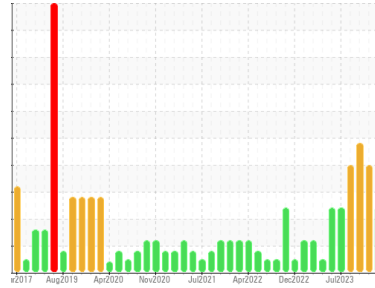




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
[1497166]
 Machine Id
NEW FLYER 1116
 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

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Test for glycol is negative. 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		WC0891057	WC0877989	WC0830242
Sample Date	Client Info		18 Jan 2024	03 Dec 2023	17 Oct 2023
Machine Age	kms	Client Info	875832	0	858334
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	SEVERE	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>75	16	19	21
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<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	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	2	2
Lead	ppm	ASTM D5185(m)	>25	1	3	<1
Copper	ppm	ASTM D5185(m)	>100	26	126	12
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)		<1	3	11
Barium	ppm	ASTM D5185(m)		0	<1	<1
Molybdenum	ppm	ASTM D5185(m)		59	71	127
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		852	828	855
Calcium	ppm	ASTM D5185(m)		925	900	952
Phosphorus	ppm	ASTM D5185(m)		857	836	925
Zinc	ppm	ASTM D5185(m)		1018	997	1013
Sulfur	ppm	ASTM D5185(m)		2138	2046	2397
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

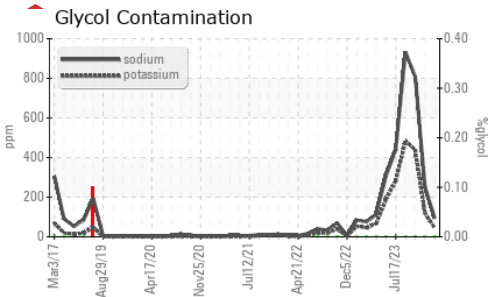
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	8	▲ 27
Sodium	ppm	ASTM D5185(m)		93	▲ 251	▲ 807
Potassium	ppm	ASTM D5185(m)	>20	44	119	▲ 439
Fuel	%	ASTM D7593*	>3.0	● 10.3	● 9.9	▲ 5.2
Glycol	%	ASTM D7922*		0.0	0.0	0.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>6	1.1	1.2	1.3
Nitration	Abs/cm	ASTM D7624*	>20	10.7	11.1	12.2
Sulfation	Abs./1mm	ASTM D7415*	>30	23.2	24.6	26.3



OIL ANALYSIS REPORT

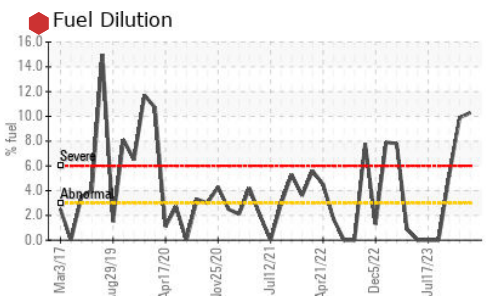
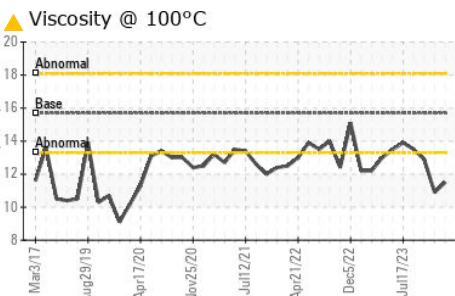
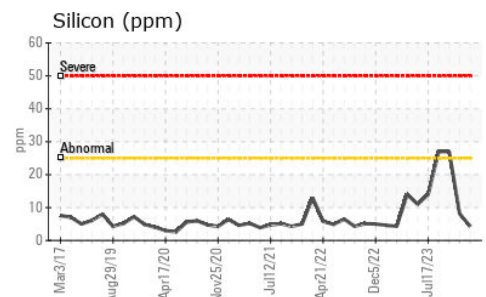
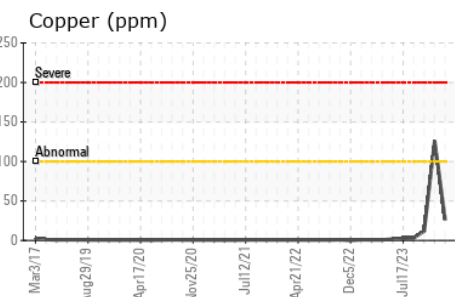
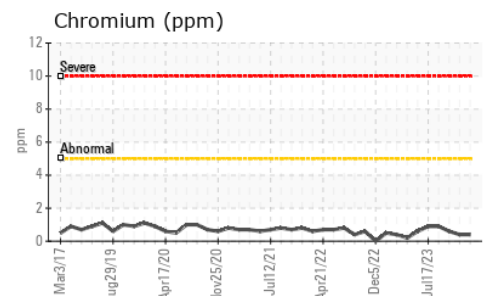
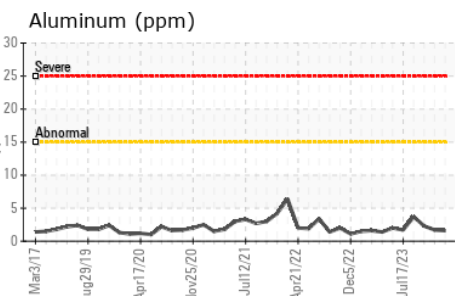
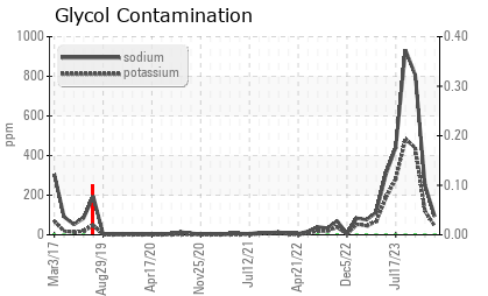
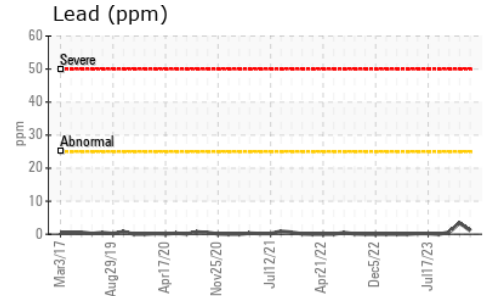
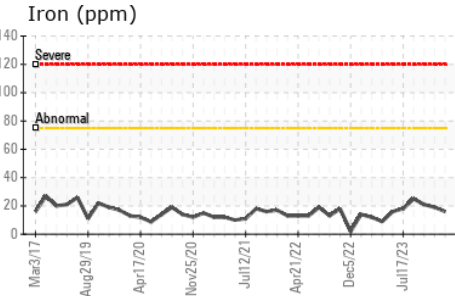
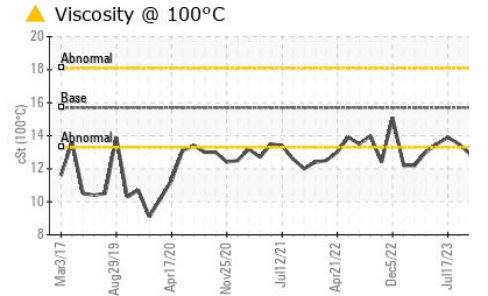


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	19.5	22.9	22.0

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	▲ 11.5	● 10.9	12.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0891057 **Received** : 22 Jan 2024
Lab Number : **02610182** **Diagnosed** : 23 Jan 2024
Unique Number : 5711268 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

CITY OF HAMILTON
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 MOUNT HOPE, ON
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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.