



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**51948**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0915516</b>	WC0879061	WC0864022
Sample Date		Client Info		<b>22 Mar 2024</b>	30 Nov 2023	19 Oct 2023
Machine Age	hrs	Client Info		<b>308202</b>	243928	221339
Oil Age	hrs	Client Info		<b>25932</b>	27595	33890
Filter Age	hrs	Client Info		<b>25932</b>	27595	33890
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>19</b>	17	17
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>6</b>	4	3
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

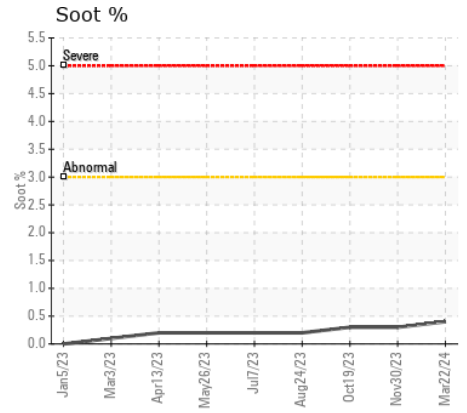
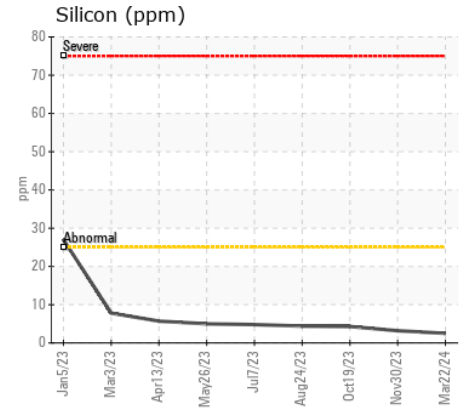
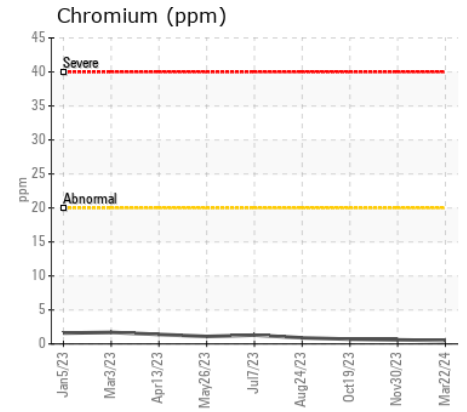
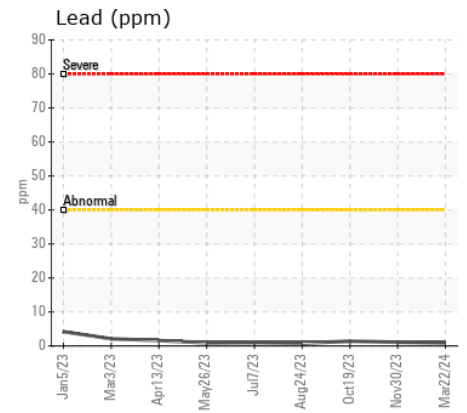
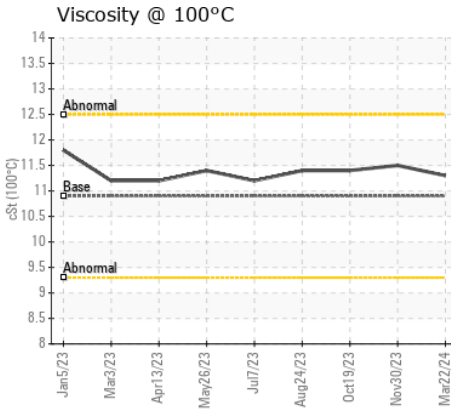
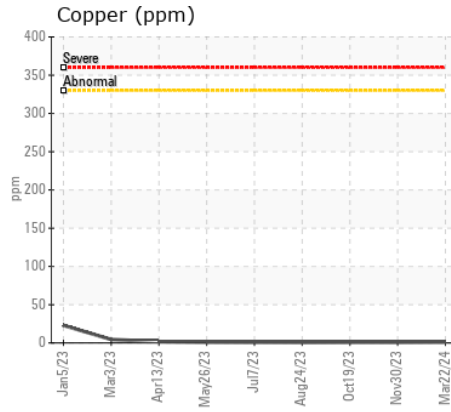
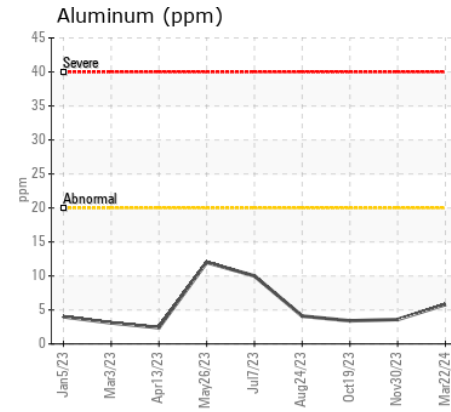
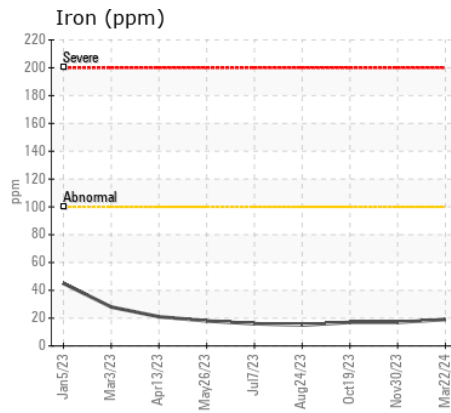
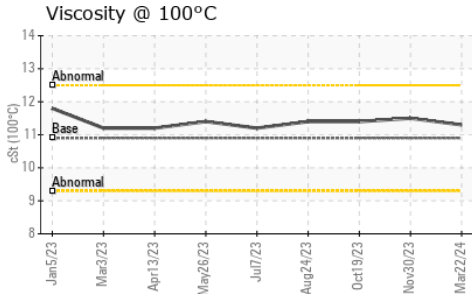
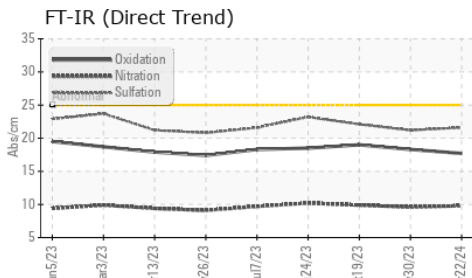
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	4
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	2	4
Fuel		WC Method	>5	<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*	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.8</b>	9.6	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.6</b>	21.2	22.1
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>1</b>	2	2
Boron	ppm	ASTM D5185(m)	250	<b>5</b>	5	5
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>63</b>	65	66
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	450	<b>1031</b>	1035	1044
Calcium	ppm	ASTM D5185(m)	3000	<b>1105</b>	1158	1163
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1046</b>	1035	1052
Zinc	ppm	ASTM D5185(m)	1350	<b>1285</b>	1289	1304
Sulfur	ppm	ASTM D5185(m)	4250	<b>2494</b>	2461	2458
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.7</b>	18.3	19.0
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.3</b>	11.5	11.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915516 **Received** : 08 Apr 2024  
**Lab Number** : 02627260 **Tested** : 08 Apr 2024  
**Unique Number** : 5760392 **Diagnosed** : 08 Apr 2024 - Kevin Marson  
**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.