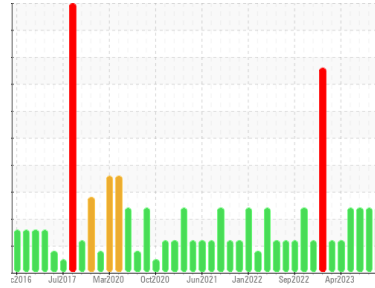




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
NEW FLYER 0909
 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		WC0830090	WC0849935	WC0830169
Sample Date	Client Info		23 Oct 2023	12 Sep 2023	22 Jul 2023
Machine Age	kms	Client Info	109944	108931	0
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	24	26	21
Chromium	ppm	ASTM D5185(m) >5	<1	1	<1
Nickel	ppm	ASTM D5185(m) >4	0	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	<1	1	1
Lead	ppm	ASTM D5185(m) >25	<1	<1	<1
Copper	ppm	ASTM D5185(m) >100	<1	1	1
Tin	ppm	ASTM D5185(m) >4	0	<1	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	3	3
Barium	ppm	ASTM D5185(m)	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	56	59	57
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	852	860	866
Calcium	ppm	ASTM D5185(m)	933	930	918
Phosphorus	ppm	ASTM D5185(m)	842	895	975
Zinc	ppm	ASTM D5185(m)	1048	1025	1050
Sulfur	ppm	ASTM D5185(m)	2222	2248	2315
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	4	4
Sodium	ppm	ASTM D5185(m)	25	58	55
Potassium	ppm	ASTM D5185(m) >20	18	45	42
Fuel	%	ASTM D7593* >3.0	8.5	7.7	7.6
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

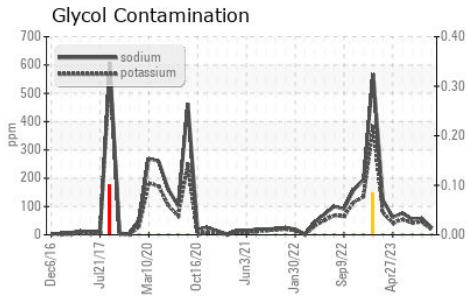
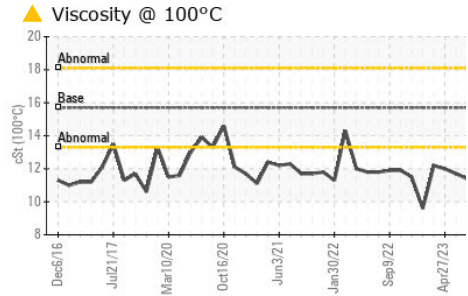
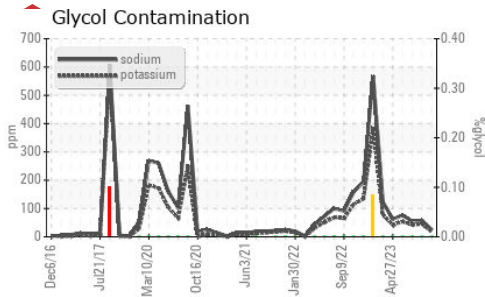
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	0.6	0.7	0.5
Nitration	Abs/cm	ASTM D7624* >20	10.6	11.1	9.9
Sulfation	Abs/.1mm	ASTM D7415* >30	24.2	25.4	24.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	25.8	26.9	25.3



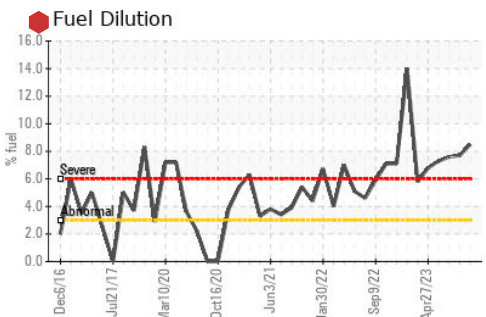
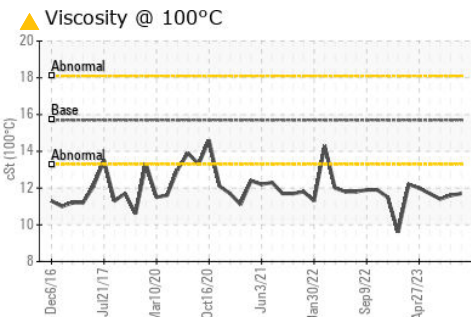
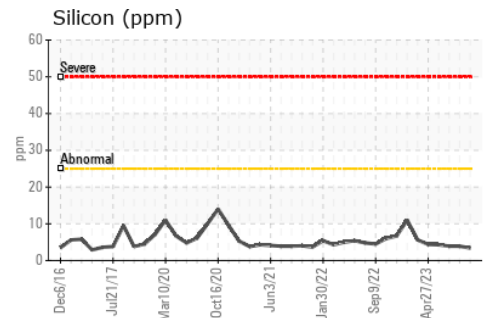
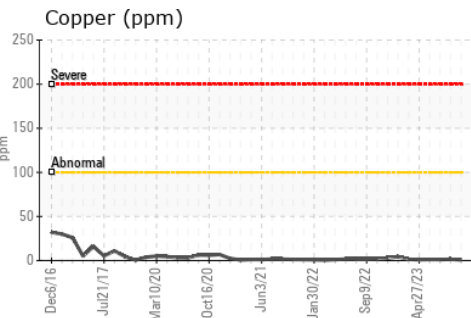
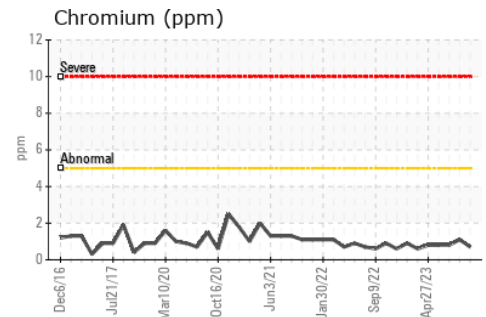
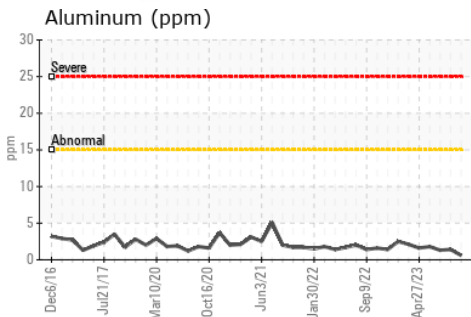
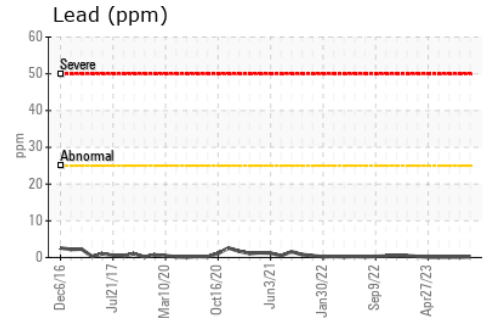
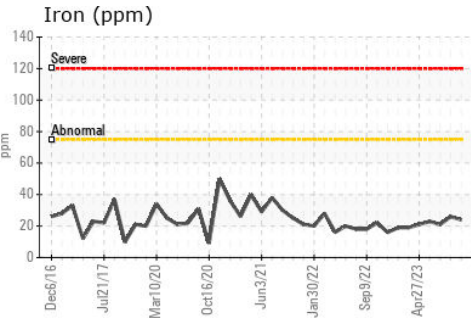
OIL ANALYSIS REPORT



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	▲ 11.7	▲ 11.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0830090 **Received** : 27 Oct 2023
Lab Number : 02592320 **Diagnosed** : 30 Oct 2023
Unique Number : 5669399 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

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.