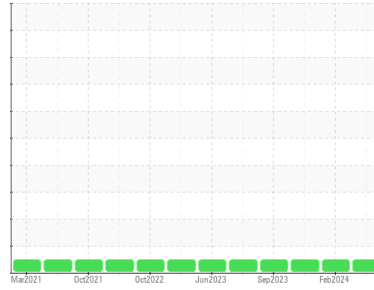




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**420010-1309**

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	<b>GFL0104702</b>	GFL0096243	GFL0096251
Sample Date	Client Info	<b>30 May 2024</b>	12 Feb 2024	19 Oct 2023
Machine Age	hrs	<b>10737</b>	10014	216952
Oil Age	hrs	<b>0</b>	10014	0
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >2.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>26</b>	16	21
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>10</b>	11	11
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	3	6
Lead	ppm ASTM D5185m >40	<b>4</b>	2	2
Copper	ppm ASTM D5185m >330	<b>&lt;1</b>	0	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>75</b>	70	83
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>54</b>	48	57
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>623</b>	649	722
Calcium	ppm ASTM D5185m	<b>1590</b>	1369	1509
Phosphorus	ppm ASTM D5185m 760	<b>741</b>	657	788
Zinc	ppm ASTM D5185m 830	<b>860</b>	780	886
Sulfur	ppm ASTM D5185m 2770	<b>3314</b>	2685	3702

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>0</b>	4	5
Sodium	ppm ASTM D5185m	<b>5</b>	4	6
Potassium	ppm ASTM D5185m >20	<b>2</b>	5	10

## INFRA-RED

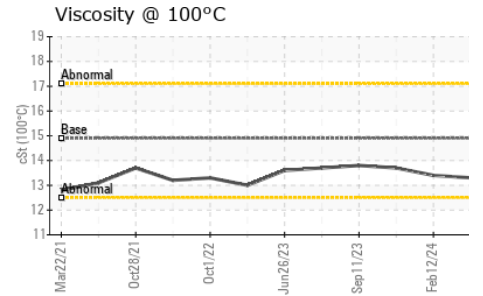
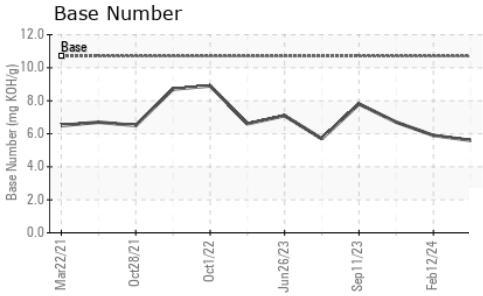
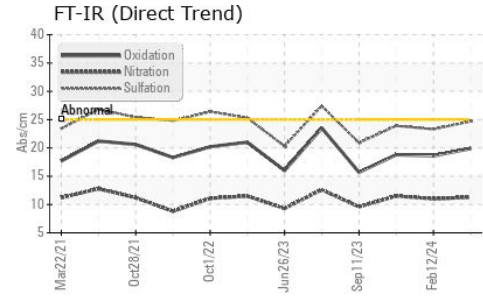
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.8</b>	0.5	0.5
Nitration	Abs/cm *ASTM D7624 >20	<b>11.3</b>	11.0	11.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>24.7</b>	23.3	23.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.9</b>	18.6	18.8
Base Number (BN)	mg KOH/g ASTM D2896 10.7	<b>5.6</b>	5.9	6.7



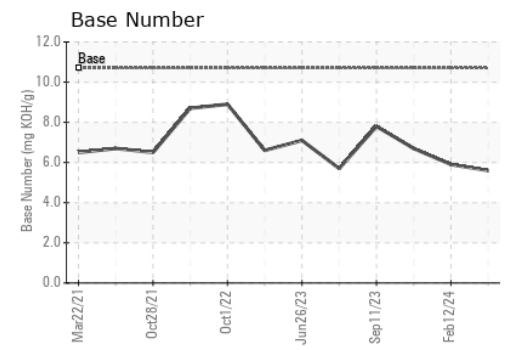
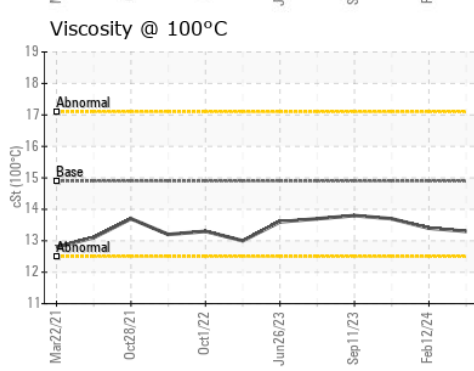
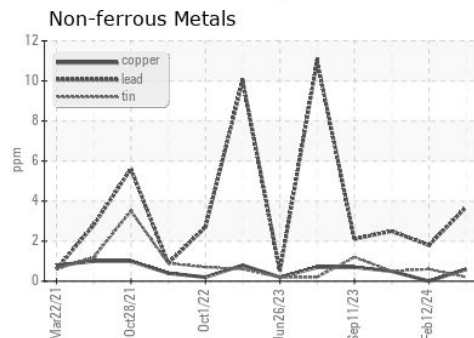
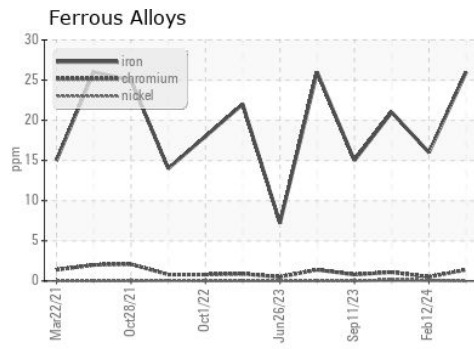
# OIL ANALYSIS REPORT



VISUAL	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	13.3	13.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104702      **Received** : 04 Jun 2024  
**Lab Number** : **06198872**      **Tested** : 05 Jun 2024  
**Unique Number** : 11060995      **Diagnosed** : 05 Jun 2024 - Wes Davis  
**Test Package** : FLEET

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

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)