



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**DFO CLARKS HARBOUR [134537]**

Machine Id  
**74262520**

Component  
**Diesel Engine**

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

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CU0023077</b>	CU0020167	---
Sample Date		Client Info		<b>23 May 2024</b>	02 May 2023	---
Machine Age	hrs	Client Info		<b>118</b>	87	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	<b>3</b>	6	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m)	>330	<b>7</b>	5	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## CONTAMINATION

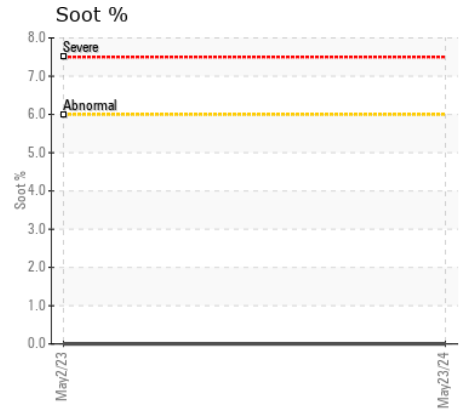
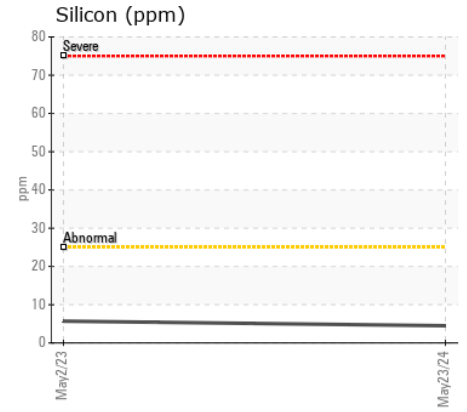
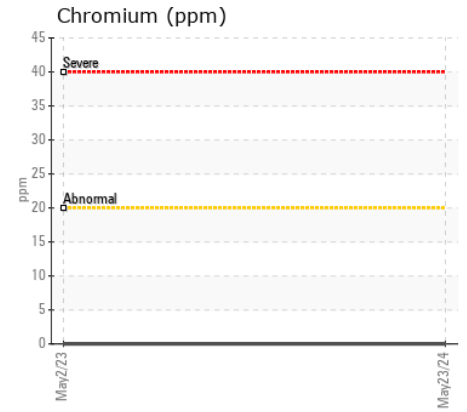
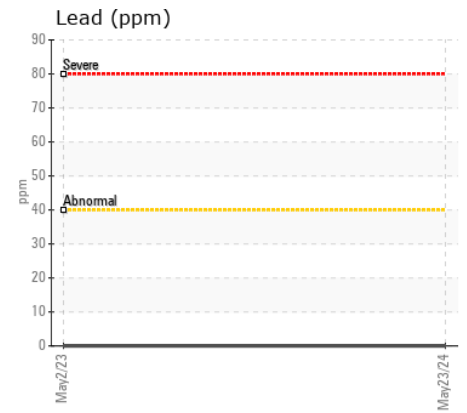
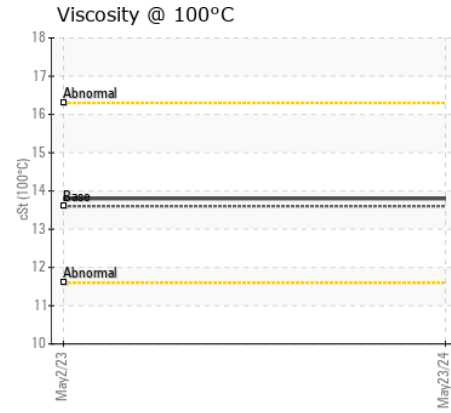
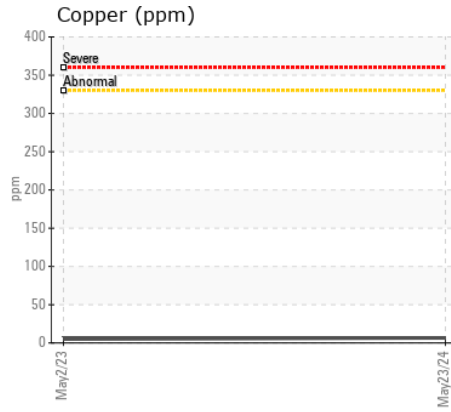
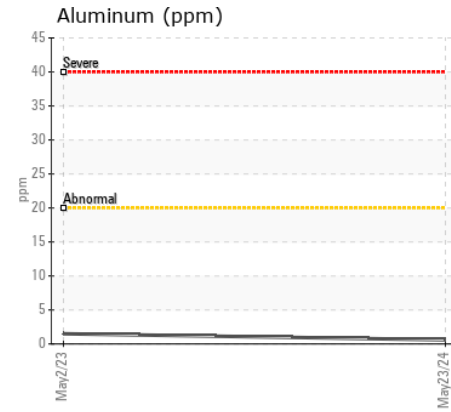
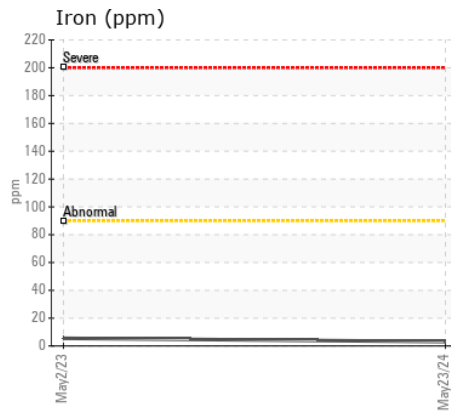
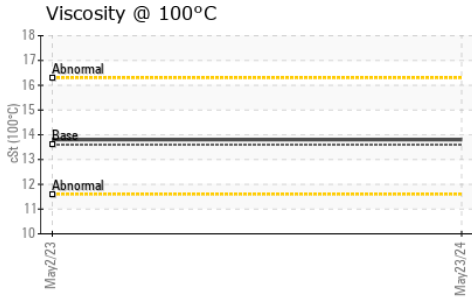
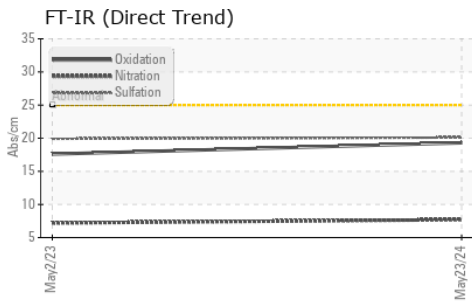
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	6	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>6	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.7</b>	7.2	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.1</b>	19.9	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	4	---
Boron	ppm	ASTM D5185(m)	39	<b>41</b>	40	---
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	49	<b>46</b>	44	---
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	616	<b>796</b>	746	---
Calcium	ppm	ASTM D5185(m)	1554	<b>1182</b>	1275	---
Phosphorus	ppm	ASTM D5185(m)	899	<b>723</b>	786	---
Zinc	ppm	ASTM D5185(m)	1069	<b>808</b>	833	---
Sulfur	ppm	ASTM D5185(m)	2624	<b>1915</b>	2107	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.3</b>	17.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	<b>13.8</b>	13.8	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0023077  
**Lab Number** : 02639751  
**Unique Number** : 5788913  
**Test Package** : MOB 1  
**Received** : 05 Jun 2024  
**Tested** : 05 Jun 2024  
**Diagnosed** : 05 Jun 2024 - Wes Davis

**CUMMINS DIESEL**  
 50 SIMMONDS DRIVE  
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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.