

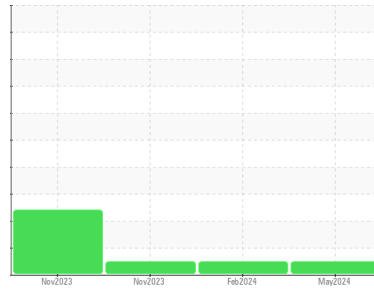


OIL ANALYSIS REPORT



Area
(YA172374) GFL035
 Machine Id
934043
 Component
Diesel Engine
 Fluid
{not provided} (40 QTS)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0116481	GFL0102358	GFL0102298
Sample Date	Client Info			07 May 2024	07 Feb 2024	17 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		600	600	300
Oil Changed	Client Info			Not Chngd	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	29	27	12
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>2	1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	9	4
Lead	ppm	ASTM D5185m	>40	2	1	0
Copper	ppm	ASTM D5185m	>330	6	4	3
Tin	ppm	ASTM D5185m	>15	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	7	34
Barium	ppm	ASTM D5185m		2	<1	0
Molybdenum	ppm	ASTM D5185m		61	55	51
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		558	577	557
Calcium	ppm	ASTM D5185m		1663	1634	1503
Phosphorus	ppm	ASTM D5185m		710	743	725
Zinc	ppm	ASTM D5185m		937	994	921
Sulfur	ppm	ASTM D5185m		2343	2357	2601

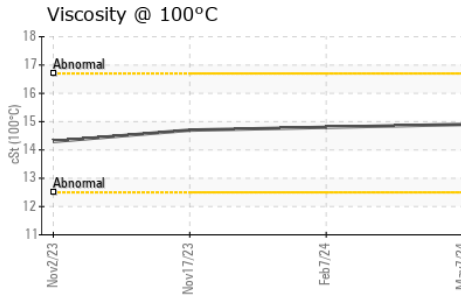
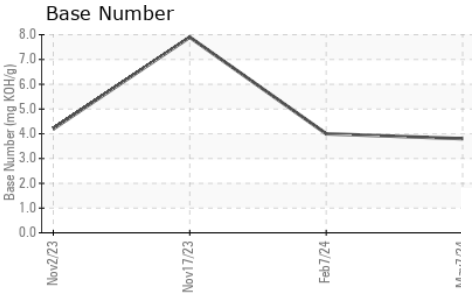
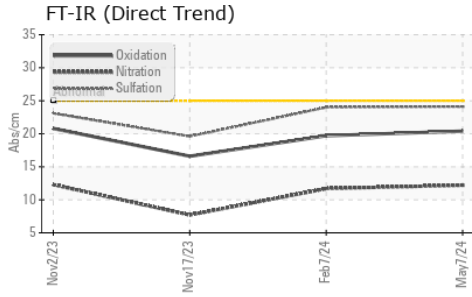
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	8	7
Sodium	ppm	ASTM D5185m		6	8	4
Potassium	ppm	ASTM D5185m	>20	15	21	12

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.2	11.7	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	24.0	19.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	19.7	16.6
Base Number (BN)	mg KOH/g	ASTM D2896		3.8	4.0	7.9



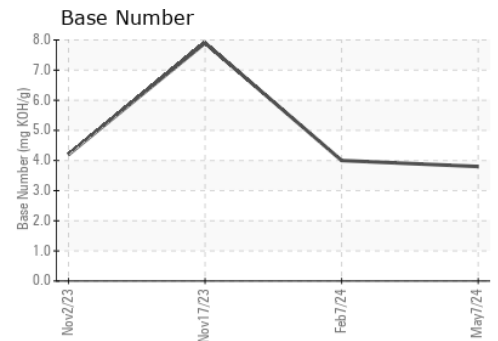
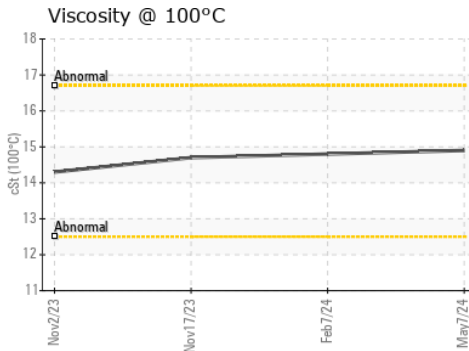
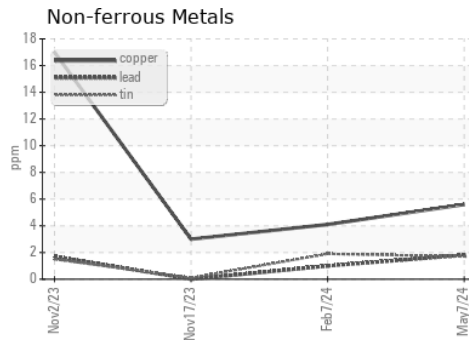
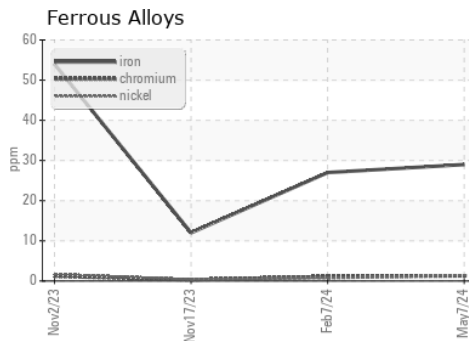
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.9	14.8	14.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116481
Lab Number : 06176480
Unique Number : 11022533
Test Package : FLEET

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

GFL Environmental - 035 - Greensboro
 1236 Elon Place
 High Point, NC
 US 27263
 Contact: JORGE COSTA
 jorge.costa@gflenv.com
 T: (336)668-3712
 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)