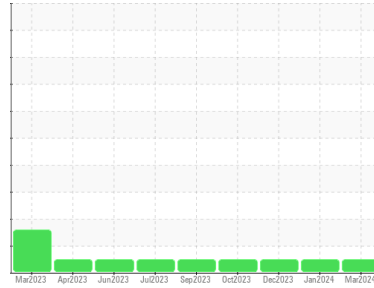




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**2212**

Component  
**Natural Gas Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0917396</b>	WC0890907	WC0878127
Sample Date	Client Info			<b>17 Mar 2024</b>	25 Jan 2024	05 Dec 2023
Machine Age	kms	Client Info		<b>0</b>	63906	56081
Oil Age	kms	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.1		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>---</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	<b>8</b>	9	7
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<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>	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	<b>2</b>	2	1
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>35	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>14</b>	15	13
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>54</b>	54	54
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	450	<b>779</b>	761	768
Calcium	ppm	ASTM D5185(m)	3000	<b>1239</b>	1216	1210
Phosphorus	ppm	ASTM D5185(m)	1150	<b>659</b>	686	624
Zinc	ppm	ASTM D5185(m)	1350	<b>853</b>	857	867
Sulfur	ppm	ASTM D5185(m)	4250	<b>2095</b>	2083	1931
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

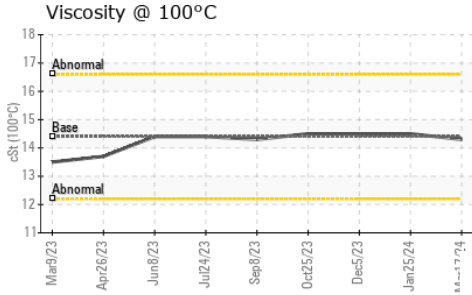
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	<b>4</b>	4	4
Sodium	ppm	ASTM D5185(m)	>158	<b>3</b>	6	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.0</b>	11.6	12.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.7</b>	22.1	21.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.3</b>	19.2	20.0



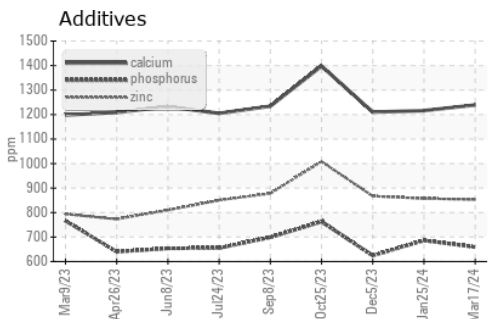
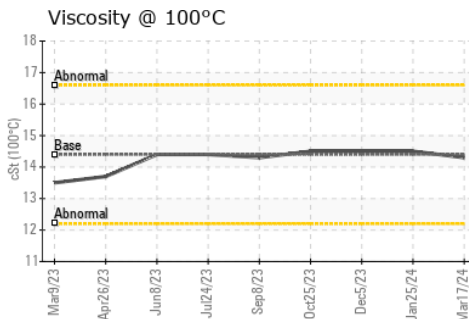
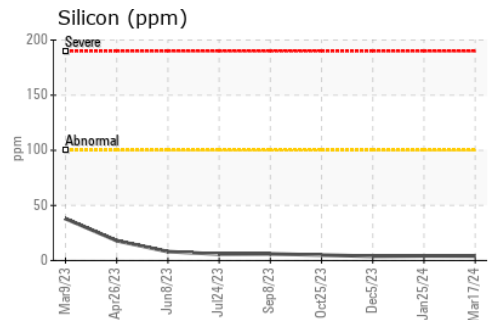
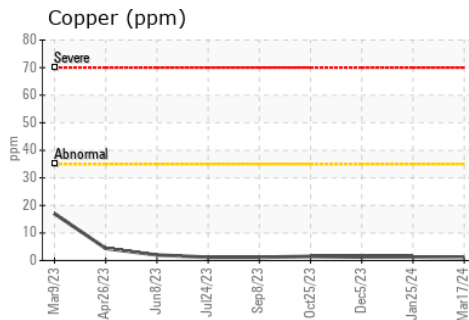
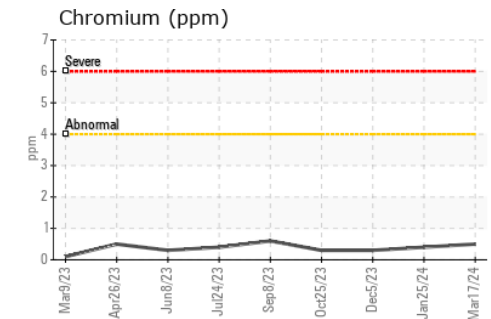
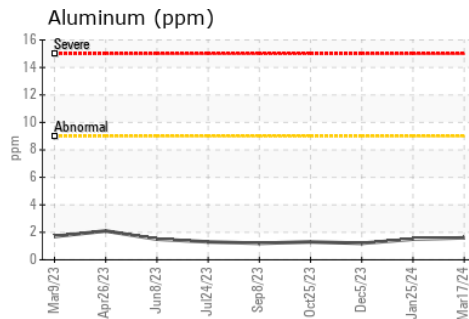
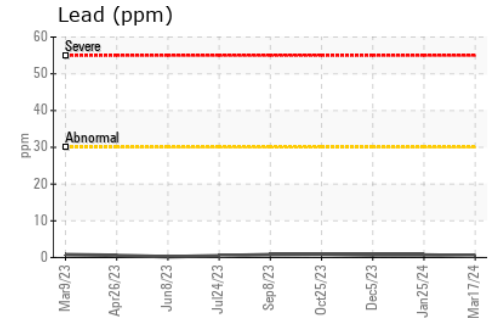
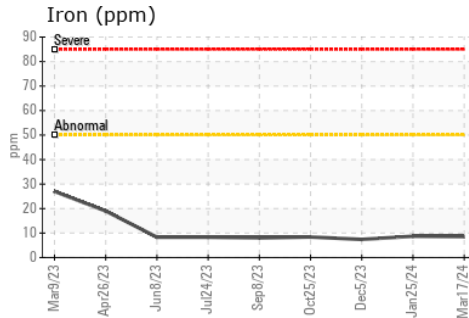
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.3</b>	14.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0917396  
**Lab Number** : 02622666  
**Unique Number** : 5747785  
**Test Package** : MOB 1  
**Received** : 18 Mar 2024  
**Tested** : 18 Mar 2024  
**Diagnosed** : 18 Mar 2024 - Wes Davis

**CITY OF HAMILTON**  
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM  
 MOUNT HOPE, ON  
 CA L0R 1W0  
 Contact: Cliff Bird  
 cliff.bird@hamilton.ca  
 T:  
 F: (905)679-4502

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.