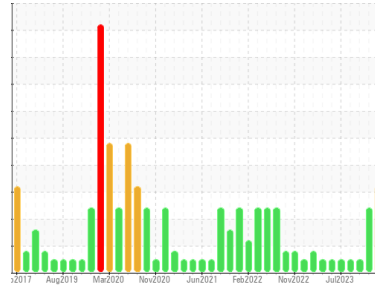




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**NEW FLYER 1108**

Component  
**Diesel Engine**

Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Tests confirm the presence of fuel in the oil. Test for glycol is negative.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants. The condition of the oil is acceptable for the time in service (see recommendation).

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0891037</b>	WC0877893	WC0849901
Sample Date	Client Info		<b>04 Jan 2024</b>	22 Nov 2023	02 Oct 2023
Machine Age	kms	Client Info	<b>843856</b>	835344	825774
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>ABNORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	<b>18</b>	19	20
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	4
Copper	ppm	ASTM D5185(m)	>100	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<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)		<b>2</b>	<1	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>74</b>	56	66
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>931</b>	896	935
Calcium	ppm	ASTM D5185(m)		<b>1015</b>	970	1010
Phosphorus	ppm	ASTM D5185(m)		<b>1020</b>	891	957
Zinc	ppm	ASTM D5185(m)		<b>1136</b>	1090	1154
Sulfur	ppm	ASTM D5185(m)		<b>2607</b>	2272	2405
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

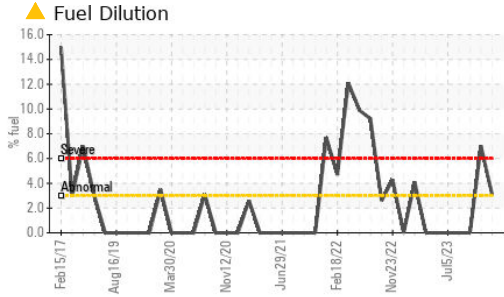
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	5	7
Sodium	ppm	ASTM D5185(m)		<b>212</b>	3	92
Potassium	ppm	ASTM D5185(m)	>20	<b>132</b>	1	48
Fuel	%	ASTM D7593*	>3.0	<b>3.1</b>	7	<1.0
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>1.1</b>	0.4	1.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.3</b>	10.8	10.5
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>22.1</b>	24.3	23.9

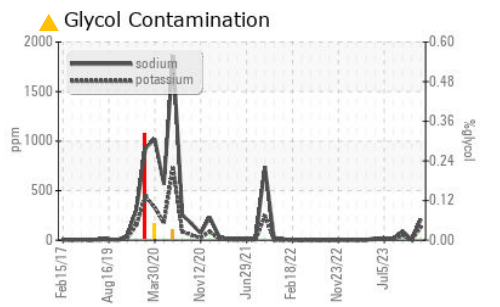
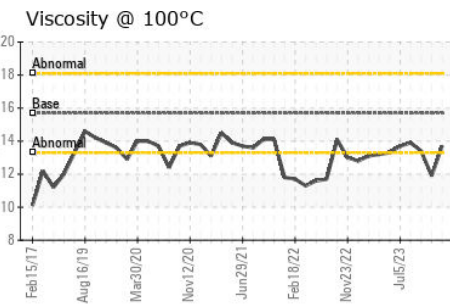
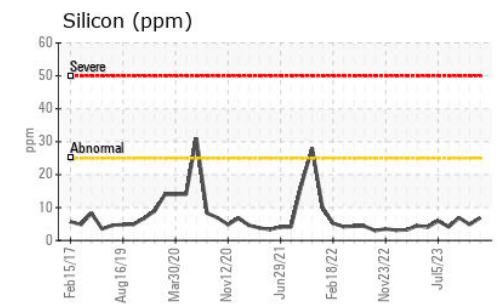
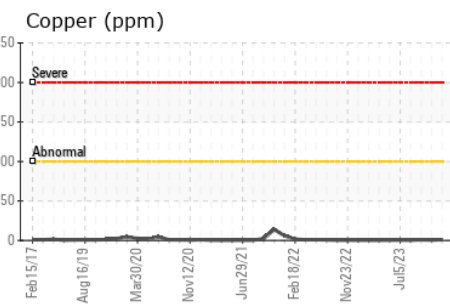
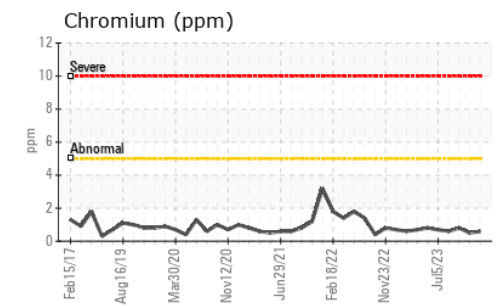
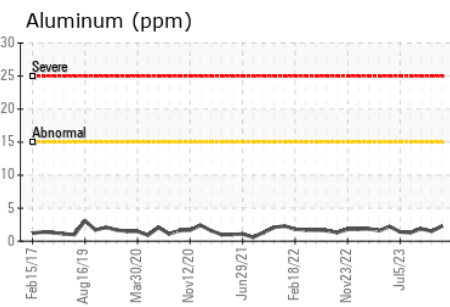
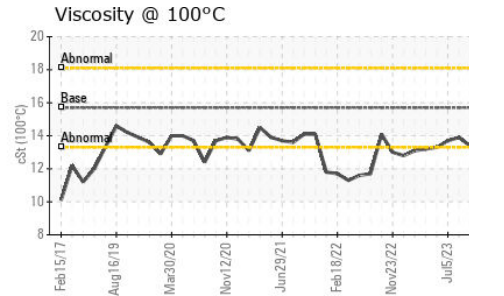
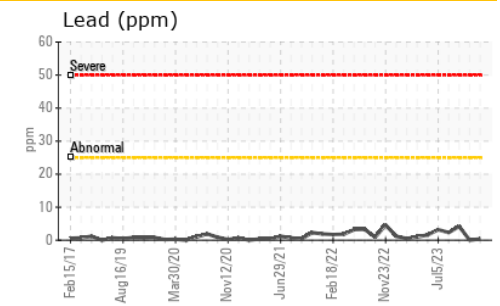
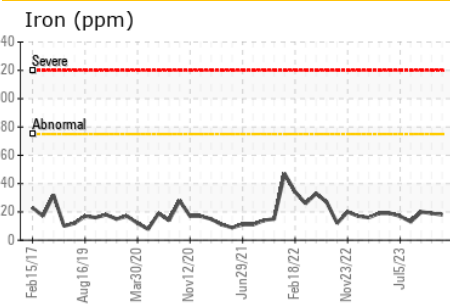
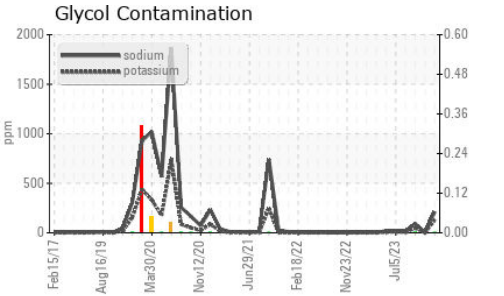


# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs.:1mm	ASTM D7414*	>25	<b>17.3</b>	25.6	20.5
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	<b>13.7</b>	▲ 11.9	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0891037 **Received** : 09 Jan 2024  
**Lab Number** : **02607402** **Diagnosed** : 10 Jan 2024  
**Unique Number** : 5708488 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol, PercentFuel )

**CITY OF HAMILTON**  
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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.