



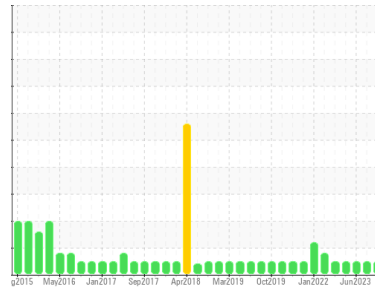
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[6172]**  
 Machine Id  
**NEW FLYER 1203-312**  
 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

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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>WC0875083</b>	WC0805068	WC0805039
Sample Date	Client Info		<b>30 Dec 2023</b>	18 Jul 2023	09 Jun 2023
Machine Age	kms	Client Info	<b>508890</b>	481938	472540
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>31</b>	7	7
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	<1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
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)	39	<b>9</b>	28	49
Barium	ppm	ASTM D5185(m)	1	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	49	<b>10</b>	35	13
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	616	<b>55</b>	42	70
Calcium	ppm	ASTM D5185(m)	1554	<b>2130</b>	2219	2214
Phosphorus	ppm	ASTM D5185(m)	899	<b>829</b>	994	997
Zinc	ppm	ASTM D5185(m)	1069	<b>987</b>	1115	1142
Sulfur	ppm	ASTM D5185(m)	2624	<b>3002</b>	3042	2901
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

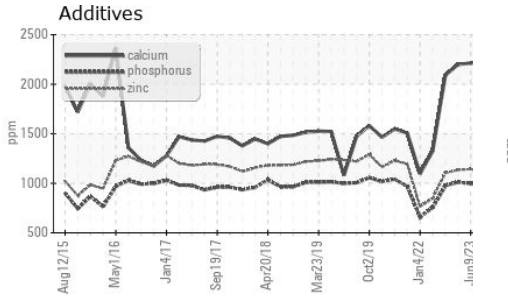
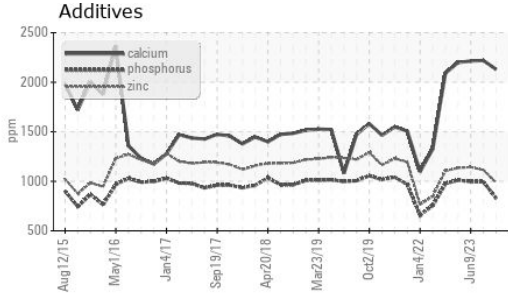
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	5	4
Sodium	ppm	ASTM D5185(m)		<b>4</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	1	2

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.9	0.8
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.2</b>	9.8	10.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>22.0</b>	23.3	23.7



# OIL ANALYSIS REPORT



FLUID DEGRADATION	method	limit/base	current	history1	history2
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Oxidation	Abs./1mm	ASTM D7414*	>25	14.7	17.0	19.0
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VISUAL	method	limit/base	current	history1	history2
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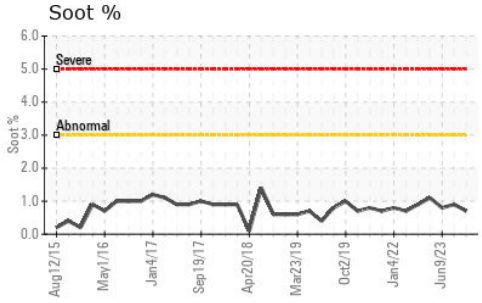
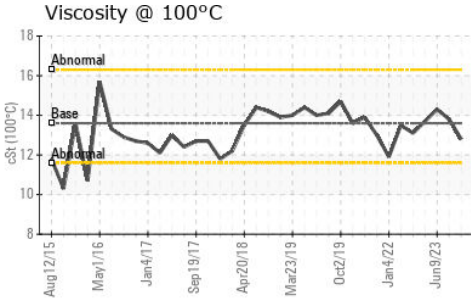
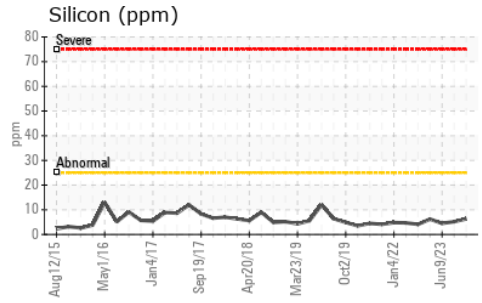
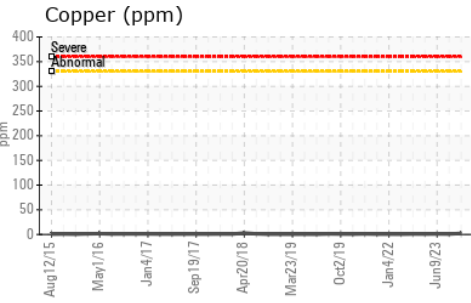
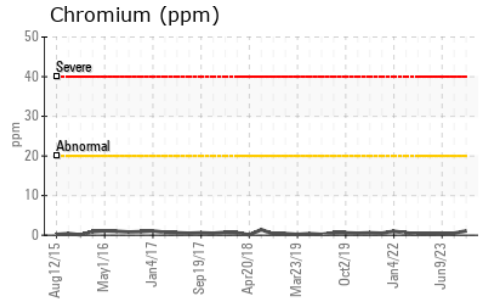
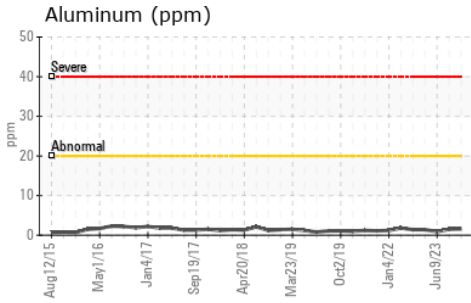
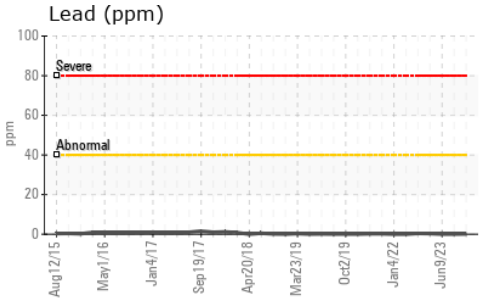
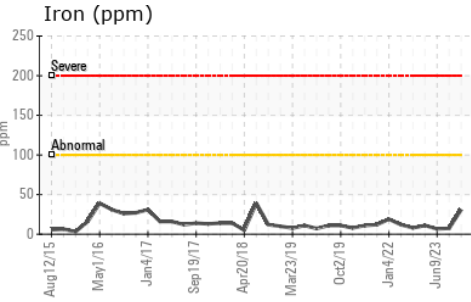
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
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Free Water	scalar	Visual*		NEG	NEG	NEG
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FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 100°C	cSt	ASTM D7279(m)	13.6	12.8	13.8	14.3
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## GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0875083  
**Lab Number** : 02606938  
**Unique Number** : 5708024  
**Test Package** : MOB 1

**Received** : 08 Jan 2024  
**Diagnosed** : 08 Jan 2024  
**Diagnostician** : Wes Davis

**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.