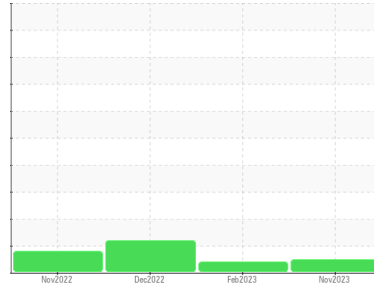




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**720062**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 LE 15W40 (--- 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>GFL0083067</b>	GFL0044642	GFL0053985	
Sample Date	Client Info	<b>02 Nov 2023</b>	22 Feb 2023	12 Dec 2022	
Machine Age	hrs	Client Info	<b>0</b>	0	330
Oil Age	hrs	Client Info	<b>0</b>	0	150
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Not Changed	
Sample Status		<b>NORMAL</b>	ATTENTION	ABNORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	▲ 2.4
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>70</b>	13	6
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>3</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	1	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m >25	<b>8</b>	2	<1
Lead	ppm ASTM D5185m >40	<b>2</b>	2	<1
Copper	ppm ASTM D5185m >330	<b>2</b>	<1	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>16</b>	6	6
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>83</b>	54	55
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm ASTM D5185m	<b>888</b>	892	863
Calcium	ppm ASTM D5185m	<b>1147</b>	996	1021
Phosphorus	ppm ASTM D5185m 1200	<b>997</b>	930	960
Zinc	ppm ASTM D5185m 1300	<b>1290</b>	1174	1113
Sulfur	ppm ASTM D5185m 3200	<b>2791</b>	3326	3021

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>10</b>	4	3
Sodium	ppm ASTM D5185m	<b>3</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>7</b>	2	0

## INFRA-RED

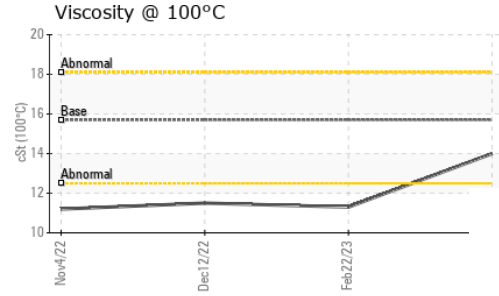
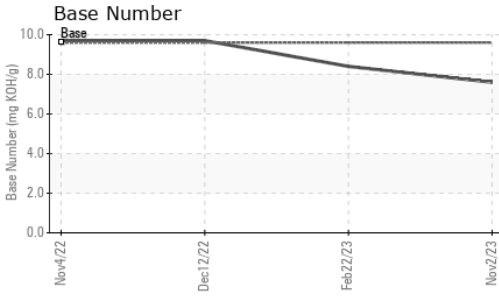
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>1.1</b>	0.4	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>11.2</b>	5.6	5.6
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.7</b>	17.4	18.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>18.2</b>	12.2	13.4
Base Number (BN)	mg KOH/g ASTM D2896 9.6	<b>7.6</b>	8.4	9.7



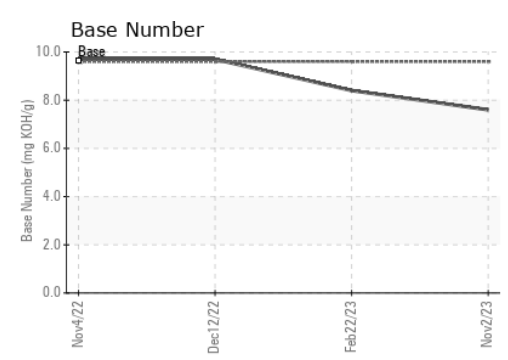
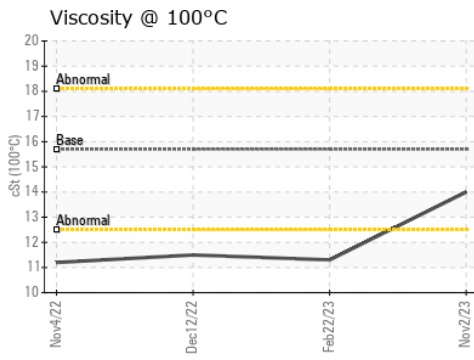
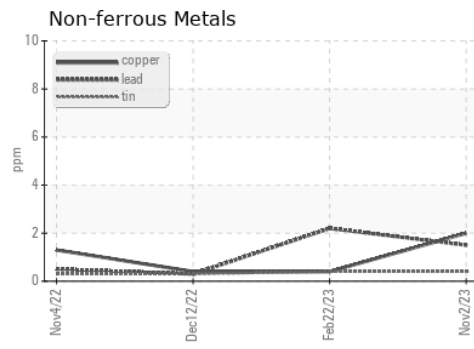
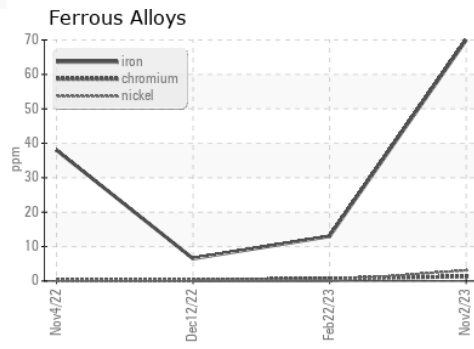
# OIL ANALYSIS REPORT



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	15.7	<b>14.0</b>	▲ 11.3 ▲ 11.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0083067 **Received** : 08 Nov 2023  
**Lab Number** : **06001415** **Diagnosed** : 09 Nov 2023  
**Unique Number** : 10729775 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**GFL Environmental - 073 - Warner Robins - Transwaste**  
 155 Story Road  
 Warner Robins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@gflenv.com  
 T:  
 F:

Certificate L2367  
 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)