



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

[334546]

Machine Id

1880 G2

Component

Diesel Engine

Fluid

VALVOLINE PREMIUM BLUE EXTREME 5W40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CU0022017</b>	CU0022320	CU0020866
Sample Date		Client Info		<b>24 May 2024</b>	12 Oct 2023	10 Mar 2023
Machine Age	hrs	Client Info		<b>3471</b>	1841	647
Oil Age	hrs	Client Info		<b>0</b>	650	0
Filter Age	hrs	Client Info		<b>0</b>	650	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>26</b>	32	28
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	2
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	6	5
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	13	84
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

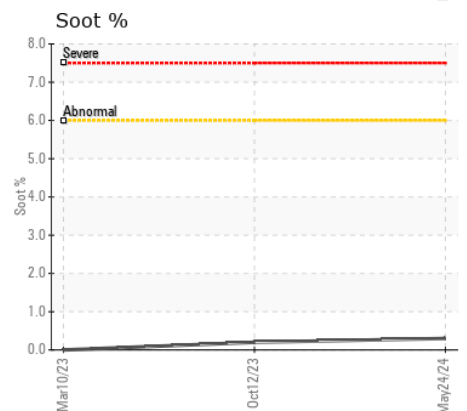
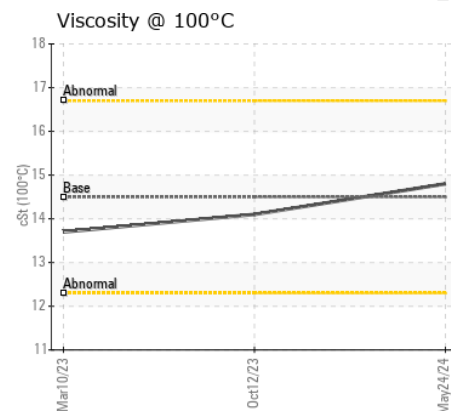
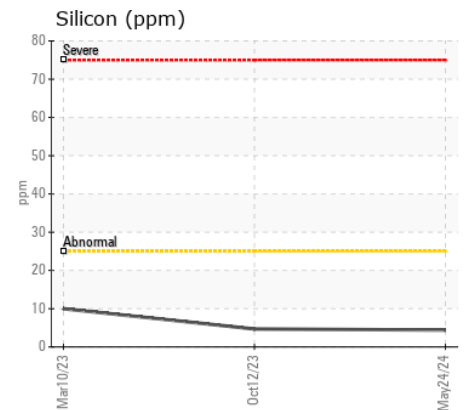
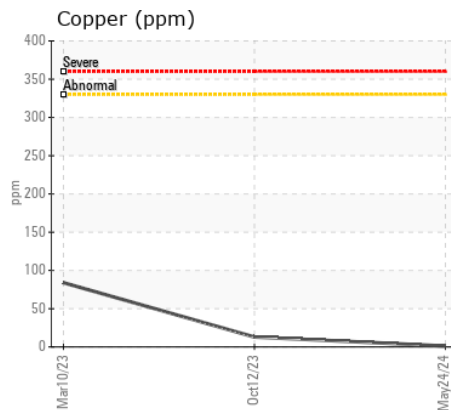
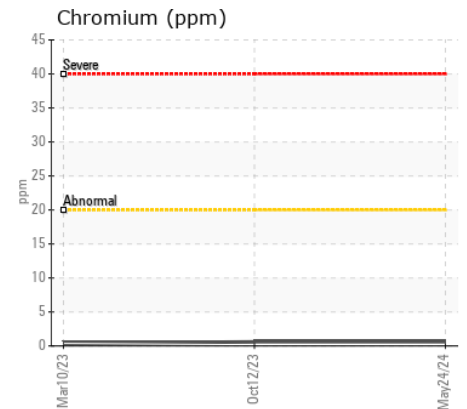
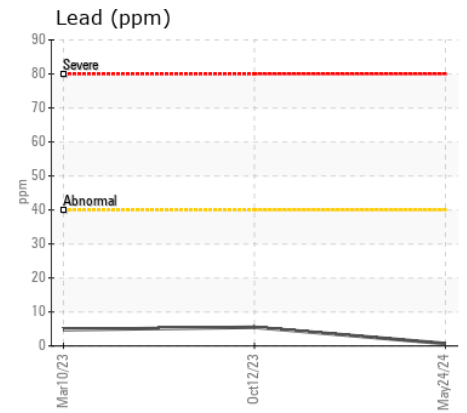
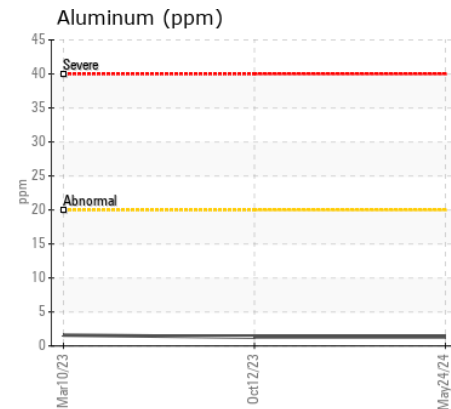
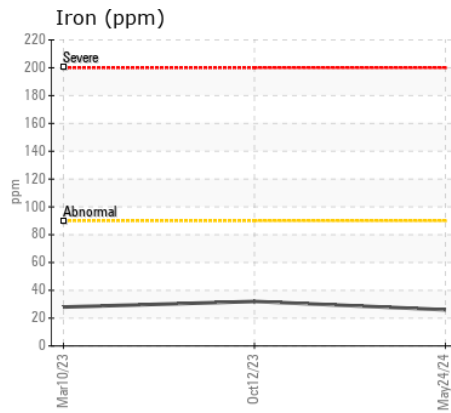
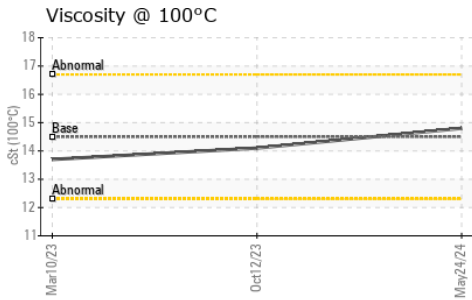
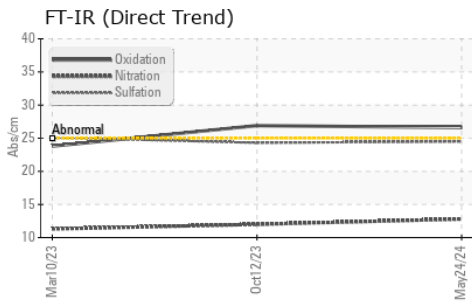
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	5	10
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	7	0
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	0.0	NEG
Soot %	%	ASTM D7844*	>6	<b>0.3</b>	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.8</b>	12.0	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>24.5</b>	24.3	25.1
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>5</b>	9	7
Boron	ppm	ASTM D5185(m)		<b>37</b>	23	42
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	4
Molybdenum	ppm	ASTM D5185(m)		<b>64</b>	67	60
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	4
Magnesium	ppm	ASTM D5185(m)		<b>1072</b>	1136	1083
Calcium	ppm	ASTM D5185(m)		<b>932</b>	838	956
Phosphorus	ppm	ASTM D5185(m)		<b>962</b>	987	1014
Zinc	ppm	ASTM D5185(m)		<b>1175</b>	1227	1153
Sulfur	ppm	ASTM D5185(m)		<b>2468</b>	2558	2589
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>26.6</b>	26.9	23.8
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>14.8</b>	14.1	13.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0022017  
**Lab Number** : 02642769  
**Unique Number** : 5800308  
**Test Package** : MOB 1  
**Received** : 19 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Kevin Marson

**CUMMINS CANADA ULC - GENERATOR DIVISION**  
 7175 PACIFIC CIRCLE  
 MISSISSAUGA, ON  
 CA L5T 2A5  
 Contact: Elisia Johnson  
 elisia.johnson@cummins.com  
 T: (905)795-0050  
 F: (905)795-9252

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.