

# **OIL ANALYSIS REPORT**

Sample Rating Trend

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#### Machine Io **NEW FLYER 1216** Component

**Diesel Engine** 

SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)

		y2017 Nov20	19 Jun2020 Feb2021	Sep2021 Jun2022 Feb2023	Sep2023	
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0917674	WC0890944	WC0891129
Sample Date		Client Info		26 Mar 2024	07 Feb 2024	02 Jan 2024
Machine Age	kms	Client Info		875963	864733	858656
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATION	N	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	19	10	4
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	1	2	1
Lead	ppm	ASTM D5185(m)	>25	0	0	0
Copper	ppm	ASTM D5185(m)	>100	<1	<1	<1
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)		2	1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		65	60	57
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		913	898	952
Calcium	ppm	ASTM D5185(m)		937	925	1015
Phosphorus	ppm	ASTM D5185(m)		941	978	996
Zinc	ppm	ASTM D5185(m)		1092	1111	1146
Sulfur	ppm	ASTM D5185(m)		2300	2605	2766
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	10	9
Sodium	ppm	ASTM D5185(m)		124	61	9
Potassium	ppm	ASTM D5185(m)	>20	73	34	0
Fuel	%	ASTM D7593*	>3.0	<b>▲</b> 5.5	<1.0	<1.0
Glycol	%	ASTM D7922*		0.0	0.0	NEG
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.8	0.4	0
Nitration	Abs/cm	ASTM D7624*		10.5	7.2	4.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	19.5	18.0

### DIAGNOSIS

### Recommendation

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

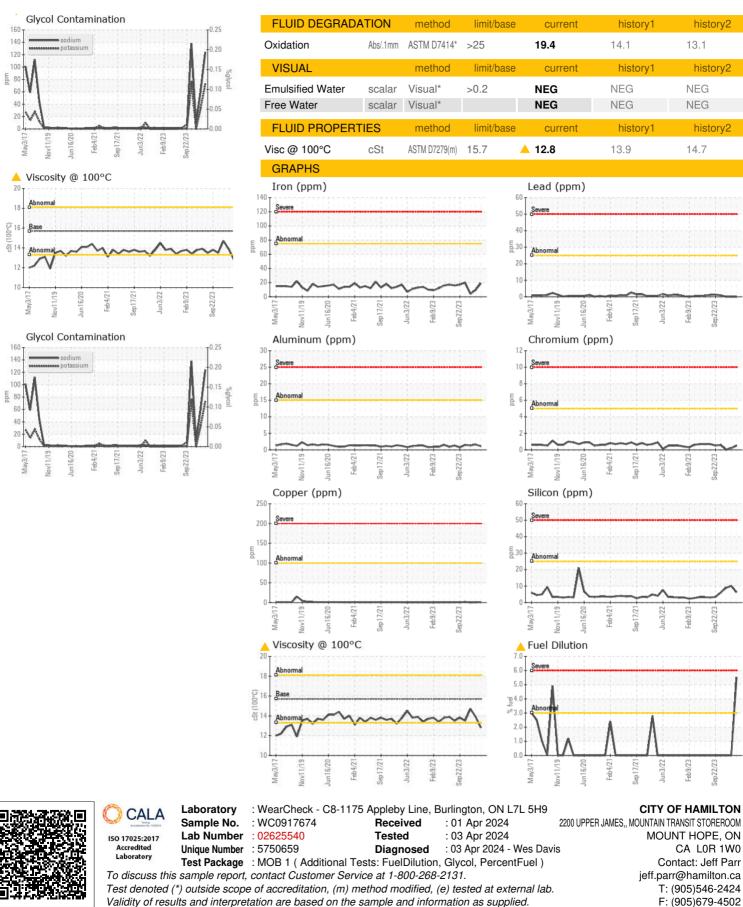
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### 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.



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Contact/Location: Jeff Parr - HAMHAM

Sep22/23

ep22/23