



Machine Id
CUMMINS 10862
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (7 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116823	GFL0116807	GFL0116791
Sample Date		Client Info		17 May 2024	13 May 2024	03 Apr 2024
Machine Age	hrs	Client Info		15429	15395	15181
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	31	29	12
Chromium	ppm	ASTM D5185m	>5	2	2	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>15	10	9	3
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>100	0	2	0
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

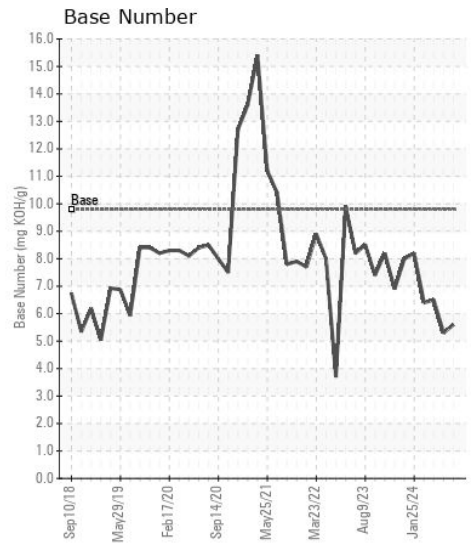
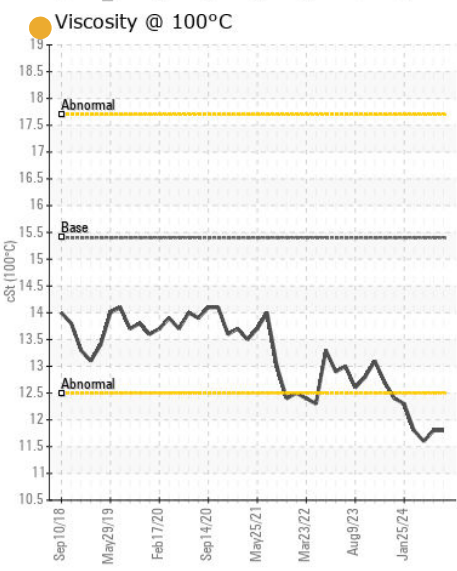
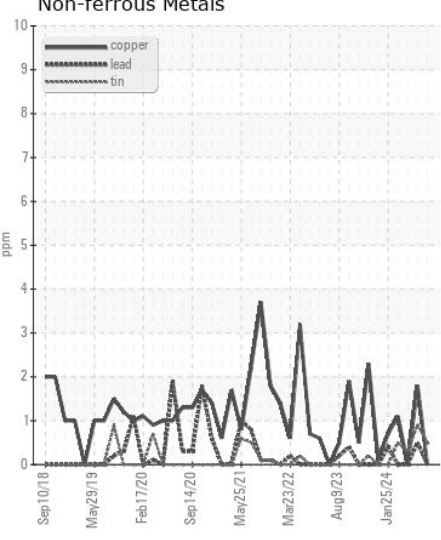
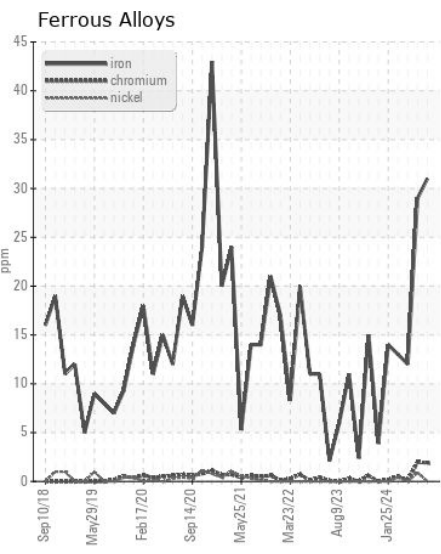
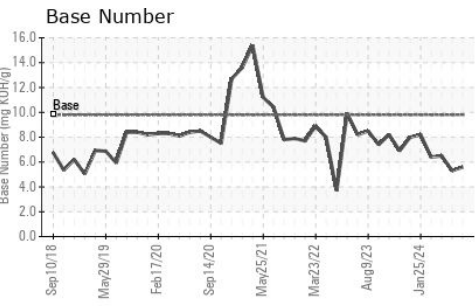
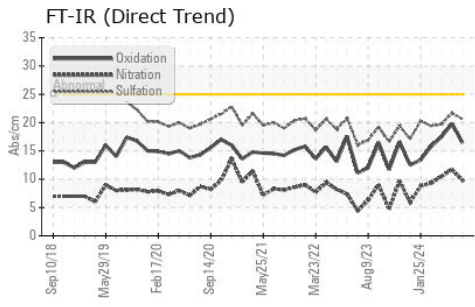
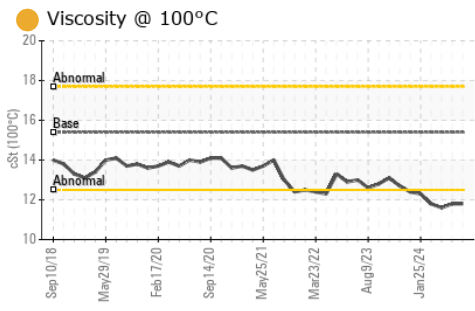
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	12	11	7
Potassium	ppm	ASTM D5185m	>20	6	8	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.5	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.8	11.7	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	21.7	19.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		16	16	11
Boron	ppm	ASTM D5185m	0	14	10	14
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	61	56	57
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	1010	684	650	694
Calcium	ppm	ASTM D5185m	1070	1064	1061	1050
Phosphorus	ppm	ASTM D5185m	1150	853	886	825
Zinc	ppm	ASTM D5185m	1270	1046	1026	993
Sulfur	ppm	ASTM D5185m	2060	2927	3101	2806
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	19.8	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.6	5.3	6.5
Visc @ 100°C	cSt	ASTM D445	15.4	11.8	11.8	11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116823
Lab Number : 06188891
Unique Number : 11045643
Test Package : FLEET
Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 28 May 2024 - Don Baldrige

GFL Environmental - 009 - Fairburn
 6905 Roosevelt Hwy
 Fairburn, GA
 US 30213
 Contact: Eric Jones
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 T: (678)630-9927
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)