

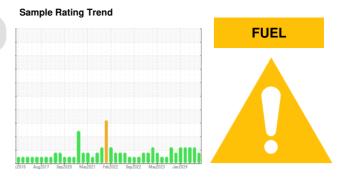
OIL ANALYSIS REPORT



Machine Id **NEW FLYER 1222**

Diesel Engine

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



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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. Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0937195	WC0937364	WC0917676
Sample Date		Client Info		26 Jun 2024	12 May 2024	26 Mar 2024
Machine Age	kms	Client Info		867726	857326	848016
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				MARGINAL	ABNORMAL	ABNORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	15	11	14
Chromium	ppm	ASTM D5185(m)	>5	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>15	4	2	2
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)		1	6	26
Barium				0	0	0
	ppm	ASTM D5185(m)		U	0	U
Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)		58	56	49
Manganese		(/		58 <1		49
	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		58 <1 953	56	49 0 801
Manganese Magnesium Calcium	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		58 <1 953 1036	56 <1 911 1049	49 0 801 1152
Manganese Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		58 <1 953 1036 972	56 <1 911 1049 913	49 0 801 1152 689
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		58 <1 953 1036 972 1200	56 <1 911 1049 913 1089	49 0 801 1152 689 824
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		58 <1 953 1036 972 1200 2393	56 <1 911 1049 913 1089 2249	49 0 801 1152 689 824 1818
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		58 <1 953 1036 972 1200 2393 <1	56 <1 911 1049 913 1089 2249	49 0 801 1152 689 824 1818 <1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	58 <1 953 1036 972 1200 2393 <1	56 <1 911 1049 913 1089 2249 <1 history1	49 0 801 1152 689 824 1818 <1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	limit/base >25	58 <1 953 1036 972 1200 2393 <1 current 3	56 <1 911 1049 913 1089 2249 <1 history1 2	49 0 801 1152 689 824 1818 <1 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>25	58 <1 953 1036 972 1200 2393 <1 current 3 5	56 <1 911 1049 913 1089 2249 <1 history1 2	49 0 801 1152 689 824 1818 <1 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>25 >20	58 <1 953 1036 972 1200 2393 <1 current 3 5 6	56 <1 911 1049 913 1089 2249 <1 history1 2 2 <1	49 0 801 1152 689 824 1818 <1 history2 3 4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>25	58 <1 953 1036 972 1200 2393 <1 current 3 5	56 <1 911 1049 913 1089 2249 <1 history1 2	49 0 801 1152 689 824 1818 <1 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>25 >20	58 <1 953 1036 972 1200 2393 <1 current 3 5 6 ▲ 1.9 current	56 <1 911 1049 913 1089 2249 <1 history1 2 2 <1	49 0 801 1152 689 824 1818 <1 history2 3 4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	>25 >20 >3.0	58 <1 953 1036 972 1200 2393 <1 current 3 5 6 ▲ 1.9 current 0.6	56 <1 911 1049 913 1089 2249 <1 history1 2 2 <1 ▲ 4.1 history1 0.5	49 0 801 1152 689 824 1818 <1 history2 3 4 <1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	>25 >20 >3.0 limit/base	58 <1 953 1036 972 1200 2393 <1 current 3 5 6 ▲ 1.9 current	56 <1 911 1049 913 1089 2249 <1 history1 2 2 <1 ▲ 4.1 history1	49 0 801 1152 689 824 1818 <1 history2 3 4 <1



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WC0937195 Lab Number : 02644530 Unique Number : 5802069

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Received : 28 Jun 2024 **Tested** : 02 Jul 2024 Diagnosed

: 02 Jul 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: PercentFuel)

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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