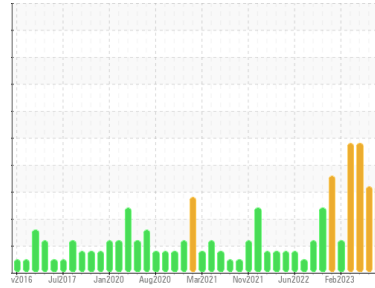




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
NEW FLYER 0932
Component
Diesel Engine
Fluid
SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Check for low coolant level. 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

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. Tests confirm the presence of fuel in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants. The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0830101	WC0811613	WC0791302
Sample Date	Client Info		14 Aug 2023	30 Jun 2023	18 May 2023
Machine Age	kms	Client Info	910004	0	890702
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	33	45	36
Chromium	ppm	ASTM D5185(m)	>5	1	2	1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	1	2	2
Lead	ppm	ASTM D5185(m)	>25	<1	1	2
Copper	ppm	ASTM D5185(m)	>100	4	7	10
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)		5	7	17
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		87	103	114
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		951	931	844
Calcium	ppm	ASTM D5185(m)		1003	1055	1008
Phosphorus	ppm	ASTM D5185(m)		1051	1047	973
Zinc	ppm	ASTM D5185(m)		1137	1123	999
Sulfur	ppm	ASTM D5185(m)		2490	2505	2399
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	8	11	14
Sodium	ppm	ASTM D5185(m)		▲ 236	▲ 359	▲ 538
Potassium	ppm	ASTM D5185(m)	>20	▲ 204	▲ 323	▲ 430
Fuel	%	ASTM D7593*	>3.0	▲ 3.8	▲ 5.5	● 7.1
Glycol	%	ASTM D7922*		0.0	0.0	0.0

INFRA-RED

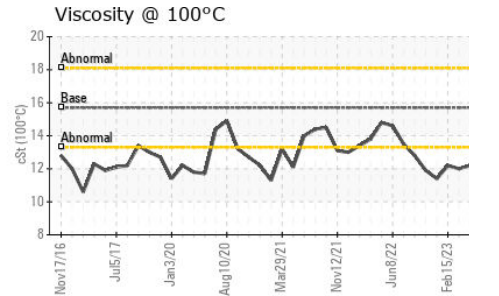
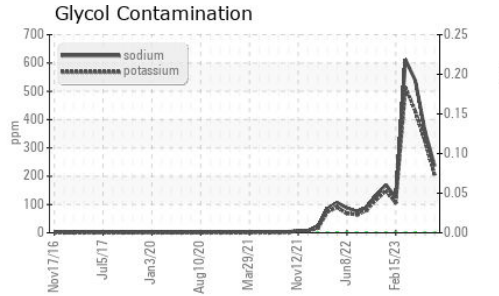
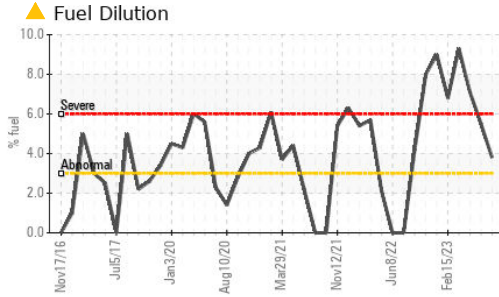
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	1.1	1.1	0.8
Nitration	Abs/cm	ASTM D7624*	>20	12.2	13.6	13.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.8	28.9	26.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.9	28.5	27.1



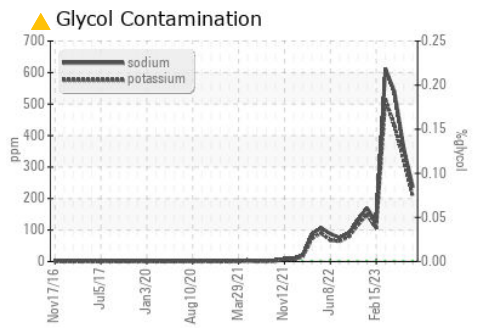
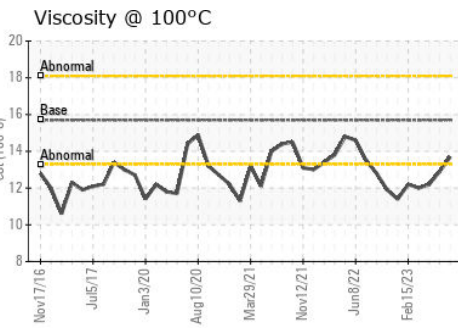
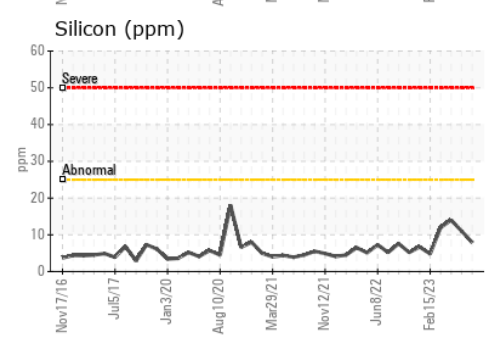
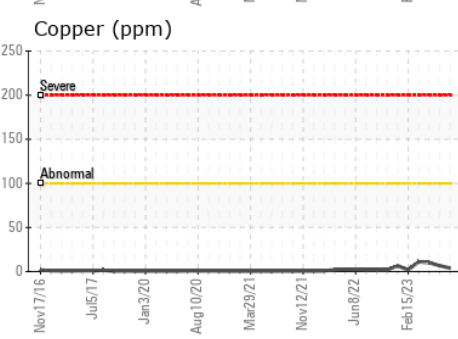
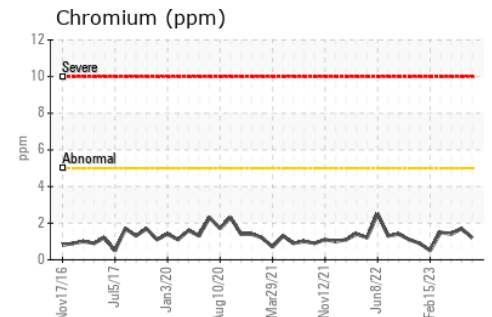
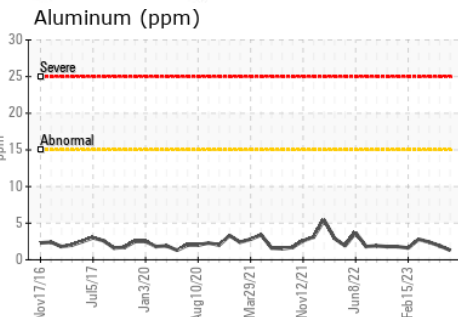
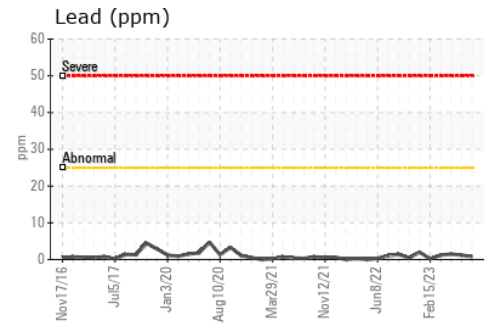
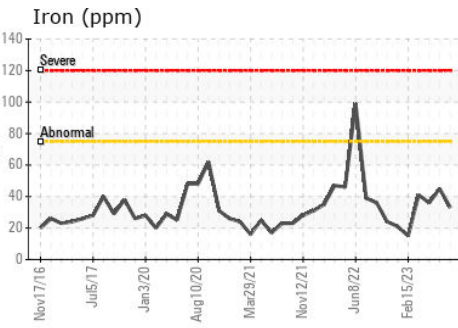
OIL ANALYSIS REPORT



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	13.7	12.9 ▲ 12.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0830101 **Received** : 16 Aug 2023
Lab Number : 02576117 **Diagnosed** : 17 Aug 2023
Unique Number : 5629177 **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.