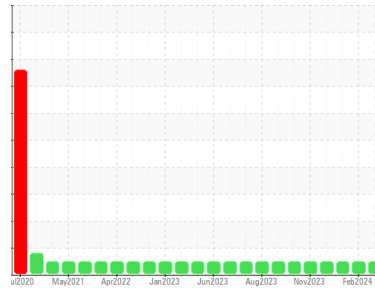




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**429061-402470**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 MULTIGRADE 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>GFL0102986</b>	GFL0102965	GFL0074790	
Sample Date	Client Info	<b>24 Mar 2024</b>	27 Feb 2024	04 Feb 2024	
Machine Age	hrs	Client Info	<b>9396</b>	9184	5038
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<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 >110	<b>15</b>	9	0
Chromium	ppm ASTM D5185m >4	<b>2</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >25	<b>3</b>	2	2
Lead	ppm ASTM D5185m >45	<b>3</b>	<1	<1
Copper	ppm ASTM D5185m >85	<b>1</b>	<1	0
Tin	ppm ASTM D5185m >4	<b>1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>12</b>	4	8
Barium	ppm ASTM D5185m	<b>1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>75</b>	71	63
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m	<b>991</b>	1008	909
Calcium	ppm ASTM D5185m	<b>1276</b>	1184	1055
Phosphorus	ppm ASTM D5185m 1360	<b>1092</b>	1176	978
Zinc	ppm ASTM D5185m 1480	<b>1339</b>	1371	1232
Sulfur	ppm ASTM D5185m	<b>3257</b>	3270	2899

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>6</b>	4	2
Sodium	ppm ASTM D5185m	<b>3</b>	5	<1
Potassium	ppm ASTM D5185m >20	<b>4</b>	1	0

## INFRA-RED

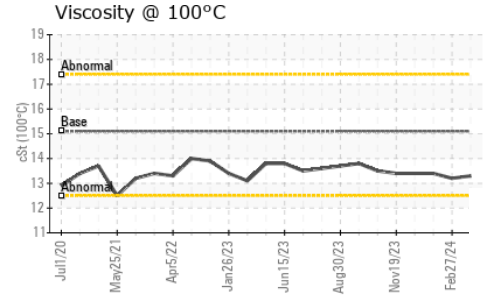
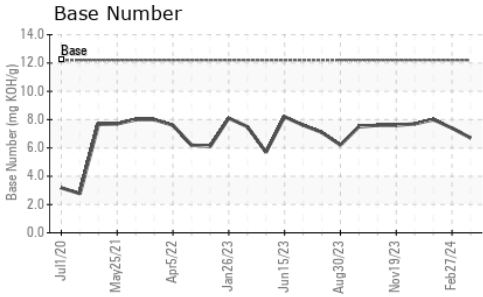
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	0.2	0.2
Nitration	Abs/cm *ASTM D7624 >20	<b>9.7</b>	8.2	7.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>20.7</b>	19.4	18.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>17.4</b>	15.5	14.3
Base Number (BN)	mg KOH/g ASTM D2896 12.2	<b>6.7</b>	7.4	8.0



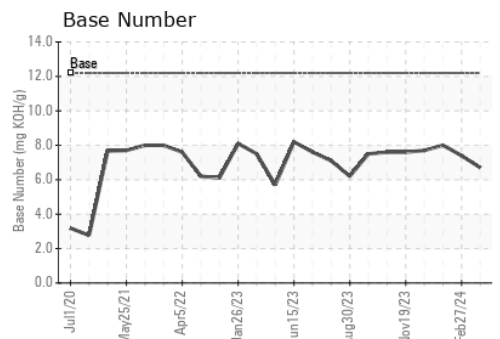
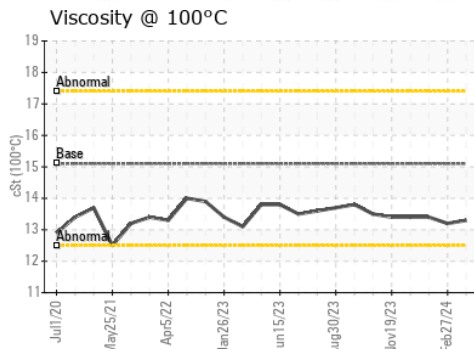
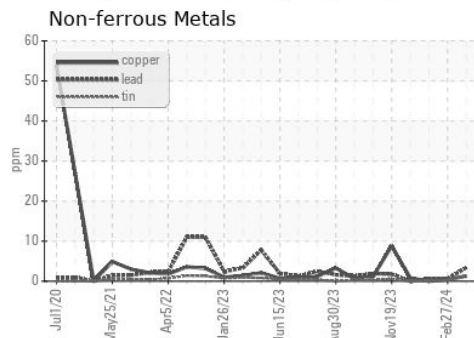
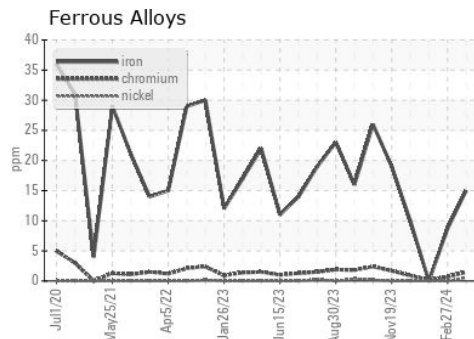
# OIL ANALYSIS REPORT



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	15.1	<b>13.3</b>	13.2	13.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102986  
**Lab Number** : **06128505**  
**Unique Number** : 10942656  
**Test Package** : FLEET  
**Received** : 25 Mar 2024  
**Tested** : 27 Mar 2024  
**Diagnosed** : 28 Mar 2024 - Don Baldrige

**GFL Environmental - 816 - WCA of South Arkansas**  
 3083 Smackover Hwy  
 El Dorado, AR  
 US 71730  
 Contact: Mike Howell  
 mike.howell@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)