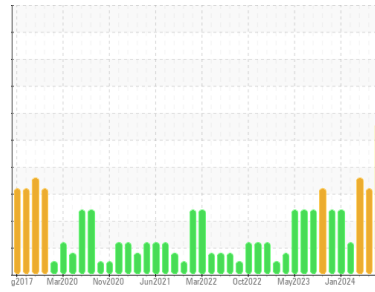




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**NEW FLYER 1212**  
 Component  
**Diesel Engine**  
 Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Test for glycol is positive. Light fuel dilution occurring. There is a light concentration of glycol present in the oil. No other contaminants were detected in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0937123</b>	WC0937093	WC0917545
Sample Date	Client Info		<b>08 Jul 2024</b>	19 May 2024	28 Mar 2024
Machine Age	kms	Client Info	<b>888646</b>	878709	865226
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>32</b>	26	16
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>25	<b>2</b>	2	<1
Copper	ppm	ASTM D5185(m)	>100	<b>5</b>	2	2
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>18</b>	4	4
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>168</b>	85	87
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)		<b>800</b>	953	937
Calcium	ppm	ASTM D5185(m)		<b>967</b>	999	976
Phosphorus	ppm	ASTM D5185(m)		<b>1012</b>	1001	1034
Zinc	ppm	ASTM D5185(m)		<b>1095</b>	1138	1133
Sulfur	ppm	ASTM D5185(m)		<b>2668</b>	2405	2458
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

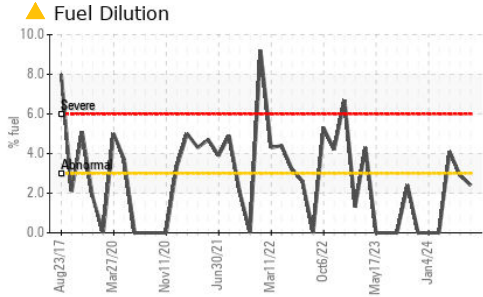
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>38</b>	12	8
Sodium	ppm	ASTM D5185(m)		<b>1369</b>	351	338
Potassium	ppm	ASTM D5185(m)	>20	<b>724</b>	204	209
Fuel	%	ASTM D7593*	>3.0	<b>2.4</b>	2.9	4.1
Glycol	%	ASTM D7922*		<b>0.011</b>	0.0	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>1.2</b>	1.1	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.5</b>	10.9	9.4
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>27.4</b>	24.0	21.4



# OIL ANALYSIS REPORT

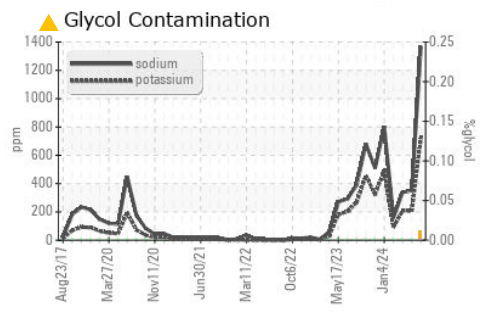
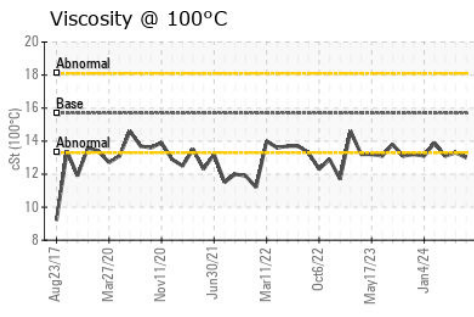
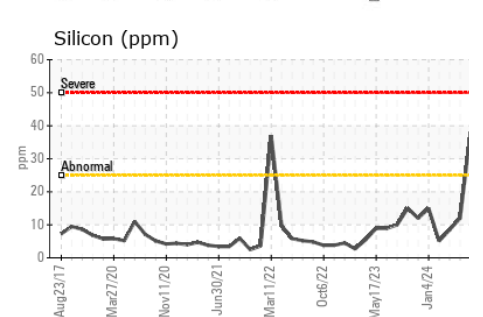
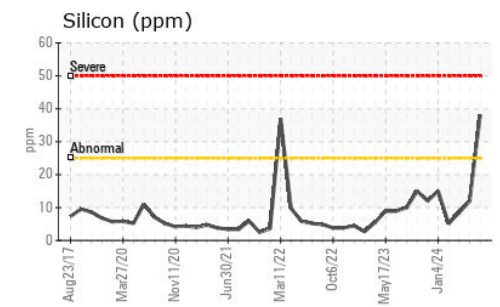
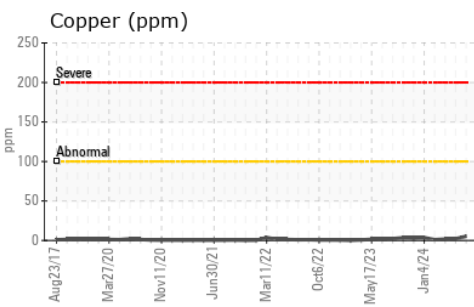
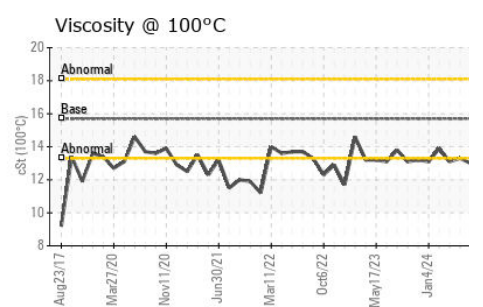
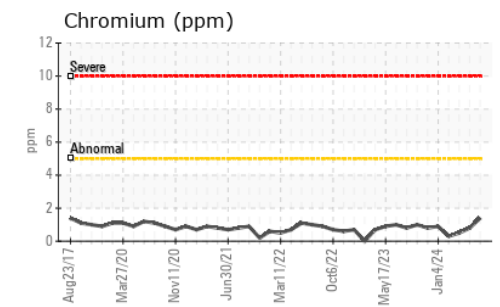
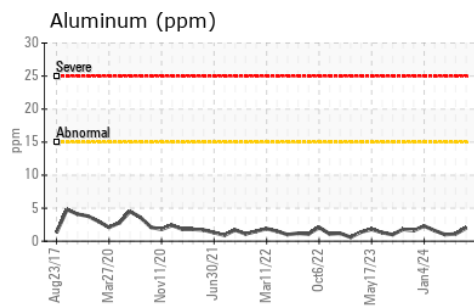
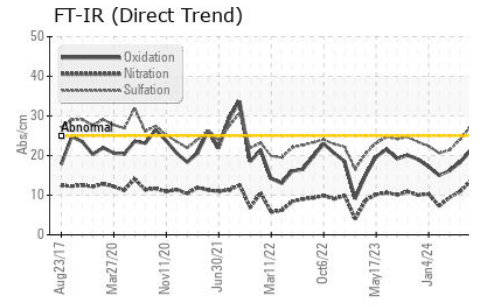
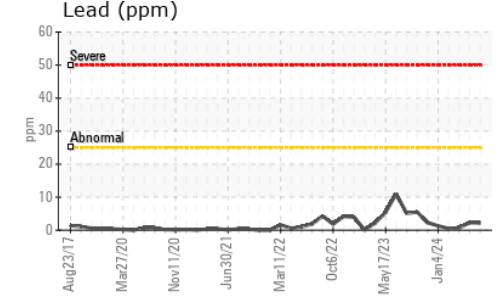
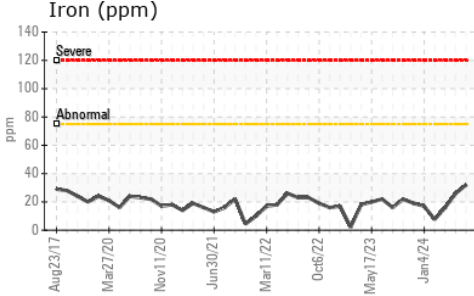
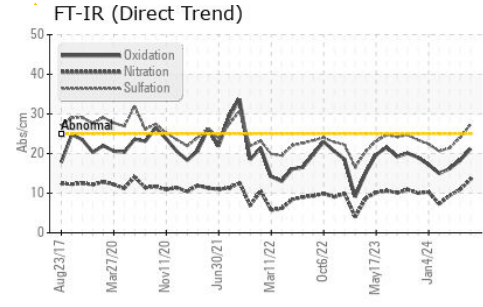


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs.:1mm	ASTM D7414*	>25	21.2	18.3	16.2

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	13.0	13.3	▲ 13.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0937123 **Received** : 11 Jul 2024  
**Lab Number** : 02647273 **Tested** : 12 Jul 2024  
**Unique Number** : 5812825 **Diagnosed** : 15 Jul 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel )

**CITY OF HAMILTON**  
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 Contact: Jeff Parr  
 jeff.parr@hamilton.ca  
 T: (905)546-2424  
 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.