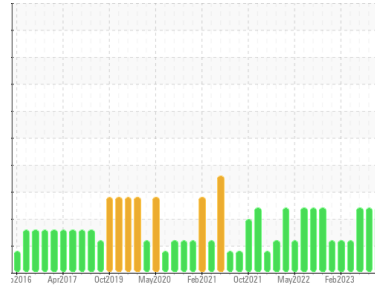




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
NEW FLYER 0916
Component
Diesel Engine
Fluid
SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. 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

Metal levels are typical for a new component breaking in.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0849723	WC0830138	WC0811615
Sample Date	Client Info		10 Oct 2023	22 Aug 2023	07 Jul 2023
Machine Age	kms	Client Info	111011	109775	108749
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	SEVERE	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	53	36	25
Chromium	ppm	ASTM D5185(m)	>5	2	2	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>15	2	2	2
Lead	ppm	ASTM D5185(m)	>25	<1	0	<1
Copper	ppm	ASTM D5185(m)	>100	2	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		2	2	1
Barium	ppm	ASTM D5185(m)		<1	0	0
Molybdenum	ppm	ASTM D5185(m)		68	59	54
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		876	869	905
Calcium	ppm	ASTM D5185(m)		954	936	977
Phosphorus	ppm	ASTM D5185(m)		854	886	992
Zinc	ppm	ASTM D5185(m)		1054	1030	1113
Sulfur	ppm	ASTM D5185(m)		2165	2242	2341
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	6	4	4
Sodium	ppm	ASTM D5185(m)		102	47	2
Potassium	ppm	ASTM D5185(m)	>20	91	42	0
Fuel	%	ASTM D7593*	>3.0	6.3	8	6.7
Glycol	%	ASTM D7922*		0.0	0.0	NEG

INFRA-RED

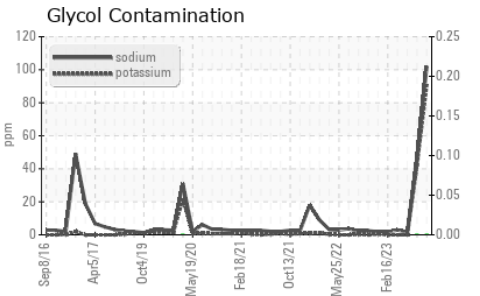
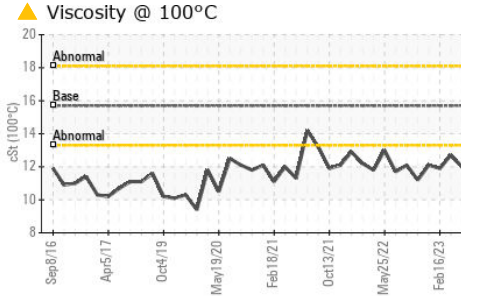
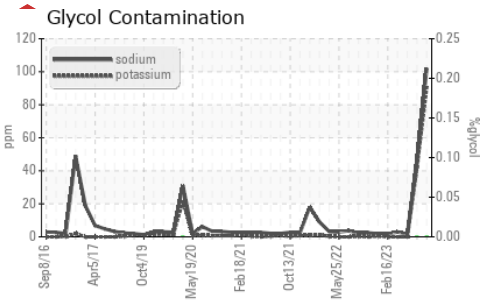
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	0.7	0.6	0.5
Nitration	Abs/cm	ASTM D7624*	>20	12.6	12.5	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.1	28.8	25.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	31.1	31.2	26.9



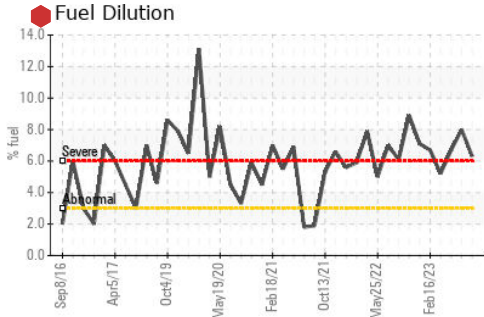
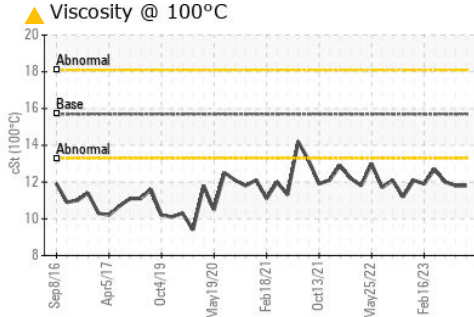
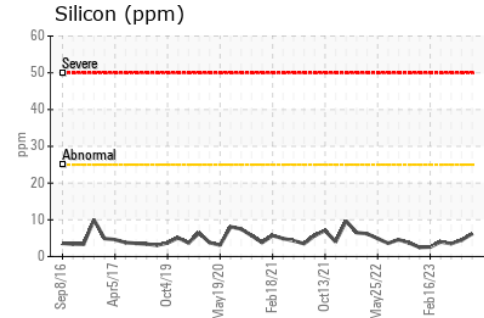
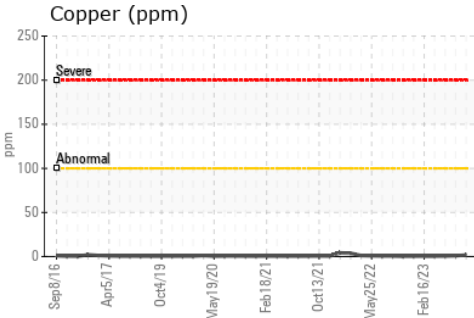
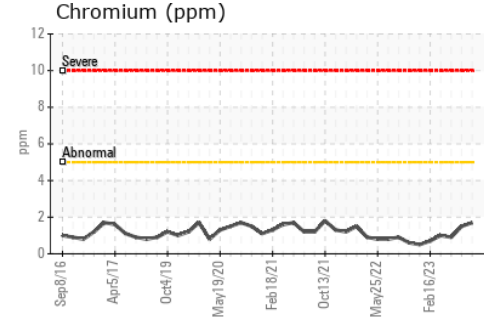
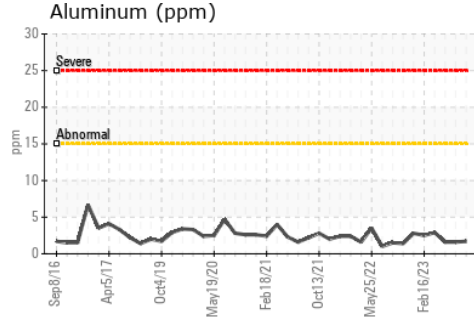
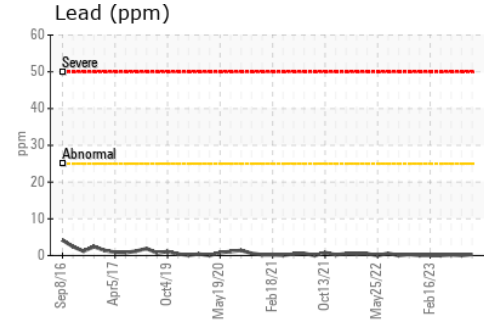
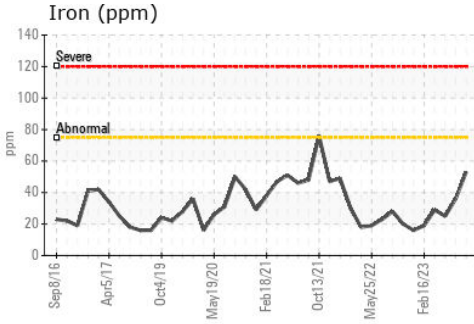
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	▲ 11.8	▲ 11.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0849723
Lab Number : 02588528
Unique Number : 5657594
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

CITY OF HAMILTON
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 T: (905)546-2424
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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.