



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
AUTOCAR 812012

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0109040	GFL0109116	GFL0109068
Sample Date		Client Info		21 Feb 2024	30 Jan 2024	11 Jan 2024
Machine Age	hrs	Client Info		5156	5026	4902
Oil Age	hrs	Client Info		5156	5026	4902
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				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	3	2	17
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	4
Lead	ppm	ASTM D5185m	>40	0	1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<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

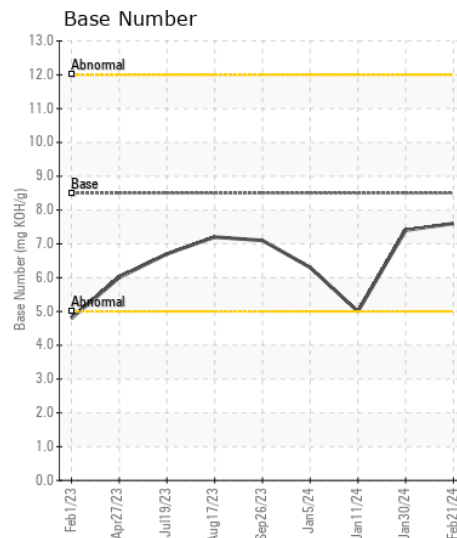
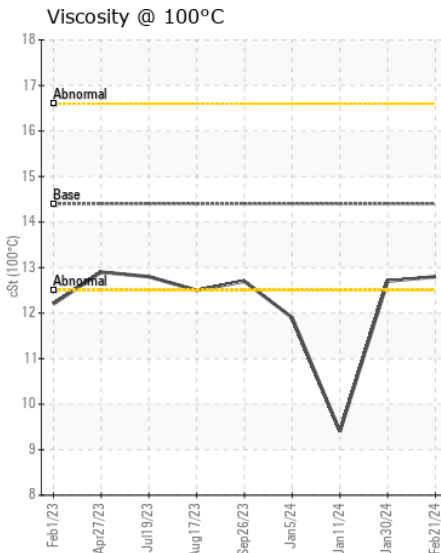
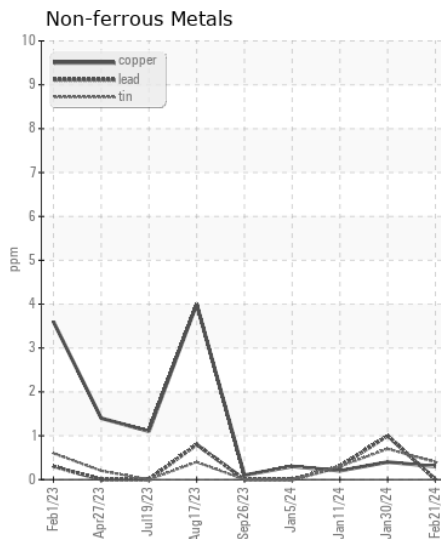
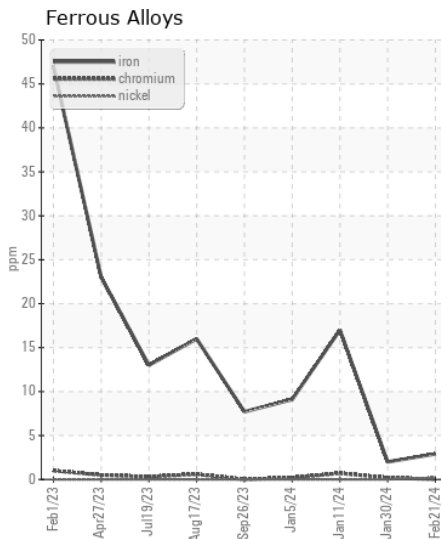
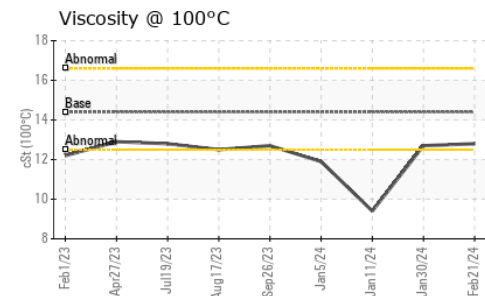
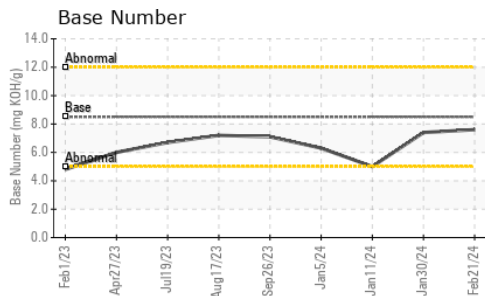
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	2	9
Potassium	ppm	ASTM D5185m	>20	4	7	2
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 1.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.2	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.3	6.1	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	17.2	20.0
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	3	4	4
Boron	ppm	ASTM D5185m	250	16	14	11
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	55	50	52
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	730	672	613
Calcium	ppm	ASTM D5185m	3000	1029	977	929
Phosphorus	ppm	ASTM D5185m	1150	929	857	790
Zinc	ppm	ASTM D5185m	1350	1060	1012	928
Sulfur	ppm	ASTM D5185m	4250	2684	2440	2315
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9	12.6	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	7.4	5.0
Visc @ 100°C	cSt	ASTM D445	14.4	12.8	12.7	▲ 9.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109040
Lab Number : 06098139
Unique Number : 10896369
Test Package : FLEET

Received : 23 Feb 2024
Tested : 25 Feb 2024
Diagnosed : 25 Feb 2024 - Wes Davis

GFL Environmental - 009 - Fairburn
 6905 Roosevelt Hwy
 Fairburn, GA
 US 30213
 Contact: Eric Jones
 erjones@gflenv.com
 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)