



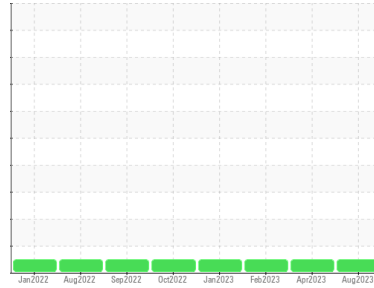
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[3874]**  
 Machine Id  
**2103**  
 Component  
**Diesel Engine**  
 Fluid  
**VALVOLINE 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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>WC0828560</b>	WC0780456	WC0754259
Sample Date	Client Info			<b>15 Aug 2023</b>	24 Apr 2023	14 Feb 2023
Machine Age	hrs Client Info			<b>226262</b>	198875	178696
Oil Age	hrs Client Info			<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	<b>6</b>	5	5
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>100	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	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)		<b>37</b>	96	100
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>40</b>	12	20
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>199</b>	84	140
Calcium	ppm	ASTM D5185(m)		<b>1992</b>	2199	2074
Phosphorus	ppm	ASTM D5185(m)		<b>995</b>	1042	1006
Zinc	ppm	ASTM D5185(m)		<b>1113</b>	1151	1137
Sulfur	ppm	ASTM D5185(m)		<b>2956</b>	2971	2874
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

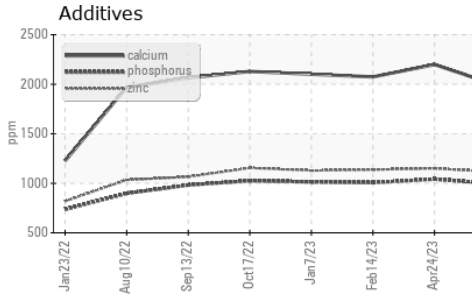
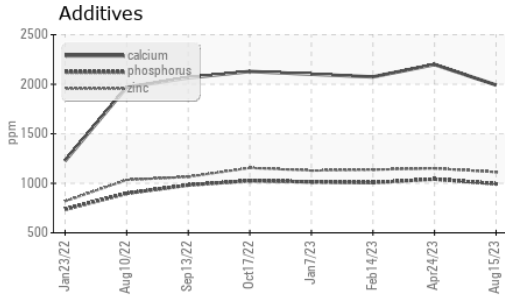
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	2	2
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>0.1</b>	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.1</b>	8.4	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.3</b>	21.7	22.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.6</b>	18.1	17.9



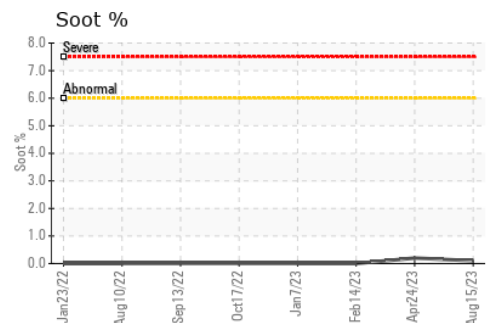
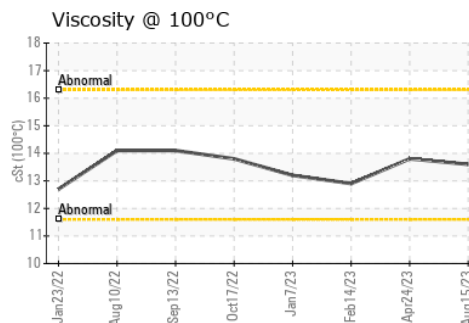
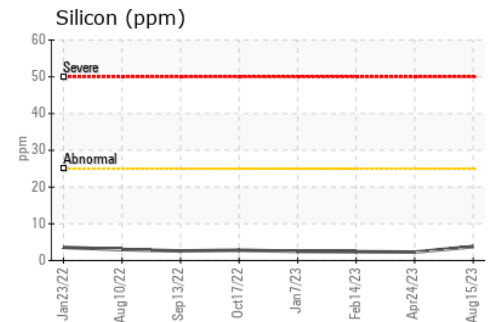
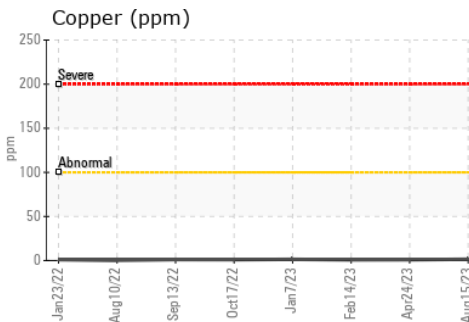
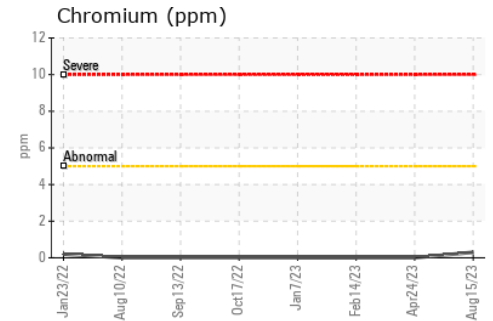
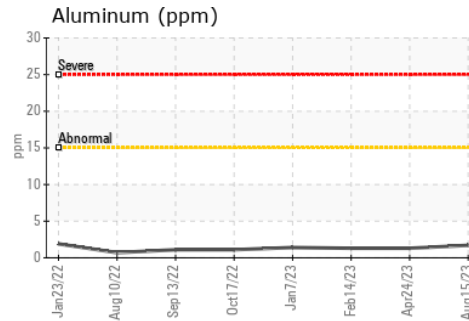
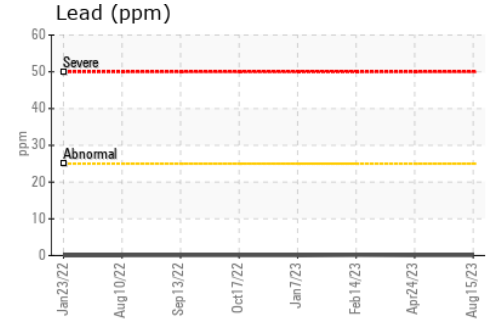
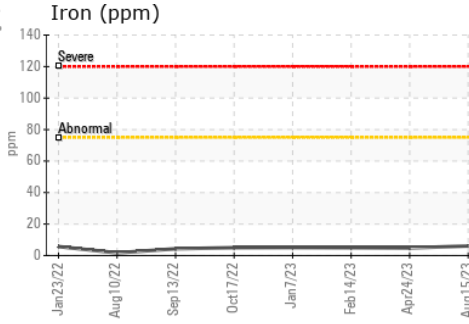
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	13.8	12.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0828560 **Received** : 24 Aug 2023  
**Lab Number** : 02577978 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 5631038 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**MVT Canadian Bus**  
 133 Welham Road  
 Barrie, ON  
 CA L4N 8Y3  
 Contact: Frank Mastromarco  
 frank.mastromarco@mvttransit.com  
 T: (709)792-5033  
 F:

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.