



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



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

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		GFL0102358	GFL0102298	GFL0085166
Sample Date		Client Info		07 Feb 2024	17 Nov 2023	02 Nov 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		600	300	600
Filter Age	hrs	Client Info		0	300	600
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	27	12	54
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	2
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	9	4	▲ 24
Lead	ppm	ASTM D5185m	>40	1	0	2
Copper	ppm	ASTM D5185m	>330	4	3	17
Tin	ppm	ASTM D5185m	>15	2	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

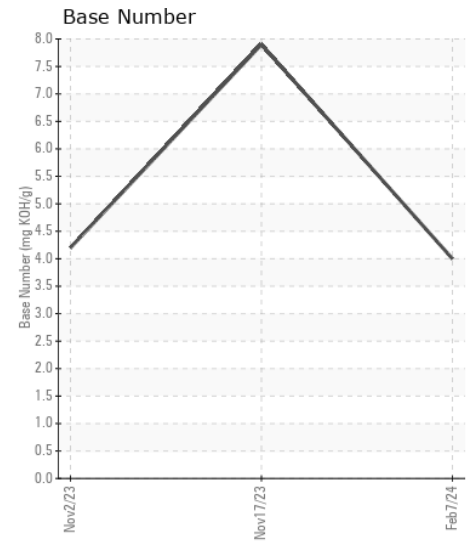
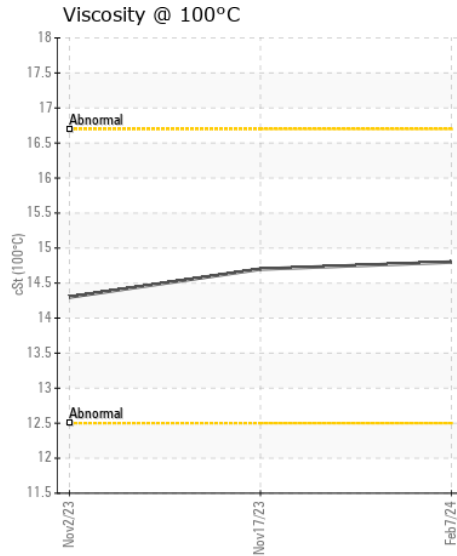
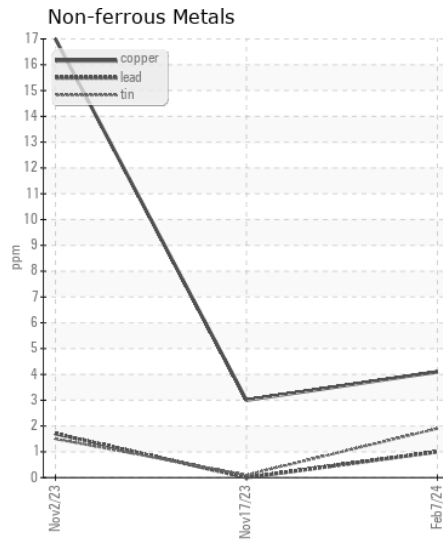
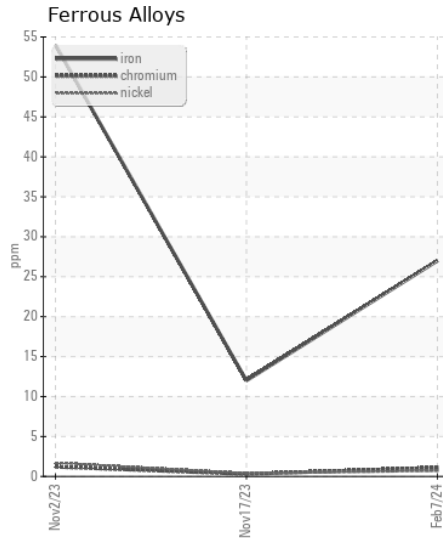
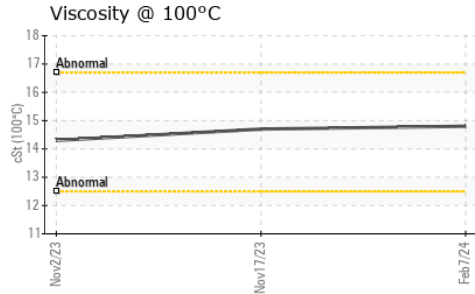
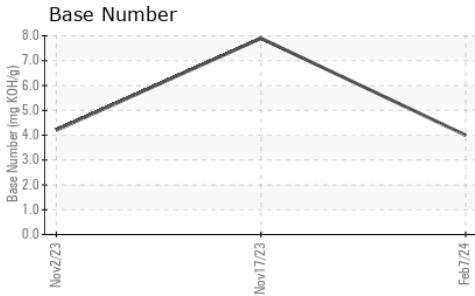
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	7	▲ 34
Potassium	ppm	ASTM D5185m	>20	21	12	79
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	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.7	7.7	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	19.6	23.1
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		8	4	2
Boron	ppm	ASTM D5185m		7	34	8
Barium	ppm	ASTM D5185m		<1	0	10
Molybdenum	ppm	ASTM D5185m		55	51	54
Manganese	ppm	ASTM D5185m		2	2	13
Magnesium	ppm	ASTM D5185m		577	557	706
Calcium	ppm	ASTM D5185m		1634	1503	1240
Phosphorus	ppm	ASTM D5185m		743	725	739
Zinc	ppm	ASTM D5185m		994	921	891
Sulfur	ppm	ASTM D5185m		2357	2601	2518
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	16.6	20.8
Base Number (BN)	mg KOH/g	ASTM D2896		4.0	7.9	4.2
Visc @ 100°C	cSt	ASTM D445		14.8	14.7	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102358
Lab Number : 06084277
Unique Number : 10871722
Test Package : FLEET

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 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)