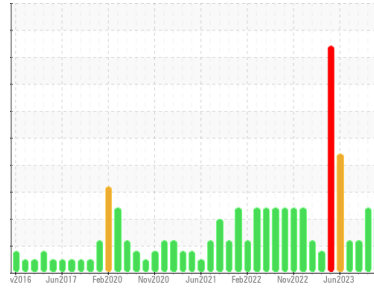




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area  
**[1495082]**  
 Machine Id  
**NEW FLYER 1006**  
 Component  
**Diesel Engine**  
 Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel 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>WC0891139</b>	WC0849744	WC0849778
Sample Date	Client Info		<b>28 Dec 2023</b>	07 Nov 2023	26 Sep 2023
Machine Age	kms	Client Info	<b>431086</b>	422768	413911
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>SEVERE</b>	SEVERE	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>14</b>	15	20
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	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>	1	<1
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<b>&lt;1</b>	<1	3
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>&lt;1</b>	<1	1
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>55</b>	55	57
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>891</b>	875	915
Calcium	ppm	ASTM D5185(m)		<b>959</b>	948	979
Phosphorus	ppm	ASTM D5185(m)		<b>923</b>	884	911
Zinc	ppm	ASTM D5185(m)		<b>1073</b>	1069	1125
Sulfur	ppm	ASTM D5185(m)		<b>2412</b>	2190	2220
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

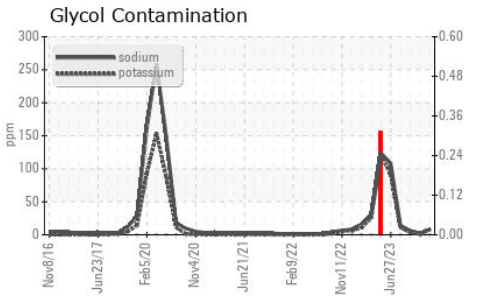
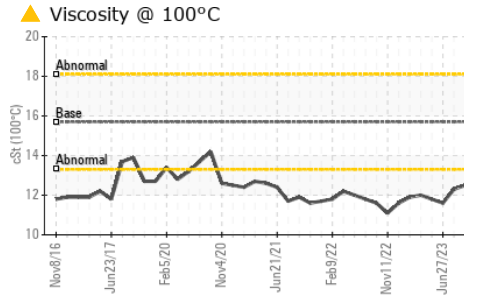
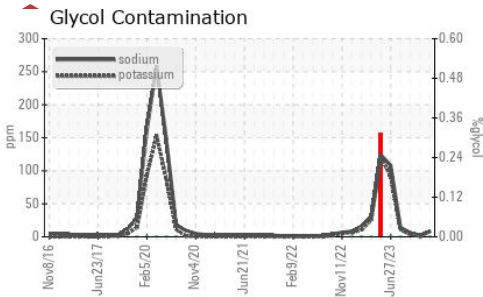
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	3	3
Sodium	ppm	ASTM D5185(m)		<b>8</b>	2	6
Potassium	ppm	ASTM D5185(m)	>20	<b>8</b>	<1	4
Fuel	%	ASTM D7593*	>3.0	<b>8.6</b>	7.9	4.1
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	NEG

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.4</b>	0.6	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	10.0	10.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.1</b>	23.5	24.1



# OIL ANALYSIS REPORT

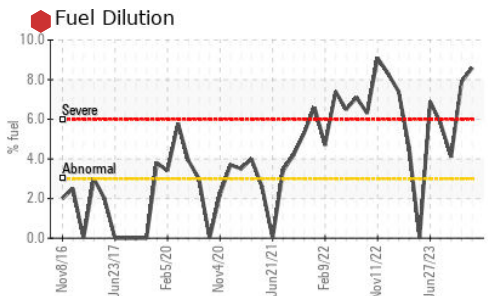
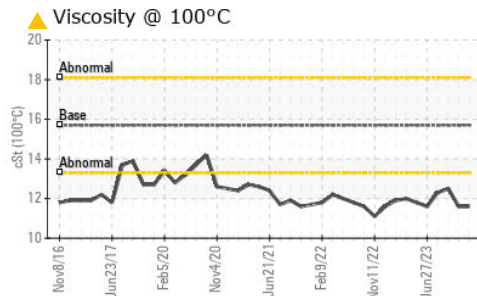
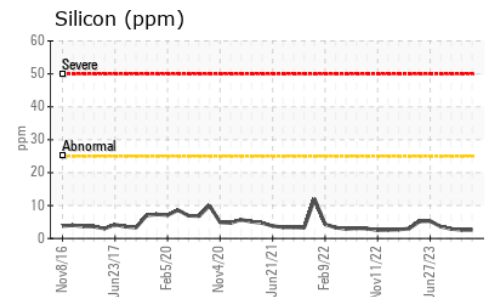
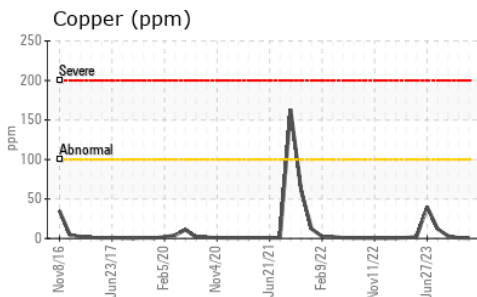
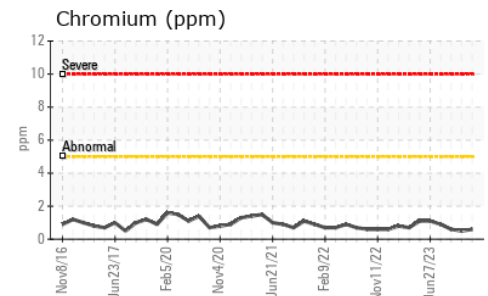
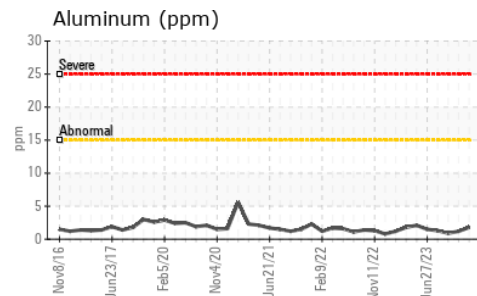
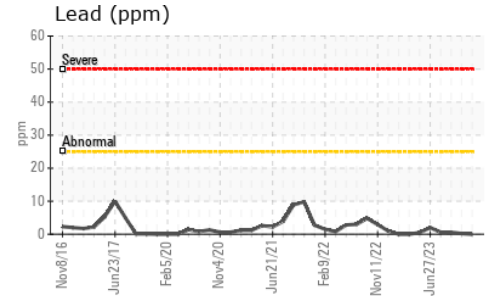
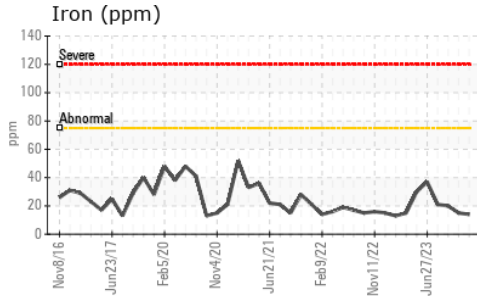


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.5</b>	23.6	24.2

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>▲ 11.6</b>	▲ 11.6	▲ 12.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0891139 **Received** : 02 Jan 2024  
**Lab Number** : **02605840** **Diagnosed** : 03 Jan 2024  
**Unique Number** : 5706926 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Glycol, PercentFuel )

**CITY OF HAMILTON**  
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 MOUNT HOPE, ON  
 CA L0R 1W0  
 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.