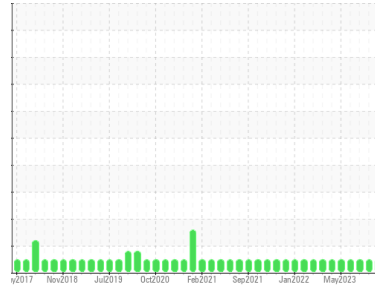




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**GFL035**  
 Machine Id  
**2634**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (40 QTS)**

## 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>GFL0102346</b>	GFL0085181	GFL0085149	
Sample Date	Client Info	<b>16 Feb 2024</b>	23 Jan 2024	09 Nov 2023	
Machine Age	hrs	Client Info	<b>9999</b>	0	9999
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<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 >165	<b>17</b>	27	25
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>0</b>	0	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	3	2
Lead	ppm ASTM D5185m >150	<b>&lt;1</b>	2	5
Copper	ppm ASTM D5185m >90	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185m >5	<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>2</b>	4	3
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>61</b>	64	67
Manganese	ppm ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>998</b>	931	957
Calcium	ppm ASTM D5185m	<b>1084</b>	1106	1180
Phosphorus	ppm ASTM D5185m 760	<b>1111</b>	1084	1078
Zinc	ppm ASTM D5185m 800	<b>1344</b>	1281	1291
Sulfur	ppm ASTM D5185m 3000	<b>3604</b>	2914	2729

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	<b>6</b>	7	9
Sodium	ppm ASTM D5185m	<b>6</b>	7	7
Potassium	ppm ASTM D5185m >20	<b>2</b>	4	3

## INFRA-RED

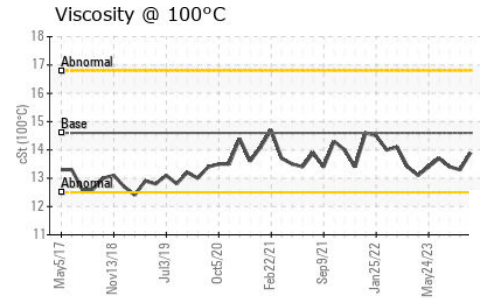
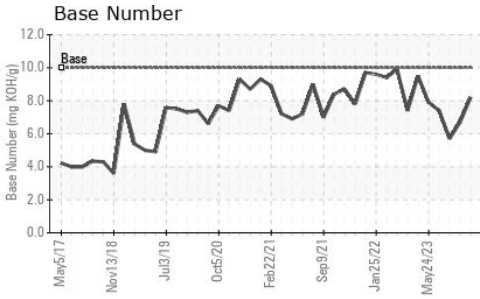
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >7.5	<b>0.4</b>	0.7	0.6
Nitration	Abs/cm *ASTM D7624 >20	<b>8.0</b>	11.2	11.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.3</b>	21.9	23.8

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.4</b>	19.4	21.5
Base Number (BN)	mg KOH/g ASTM D2896 10	<b>8.2</b>	6.7	5.7



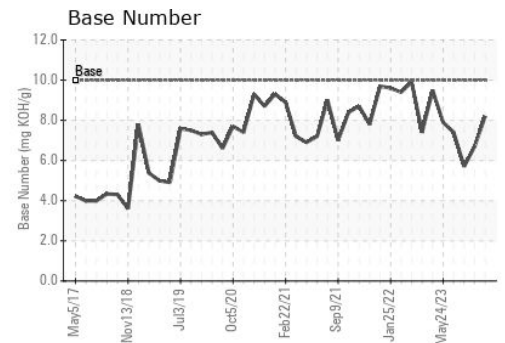
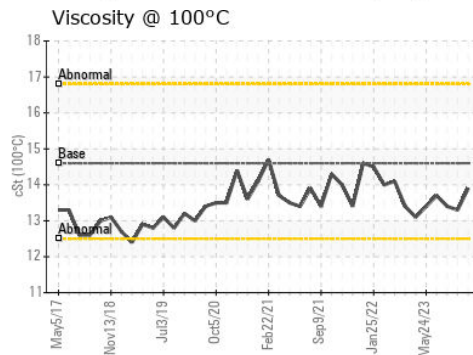
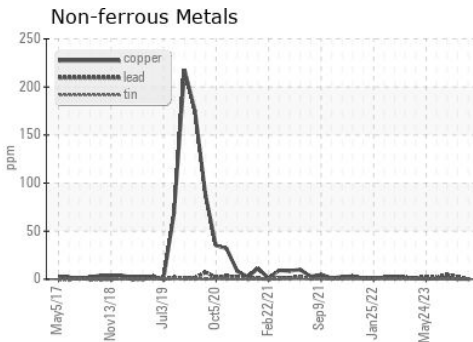
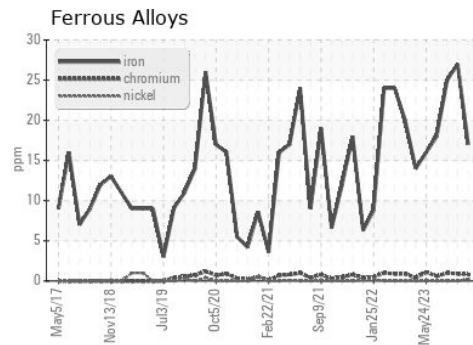
# OIL ANALYSIS REPORT



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	14.6	<b>13.9</b>	13.3	13.4

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0102346  
 Lab Number : **06104796**  
 Unique Number : 10903026  
 Test Package : FLEET

Received : 29 Feb 2024  
 Tested : 01 Mar 2024  
 Diagnosed : 04 Mar 2024 - Sean Felton

**GFL Environmental - 035 - Greensboro**  
 1236 Elon Place  
 High Point, NC  
 US 27263  
 Contact: JORGE COSTA  
 jorge.costa@gflenv.com  
 T: (336)668-3712  
 F:

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)