



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**[807939]**  
 Machine Id  
**S110**  
 Component  
**Diesel Engine**  
 Fluid  
**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>WC0812441</b>	WC0711600	WC0495058
Sample Date		Client Info		<b>13 Nov 2023</b>	08 Sep 2022	04 Aug 2021
Machine Age	kms	Client Info		<b>59156</b>	38650	15612
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>65	<b>27</b>	33	39
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	1	1
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	2
Aluminum	ppm	ASTM D5185(m)	>35	<b>6</b>	7	6
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	3	21
Copper	ppm	ASTM D5185(m)	>180	<b>56</b>	147	▲ 639
Tin	ppm	ASTM D5185(m)	>8	<b>3</b>	5	8
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

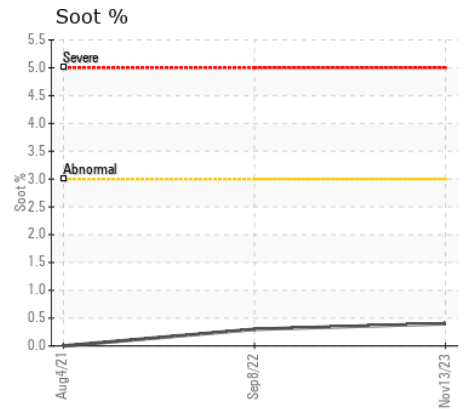
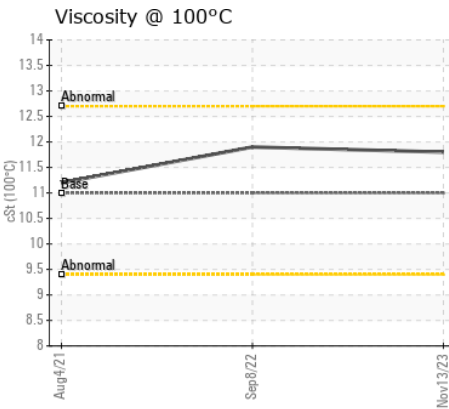
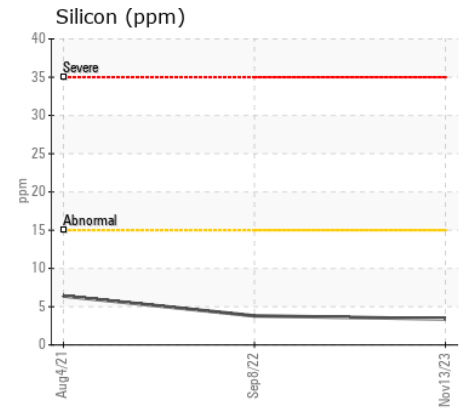
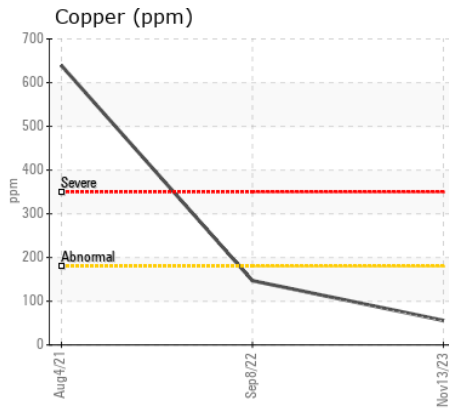
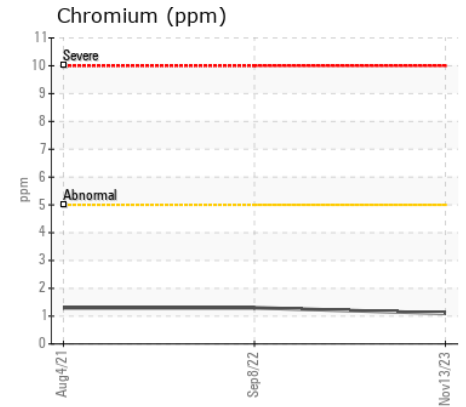
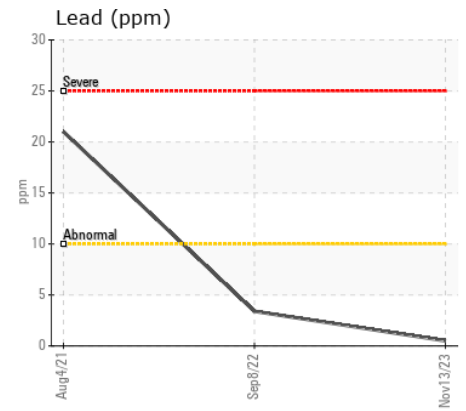
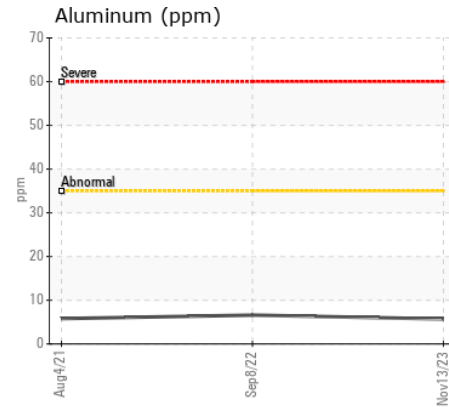
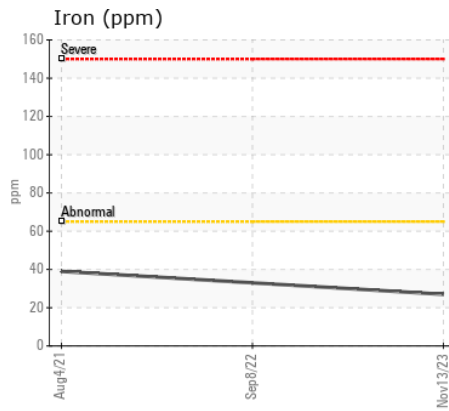
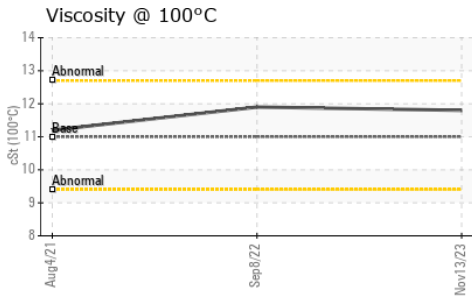
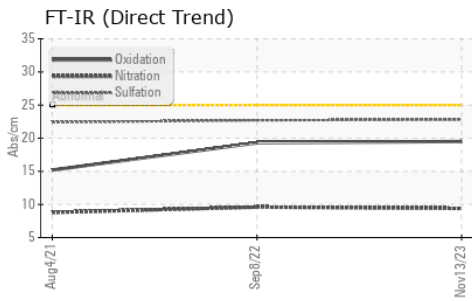
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	4	6
Potassium	ppm	ASTM D5185(m)	>20	<b>8</b>	8	9
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.0
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
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	9.6	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.8</b>	22.7	22.4
Silt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>VLITE</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)	>228	<b>2</b>	4	5
Boron	ppm	ASTM D5185(m)		<b>1</b>	2	9
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>59</b>	48	3
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	4
Magnesium	ppm	ASTM D5185(m)		<b>908</b>	773	278
Calcium	ppm	ASTM D5185(m)		<b>1263</b>	1484	1961
Phosphorus	ppm	ASTM D5185(m)		<b>993</b>	1015	852
Zinc	ppm	ASTM D5185(m)		<b>1245</b>	1228	990
Sulfur	ppm	ASTM D5185(m)		<b>2041</b>	2134	2479
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.5</b>	19.3	15.2
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>11.8</b>	11.9	11.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0812441 **Received** : 10 Jun 2024  
**Lab Number** : 02640648 **Tested** : 10 Jun 2024  
**Unique Number** : 5789810 **Diagnosed** : 10 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**CITY OF MISSISSAUGA FIRE DEPT**  
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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.