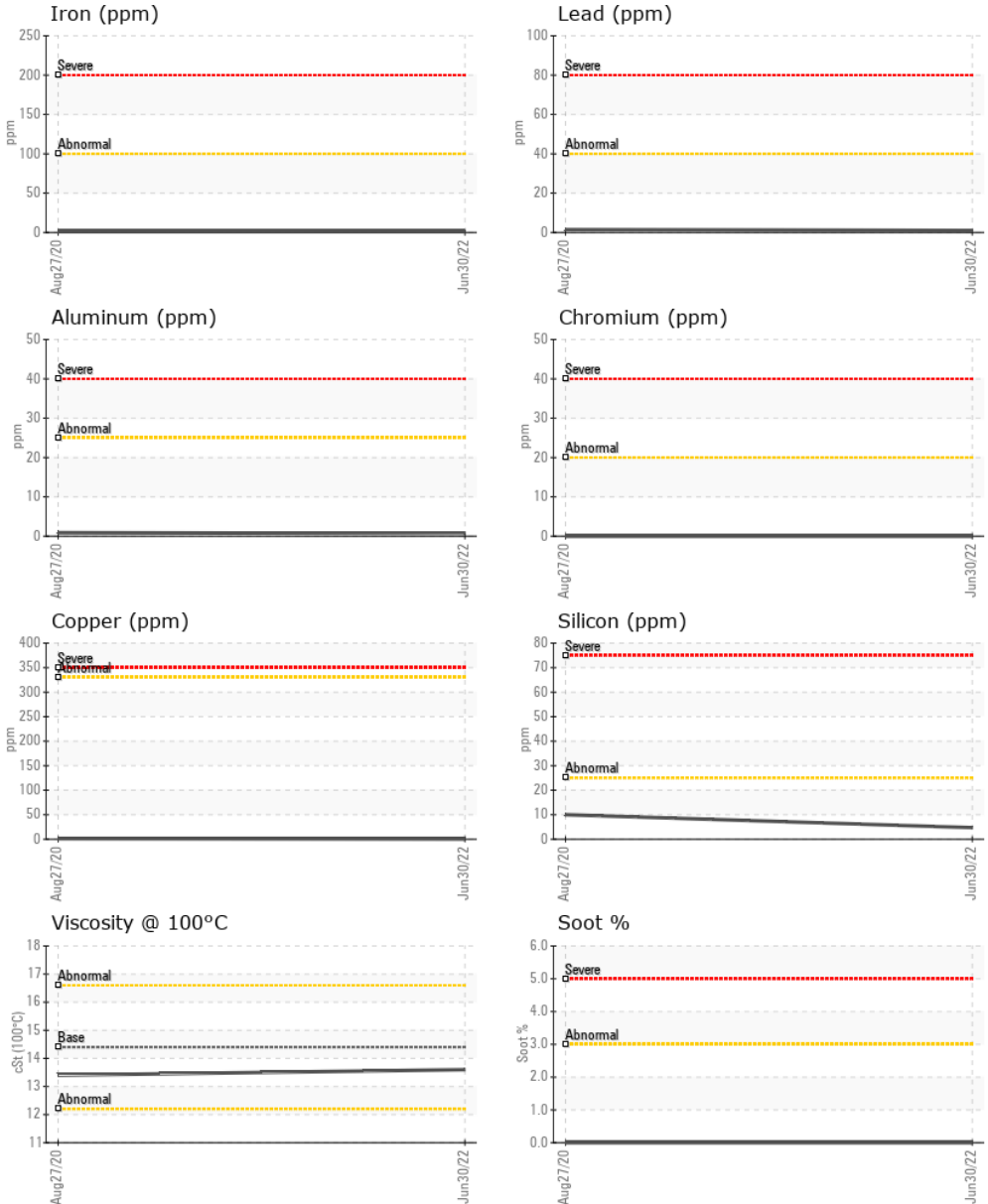
### VISUAL

	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG

### FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.6</b>	13.4

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GD0005522  
**Lab Number** : **02502319**  
**Unique Number** : 5435280  
**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.