



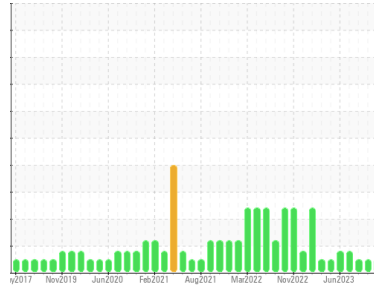
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[1495098]**  
 Machine Id  
**NEW FLYER 1102**  
 Component  
**Diesel Engine**  
 Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS XHD-7 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>WC0878047</b>	WC0877909	WC0849916
Sample Date	Client Info			<b>01 Jan 2024</b>	03 Nov 2023	22 Sep 2023
Machine Age	kms	Client Info		<b>848564</b>	841091	0
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>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
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)	>75	<b>17</b>	22	24
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;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>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	1	1
Lead	ppm	ASTM D5185(m)	>25	<b>2</b>	3	5
Copper	ppm	ASTM D5185(m)	>100	<b>3</b>	10	47
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
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

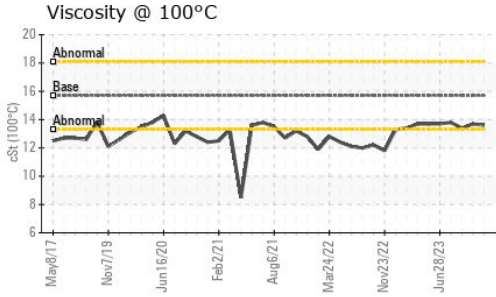
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>59</b>	61	62
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>966</b>	970	987
Calcium	ppm	ASTM D5185(m)		<b>1057</b>	1059	1092
Phosphorus	ppm	ASTM D5185(m)		<b>1002</b>	962	929
Zinc	ppm	ASTM D5185(m)		<b>1179</b>	1204	1190
Sulfur	ppm	ASTM D5185(m)		<b>2562</b>	2289	2102
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>	5	5
Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	0	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	<b>1</b>	1.3	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	9.9	9.4
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.3</b>	23.4	22.0

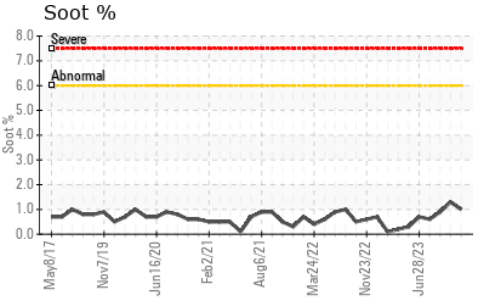
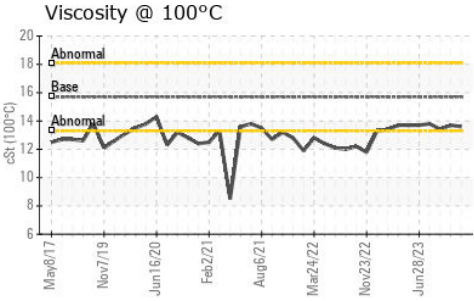
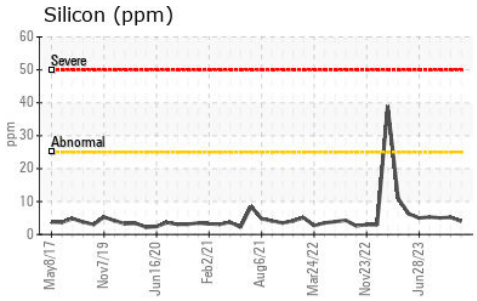
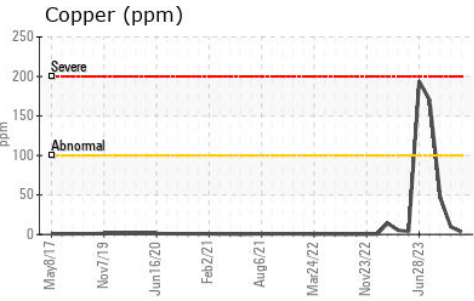
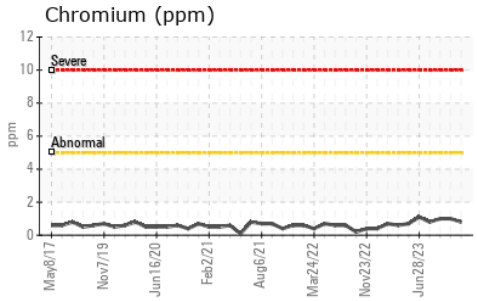
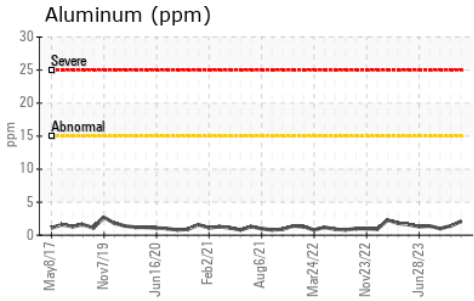
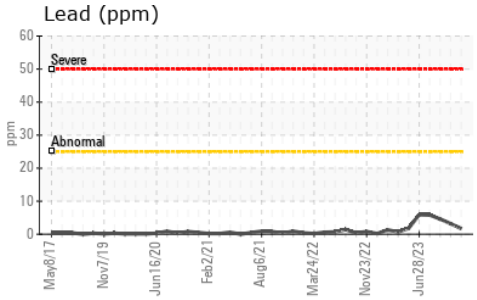
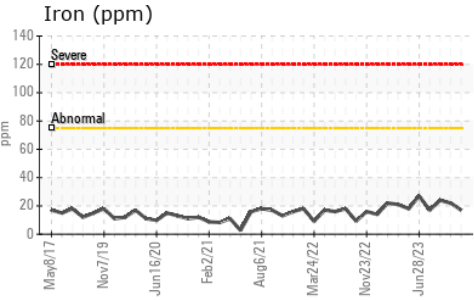


# OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.4</b>	19.6	18.7
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>13.6</b>	13.7	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0878047 **Received** : 02 Jan 2024  
**Lab Number** : **02605820** **Diagnosed** : 02 Jan 2024  
**Unique Number** : 5698905 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**CITY OF HAMILTON**  
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM  
 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.