



# OIL ANALYSIS REPORT

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

Area  
**[154160]**  
 Machine Id  
**33196952**  
 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>CU0022774</b>	CU0019025	CU0015255
Sample Date		Client Info		<b>08 Mar 2024</b>	07 Feb 2022	10 Feb 2020
Machine Age	hrs	Client Info		<b>494</b>	348	242
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>65	<b>2</b>	1	2
Chromium	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>6	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>13	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>65	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	---	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	NONE

## CONTAMINATION

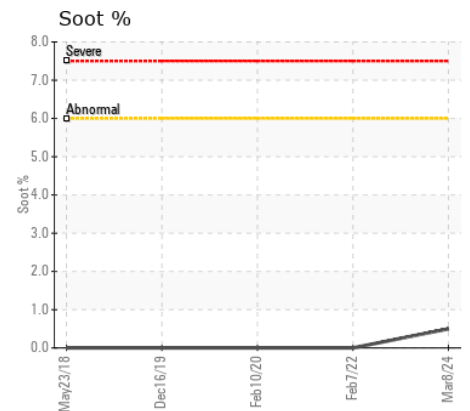
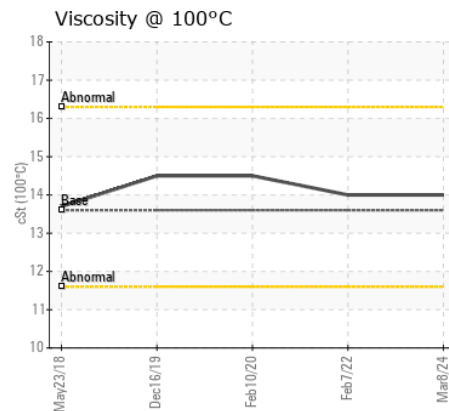
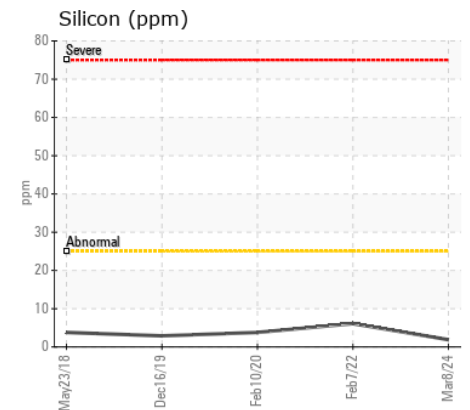
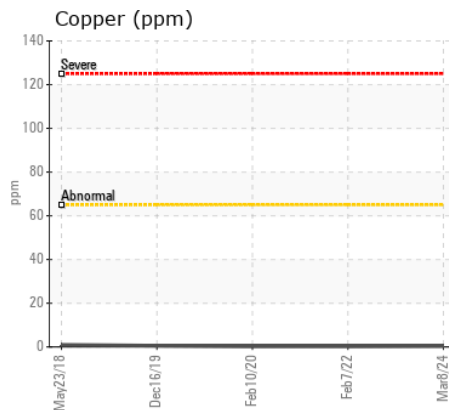
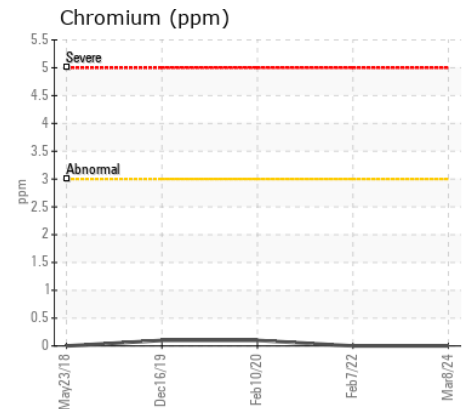
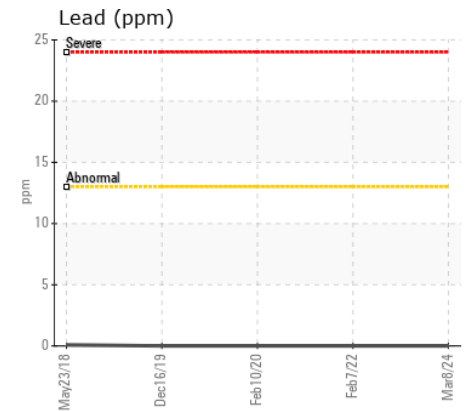
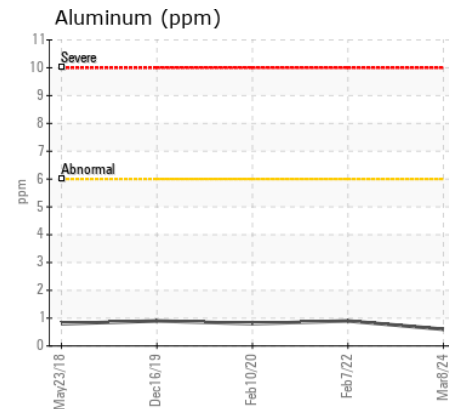
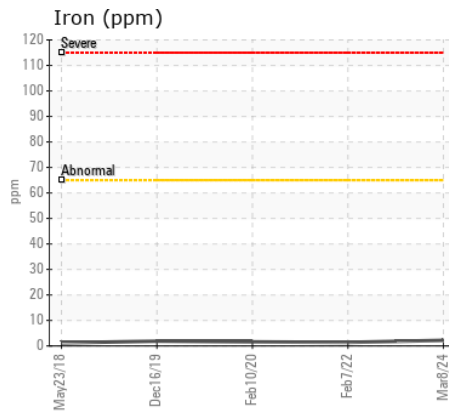
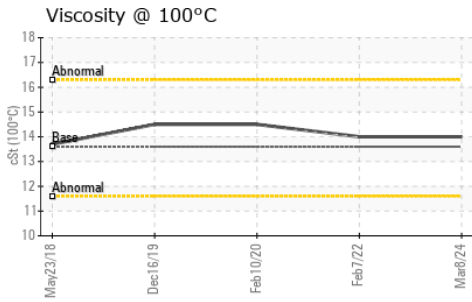
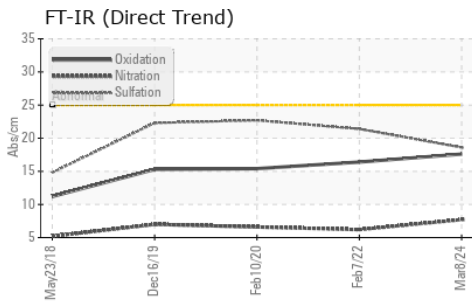
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	6	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
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>	NEG	NEG
Soot %	%	ASTM D7844*	>6	<b>0.5</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.7</b>	6.2	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.6</b>	21.4	22.7
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	VLITE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>3</b>	3	3
Boron	ppm	ASTM D5185(m)	39	<b>41</b>	44	62
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	49	<b>47</b>	41	45
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	<b>807</b>	742	603
Calcium	ppm	ASTM D5185(m)	1554	<b>1235</b>	1110	1441
Phosphorus	ppm	ASTM D5185(m)	899	<b>739</b>	715	1002
Zinc	ppm	ASTM D5185(m)	1069	<b>857</b>	817	1171
Sulfur	ppm	ASTM D5185(m)	2624	<b>1990</b>	1906	2618
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.6</b>	16.4	15.4
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	<b>14.0</b>	14.0	14.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : CU0022774  
**Lab Number** : 02640730  
**Unique Number** : 5789892  
**Test Package** : MOB 1 ( Additional Tests: Visual )  
**Received** : 10 Jun 2024  
**Tested** : 10 Jun 2024  
**Diagnosed** : 10 Jun 2024 - Wes Davis

**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.