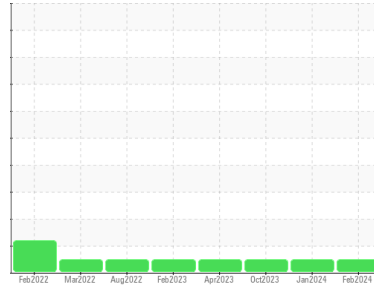




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
922024-122584
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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		GFL0111084	GFL0103505	GFL0086335
Sample Date	Client Info		12 Feb 2024	03 Jan 2024	19 Oct 2023
Machine Age	hrs	Client Info	9866	9846	17567
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Not Changd
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 >120	2	30	21
Chromium	ppm	ASTM D5185m >20	0	<1	<1
Nickel	ppm	ASTM D5185m >5	<1	1	<1
Titanium	ppm	ASTM D5185m >2	0	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	3	4	3
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	1	2	2
Tin	ppm	ASTM D5185m >15	<1	1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 151	13	22	22
Barium	ppm	ASTM D5185m 0.4	0	0	3
Molybdenum	ppm	ASTM D5185m 250	75	74	78
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m 0	839	837	816
Calcium	ppm	ASTM D5185m 2046	962	1049	1101
Phosphorus	ppm	ASTM D5185m 1043	908	873	1024
Zinc	ppm	ASTM D5185m 943	1134	1153	1173
Sulfur	ppm	ASTM D5185m 5012	2779	3124	3219

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	10	9
Sodium	ppm	ASTM D5185m	3	32	48
Potassium	ppm	ASTM D5185m >20	7	12	14

INFRA-RED

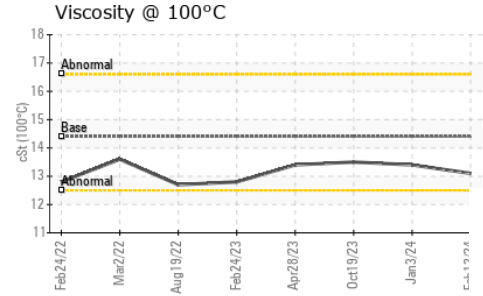
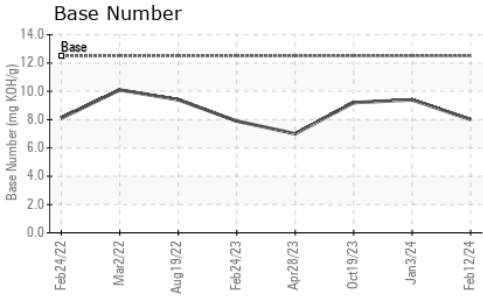
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	6.3	6.5	6.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.2	17.6	17.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.2	13.6	13.9
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	8.0	9.4	9.2



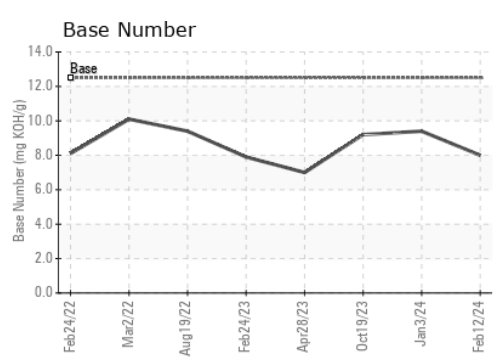
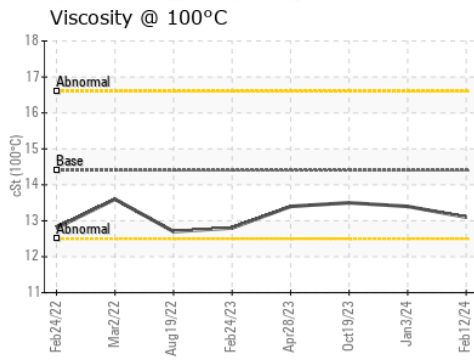
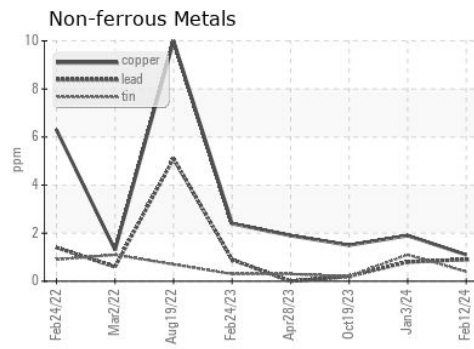
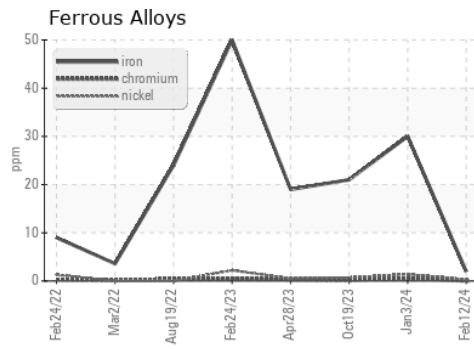
OIL ANALYSIS REPORT



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	14.4	13.1	13.4	13.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111084
Lab Number : 06091478
Unique Number : 10884331
Test Package : FLEET
Received : 16 Feb 2024
Tested : 17 Feb 2024
Diagnosed : 19 Feb 2024 - Don Baldrige

GFL environmental - 867 - Trafford (Blount Hauling)
 1130 County Line Rd
 Trafford, AL
 US 35172
 Contact: Jonathan Williams
 jonathan.williams@gflenv.com

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)