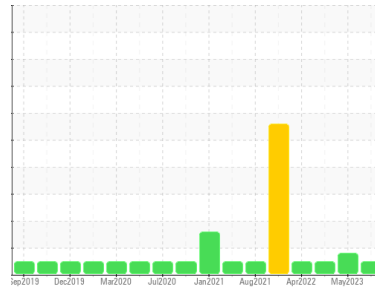




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NEW FLYER 1822
Component
Natural Gas Engine
Fluid
VALVOLINE PREMIUM BLUE 9200 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0830192	WC0811434	WC0767153
Sample Date	Client Info		04 Jul 2023	10 May 2023	05 Feb 2023
Machine Age	kms	Client Info	0	0	206343
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	MARGINAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		---	---	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	12	15	18
Chromium	ppm	ASTM D5185(m)	>4	1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	1	1
Titanium	ppm	ASTM D5185(m)		<1	1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	3	3	3
Lead	ppm	ASTM D5185(m)	>30	23	▲ 20	2
Copper	ppm	ASTM D5185(m)	>35	1	1	1
Tin	ppm	ASTM D5185(m)	>4	2	2	2
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)		7	6	6
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		58	59	55
Manganese	ppm	ASTM D5185(m)		<1	1	2
Magnesium	ppm	ASTM D5185(m)		913	887	815
Calcium	ppm	ASTM D5185(m)		1336	1386	1335
Phosphorus	ppm	ASTM D5185(m)		796	811	721
Zinc	ppm	ASTM D5185(m)		945	914	870
Sulfur	ppm	ASTM D5185(m)		2009	2060	1999
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	6	7	16
Sodium	ppm	ASTM D5185(m)		7	9	10
Potassium	ppm	ASTM D5185(m)	>20	7	3	6

INFRA-RED

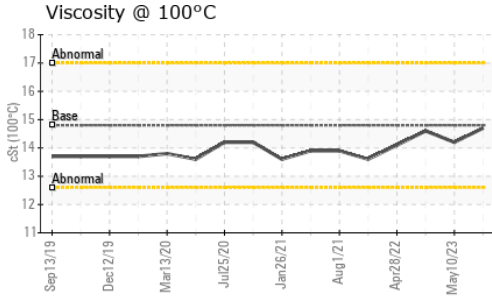
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.8	14.0	6.3
Sulfation	Abs.1mm	ASTM D7415*	>30	28.4	28.5	17.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs.1mm	ASTM D7414*	>25	25.9	26.0	10.1



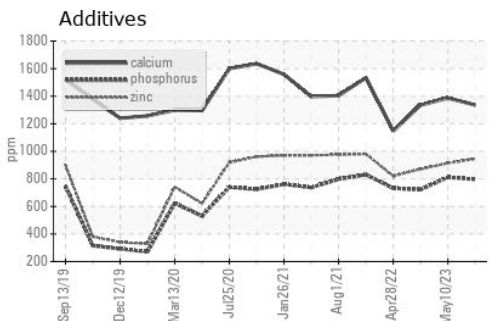
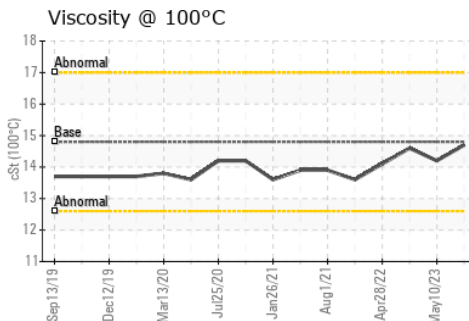
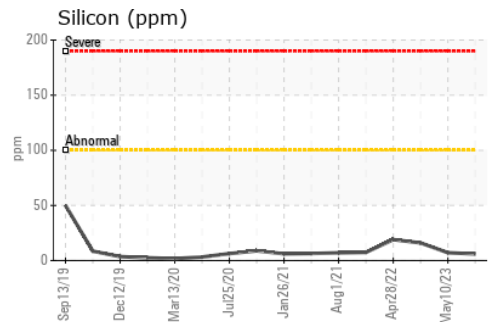
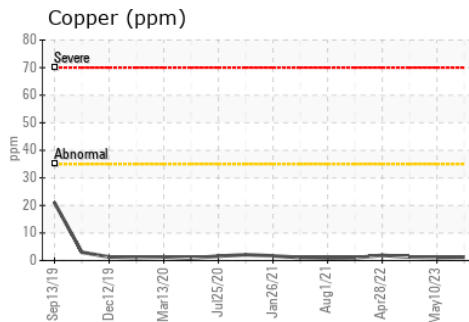
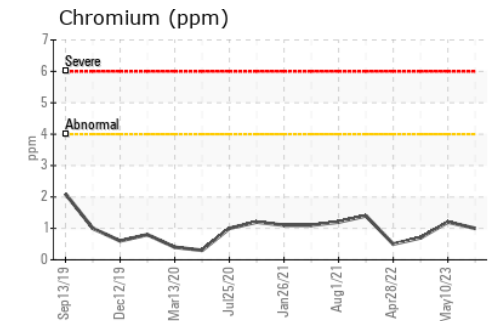
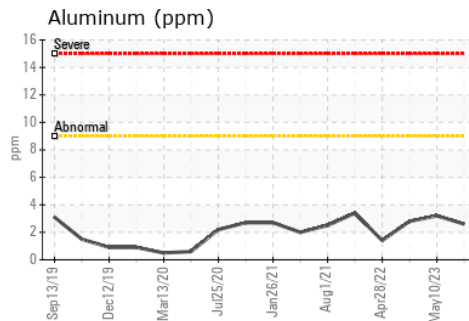
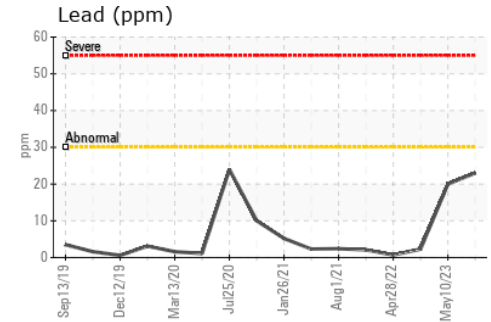
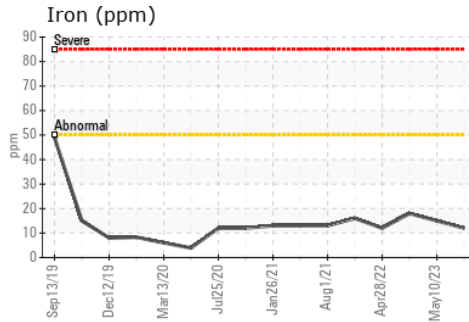
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.7	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0830192
Lab Number : 02575583
Unique Number : 5620634
Test Package : MOB 1

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.