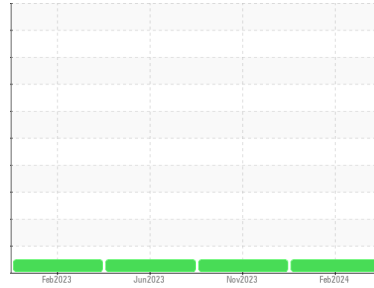




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
712049
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (10 GAL)

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		GFL0096242	GFL0096237	GFL0064371
Sample Date	Client Info		12 Feb 2024	06 Nov 2023	19 Jun 2023
Machine Age	hrs	Client Info	4244	3649	2619
Oil Age	hrs	Client Info	3649	0	172
Oil Changed	Client Info		Changed	Changed	Changed
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	8	8	2
Chromium	ppm	ASTM D5185m >20	<1	<1	0
Nickel	ppm	ASTM D5185m >5	3	4	<1
Titanium	ppm	ASTM D5185m >2	10	10	4
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >20	2	2	3
Lead	ppm	ASTM D5185m >40	0	<1	0
Copper	ppm	ASTM D5185m >330	<1	<1	<1
Tin	ppm	ASTM D5185m >15	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	69	63	205
Barium	ppm	ASTM D5185m	0	0	4
Molybdenum	ppm	ASTM D5185m	47	48	77
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	626	663	538
Calcium	ppm	ASTM D5185m	1353	1433	1306
Phosphorus	ppm	ASTM D5185m 760	610	672	565
Zinc	ppm	ASTM D5185m 830	767	837	711
Sulfur	ppm	ASTM D5185m 2770	2596	2728	2635

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	5	4
Sodium	ppm	ASTM D5185m	4	4	2
Potassium	ppm	ASTM D5185m >20	2	3	1

INFRA-RED

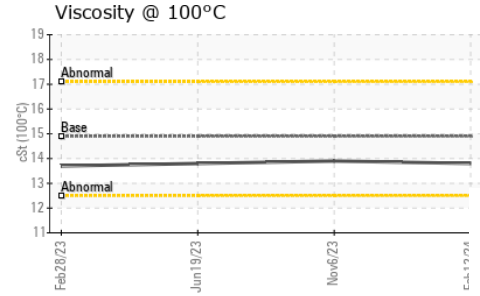
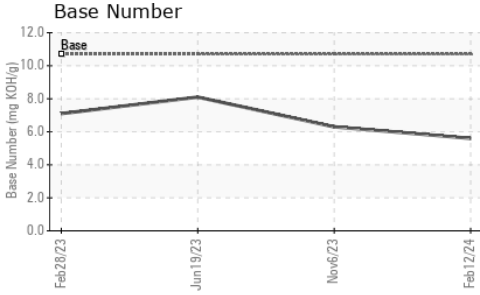
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.6	0.6	0.2
Nitration	Abs/cm	*ASTM D7624 >20	10.0	9.9	6.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.2	22.4	21.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.1	16.7	16.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	5.6	6.3	8.1



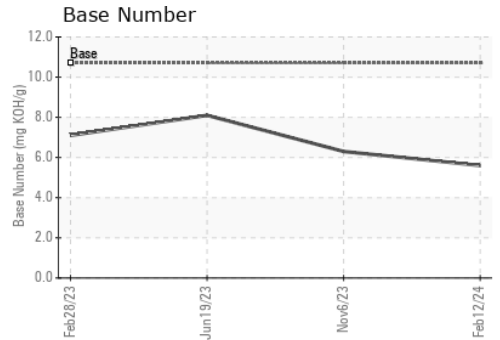
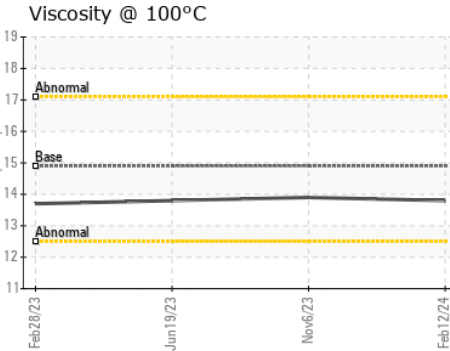
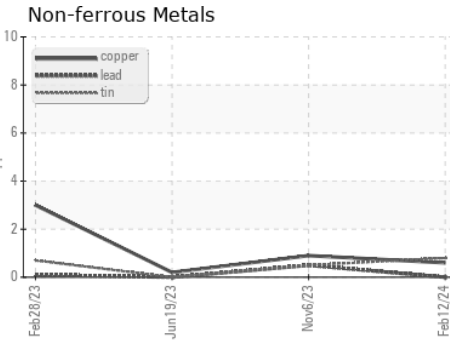
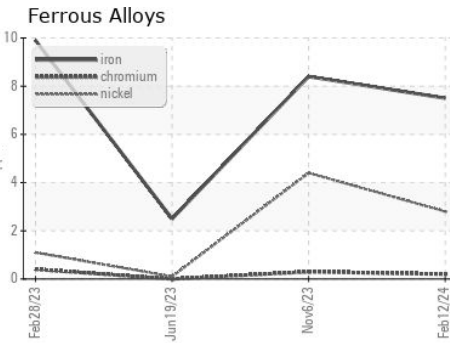
OIL ANALYSIS REPORT



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	13.8	13.9	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0096242
 Lab Number : 06096100
 Unique Number : 10888953
 Test Package : FLEET

Received : 21 Feb 2024
 Tested : 22 Feb 2024
 Diagnosed : 22 Feb 2024 - Wes Davis

GFL Environmental - 624 - Elmira Hauling
 10164 M-32
 Elmira, MI
 US 49730

Contact: ANDY GROBASKI
 andyg@americanwaste.org

T: (989)370-2941

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)

F: