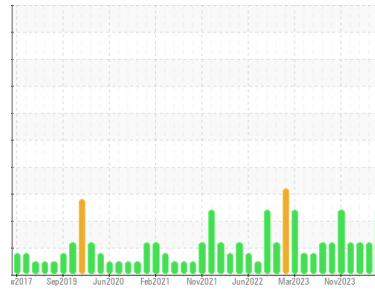




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**NEW FLYER 1114**  
 Component  
**Diesel Engine**  
 Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. 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. There is a moderate concentration of dirt present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. 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>WC0917408</b>	WC0917616	WC0891157
Sample Date	Client Info		<b>04 Jul 2024</b>	27 Mar 2024	15 Feb 2024
Machine Age	kms	Client Info	<b>827659</b>	815643	806588
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>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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>21</b>	17	13
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>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>2</b>	1	2
Lead	ppm	ASTM D5185(m)	>25	<b>1</b>	0	0
Copper	ppm	ASTM D5185(m)	>100	<b>14</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</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	<1
Barium	ppm	ASTM D5185(m)		<b>11</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>54</b>	56	57
Manganese	ppm	ASTM D5185(m)		<b>4</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>857</b>	931	935
Calcium	ppm	ASTM D5185(m)		<b>945</b>	985	1002
Phosphorus	ppm	ASTM D5185(m)		<b>900</b>	939	976
Zinc	ppm	ASTM D5185(m)		<b>1077</b>	1135	1129
Sulfur	ppm	ASTM D5185(m)		<b>2320</b>	2330	2565
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

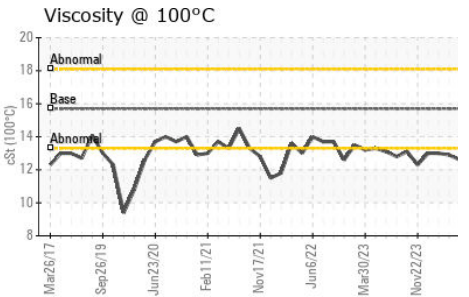
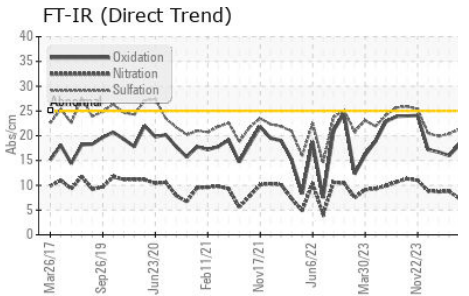
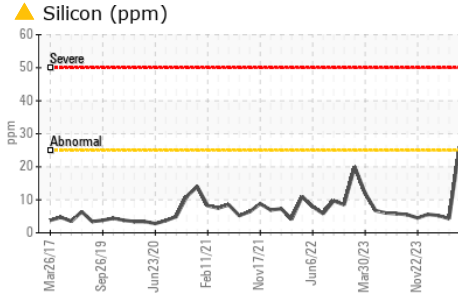
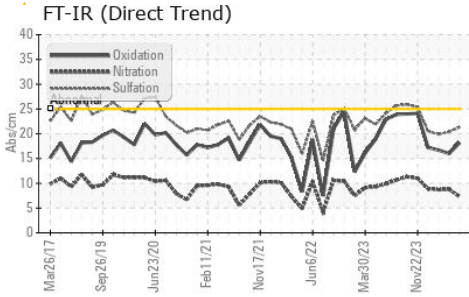
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>▲ 26</b>	4	5
Sodium	ppm	ASTM D5185(m)		<b>29</b>	5	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	2
Fuel	%	ASTM D7593*	>3.0	<b>▲ 4.8</b>	▲ 5.7	▲ 5.3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	<b>0.2</b>	0.7	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.3</b>	8.8	8.7
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.3</b>	20.4	19.9



# OIL ANALYSIS REPORT

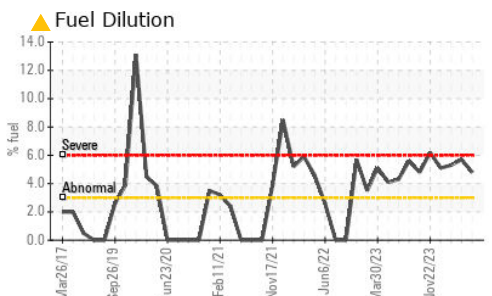
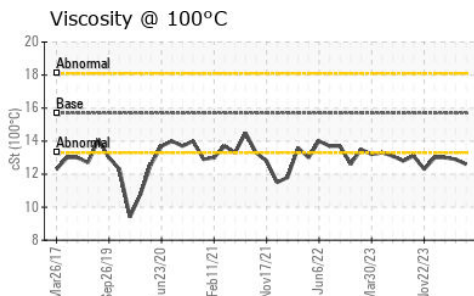
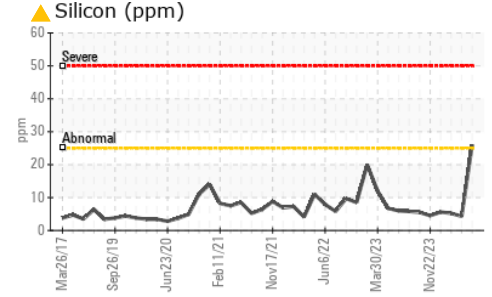
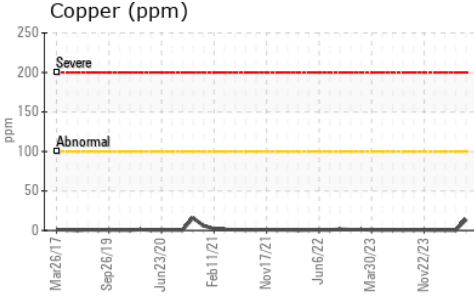
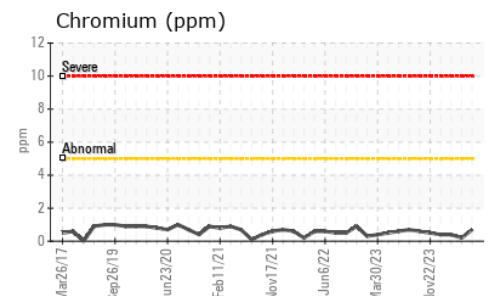
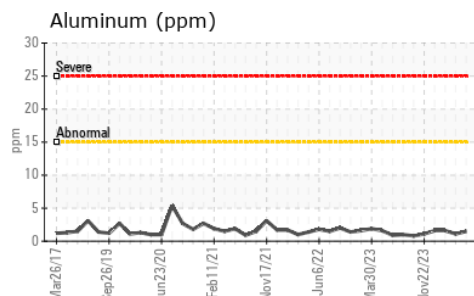
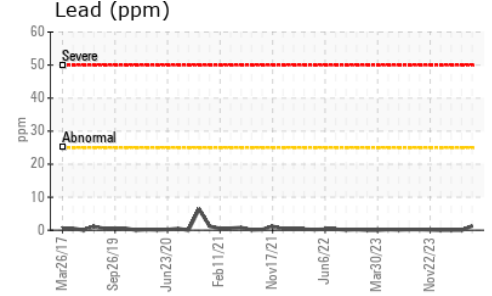
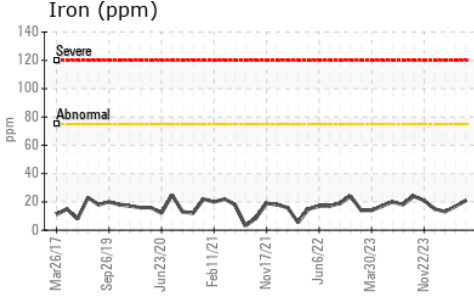


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	18.2	16.0	16.7

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	12.6 ▲	12.9 ▲	13.0 ▲

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0917408 **Received** : 11 Jul 2024  
**Lab Number** : 02647283 **Tested** : 12 Jul 2024  
**Unique Number** : 5812835 **Diagnosed** : 15 Jul 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**CITY OF HAMILTON**  
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 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.