



# OIL ANALYSIS REPORT

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

Area  
**[84891]**  
 Machine Id  
**P120**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0812466</b>	WC0495046	WC0418688
Sample Date		Client Info		<b>07 May 2024</b>	03 Aug 2021	13 Apr 2020
Machine Age	yrs	Client Info		<b>1</b>	0	10909
Oil Age	yrs	Client Info		<b>1</b>	0	12
Filter Age	yrs	Client Info		<b>1</b>	0	12
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)	>65	<b>17</b>	27	28
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	1	2
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185(m)	>35	<b>7</b>	8	6
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	4	19
Copper	ppm	ASTM D5185(m)	>180	<b>33</b>	152	670
Tin	ppm	ASTM D5185(m)	>8	<b>2</b>	7	10
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	LIGHT
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

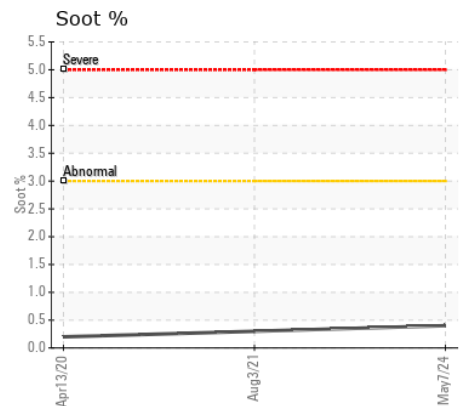
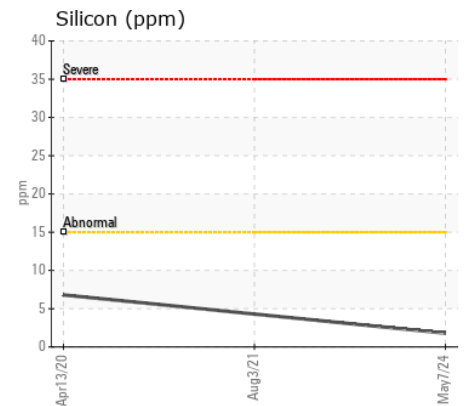
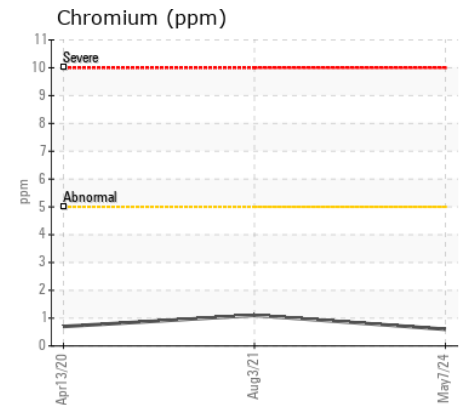
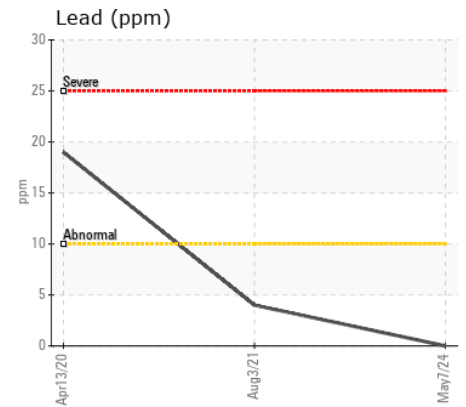
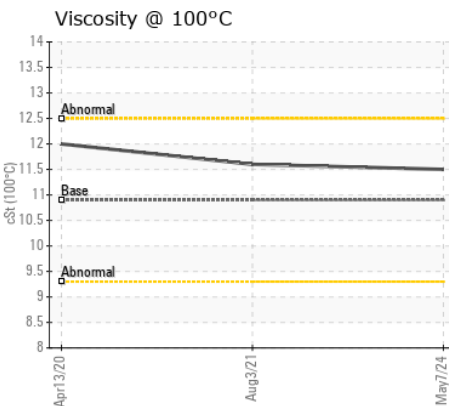
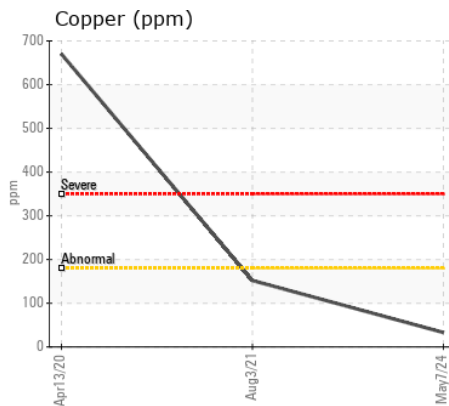
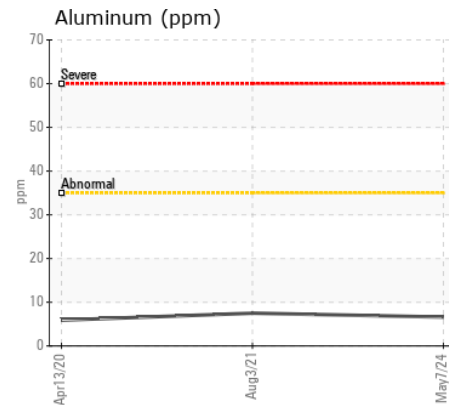
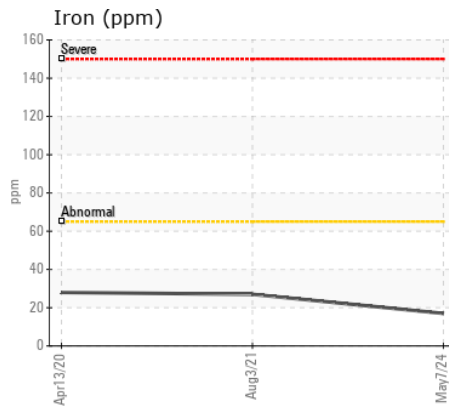
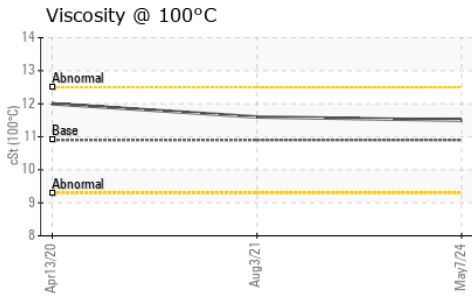
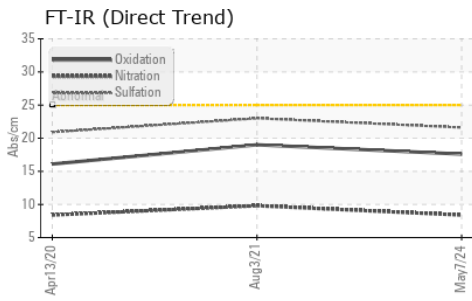
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>2</b>	4	7
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	9	15
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	0.0	0.0
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.4</b>	9.8	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.6</b>	23.0	20.9
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	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>2</b>	3	3
Boron	ppm	ASTM D5185(m)	250	<b>1</b>	3	10
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>62</b>	51	11
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	3
Magnesium	ppm	ASTM D5185(m)	450	<b>970</b>	838	140
Calcium	ppm	ASTM D5185(m)	3000	<b>1112</b>	1379	2236
Phosphorus	ppm	ASTM D5185(m)	1150	<b>953</b>	1001	851
Zinc	ppm	ASTM D5185(m)	1350	<b>1203</b>	1242	1037
Sulfur	ppm	ASTM D5185(m)	4250	<b>2098</b>	2153	2612
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.6</b>	19.0	16.1
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.5</b>	11.6	12.0



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Apple Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0812466  
**Lab Number** : 02640627  
**Unique Number** : 5789789  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**Received** : 10 Jun 2024  
**Tested** : 10 Jun 2024  
**Diagnosed** : 10 Jun 2024 - Kevin Marson

**CITY OF MISSISSAUGA FIRE DEPT**  
 7535 NINTH LINE  
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 CA L5N 7C3  
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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.