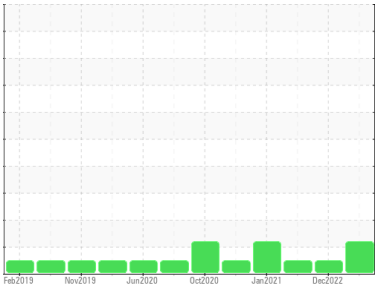
OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL

Area
[3529]
Machine Id
NEW FLYER 1101
Component
Diesel Engine
Fluid
VALVOLINE 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

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Fluid Condition

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		**WC0828594**	WC0754222	WC0737213
Sample Date		Client Info		**27 Jul 2023**	13 Dec 2022	01 Oct 2022
Machine Age	kms	Client Info		**370617**	324486	306328
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	1.9	1.9

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	**14**	8	8
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	**0**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	<1	<1
Silver	ppm	ASTM D5185(m)	>3	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**2**	1	1
Lead	ppm	ASTM D5185(m)	>40	**<1**	0	0
Copper	ppm	ASTM D5185(m)	>330	**2**	<1	<1
Tin	ppm	ASTM D5185(m)	>15	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	<1	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)		**18**	78	68
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**51**	19	13
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**34**	132	110
Calcium	ppm	ASTM D5185(m)		**1933**	2147	2217
Phosphorus	ppm	ASTM D5185(m)		**960**	1029	984
Zinc	ppm	ASTM D5185(m)		**1048**	1150	1096
Sulfur	ppm	ASTM D5185(m)		**3039**	2908	2871
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**12**	6	4
Sodium	ppm	ASTM D5185(m)		**138**	10	4
Potassium	ppm	ASTM D5185(m)	>20	▲ **401**	27	6
Glycol	%	ASTM D7922*		**0.0**	0.0	0.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.6**	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	**9.2**	10.1	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**21.5**	25.2	22.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.0**	21.2	15.5

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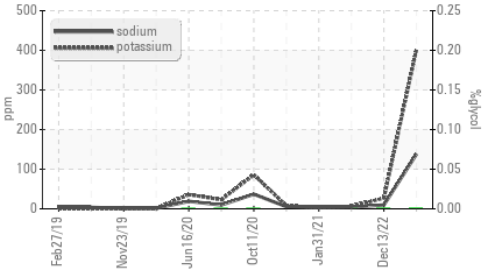
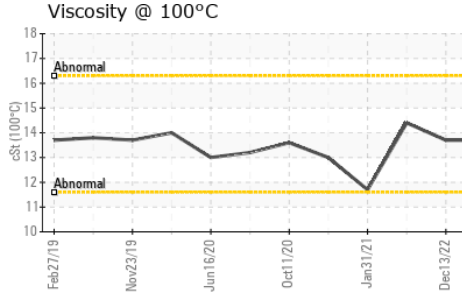
Glycol Contamination



Viscosity @ 100°C

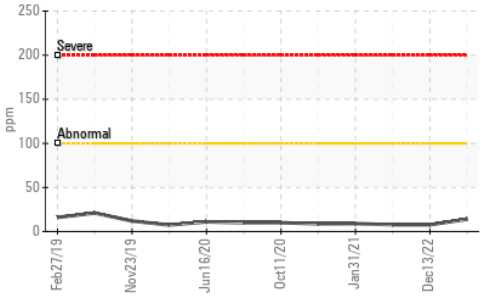


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

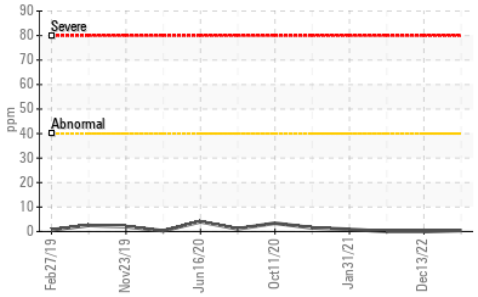
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		**13.7**	13.7	14.4

GRAPHS

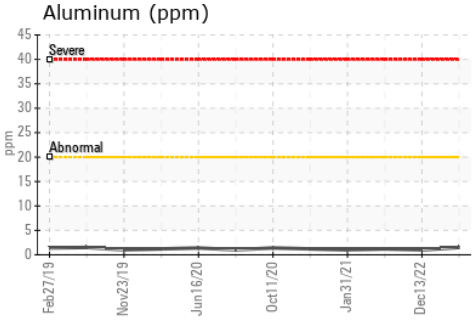
Iron (ppm)



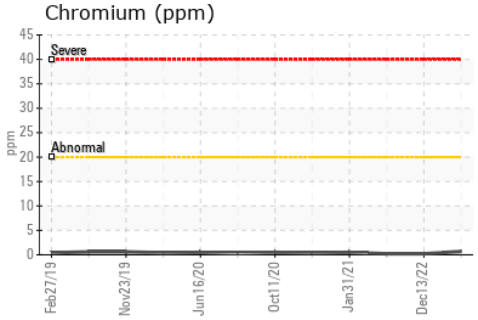
Lead (ppm)



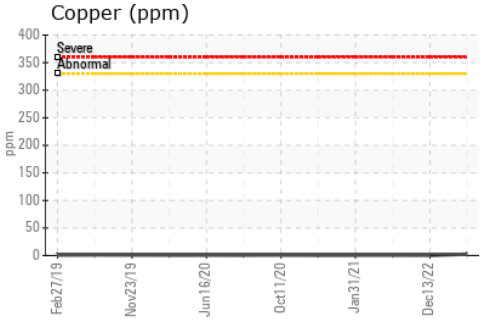
Aluminum (ppm)



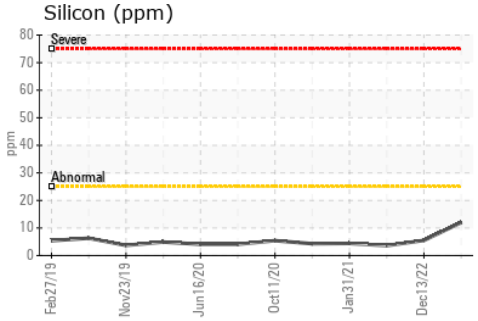
Chromium (ppm)



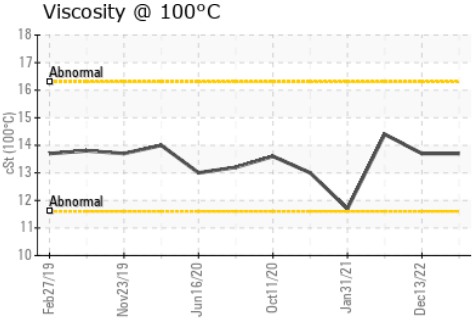
Copper (ppm)



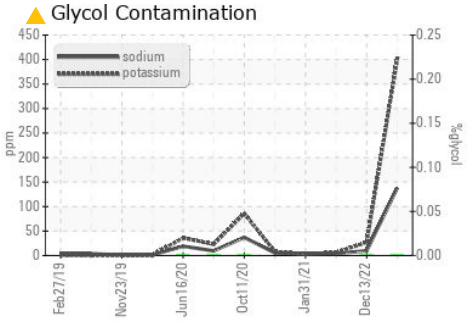
Silicon (ppm)



Viscosity @ 100°C



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0828594	**Received**	: 14 Aug 2023
Lab Number	: 02575591	**Diagnosed**	: 14 Aug 2023
Unique Number	: 5620642	**Diagnostician**	: Kevin Marson
Test Package	: MOB 1 (Additional Tests: Glycol)		

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.

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