

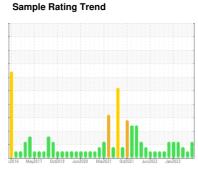
OIL ANALYSIS REPORT



NEW FLYER 1210

Component **Diesel Engine**

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





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.

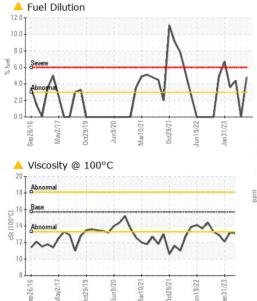
Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

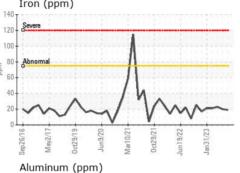
CE PLUS XHD-7 15W40 (GAL)									
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		WC0830336	WC0811359	WC0811380			
Sample Date		Client Info		02 Aug 2023	19 Jun 2023	08 May 2023			
Machine Age	kms	Client Info		833558	826102	818065			
Oil Age	kms	Client Info		0	0	0			
Oil Changed		Client Info		N/A	N/A	N/A			
Sample Status				ABNORMAL	NORMAL	MARGINAL			
CONTAMINATION	١	method	limit/base	current	history1	history2			
Glycol		WC Method		NEG	NEG	NEG			
WEAR METALS		method	limit/base	current	history1	history2			
Iron	ppm	ASTM D5185(m)	>75	19	20	23			
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1			
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1			
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1			
Silver	ppm	ASTM D5185(m)	>2	0	0	0			
Aluminum	ppm	ASTM D5185(m)	>15	<1	<1	1			
Lead	ppm	ASTM D5185(m)	>25	0	<1	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	<1			
Barium	ppm	ASTM D5185(m)		0	0	0			
Molybdenum	ppm	ASTM D5185(m)		57	59	61			
Manganese	ppm	ASTM D5185(m)		<1	<1	<1			
Magnesium	ppm	ASTM D5185(m)		928	974	995			
Calcium	ppm	ASTM D5185(m)		978	1024	1100			
Phosphorus	ppm	ASTM D5185(m)		973	1055	1107			
Zinc	ppm	ASTM D5185(m)		1110	1210	1242			
Sulfur	ppm	ASTM D5185(m)		2277	2377	2484			
Lithium	ppm	ASTM D5185(m)		<1	<1	<1			
CONTAMINANTS		method	limit/base	current	history1	history2			
Silicon	ppm	ASTM D5185(m)	>25	10	5	4			
Sodium	ppm	ASTM D5185(m)		6	4	4			
Potassium	ppm	ASTM D5185(m)	>20	2	<1	1			
Fuel	%	ASTM D7593*	>3.0	4.8	<1.0	△ 4.4			
INFRA-RED		method	limit/base	current	history1	history2			
Soot %	%	ASTM D7844*	>6	0.6	0.6	0.6			
Nitration	Abs/cm	ASTM D7624*	>20	10.2	11.6	11.0			
Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*	>30	24.2	24.6	24.4			
FLUID DEGRADA		method	limit/base	current	history1	history2			
20.2 220.000						_			
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.9	24.7	23.2			

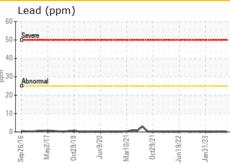


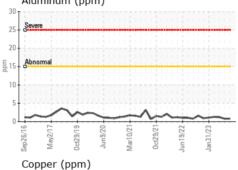
OIL ANALYSIS REPORT

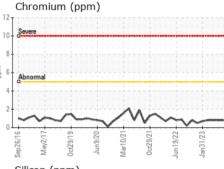


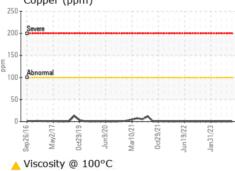
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPER	ΓIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	<u> </u>	13.7	13.1
GRAPHS						
Iron (ppm)				Lead (ppm)		

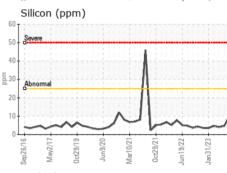


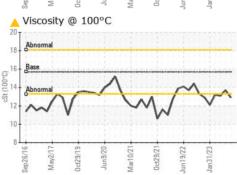


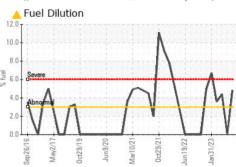














CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel)

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0830336

Received : 02575582 Diagnosed : 5620633

: 14 Aug 2023 : 15 Aug 2023

Diagnostician : Wes Davis

CITY OF HAMILTON 2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM MOUNT HOPE, ON

CA LOR 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.