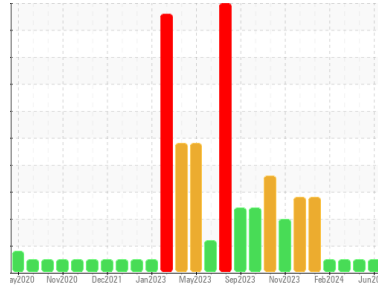




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**820018-101303**

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>GFL0122955</b>	GFL0115439	GFL0102951
Sample Date	Client Info		<b>03 Jun 2024</b>	19 May 2024	22 Apr 2024
Machine Age	hrs	Client Info	<b>10079</b>	9978	9825
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 >100	<b>22</b>	20	14
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	3	3
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	0
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>13</b>	19	15
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>71</b>	78	69
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>959</b>	1025	988
Calcium	ppm	ASTM D5185m	<b>1184</b>	1192	1176
Phosphorus	ppm	ASTM D5185m 1360	<b>1055</b>	1116	1067
Zinc	ppm	ASTM D5185m 1480	<b>1253</b>	1362	1321
Sulfur	ppm	ASTM D5185m	<b>3359</b>	3599	3477

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	7	6
Sodium	ppm	ASTM D5185m	<b>27</b>	30	19
Potassium	ppm	ASTM D5185m >20	<b>3</b>	<1	3

## INFRA-RED

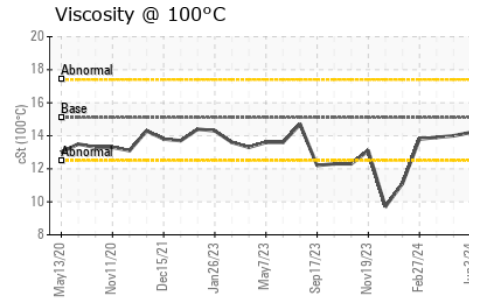
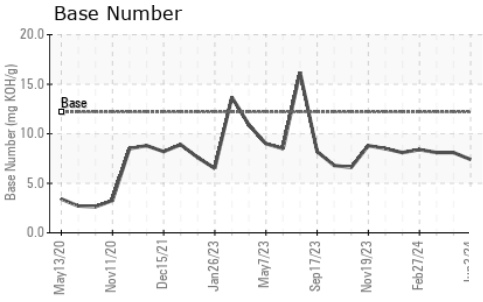
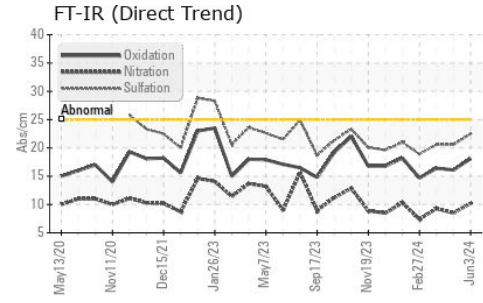
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.5	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	8.5	9.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.5</b>	20.6	20.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.1</b>	16.1	16.4
Base Number (BN)	mg KOH/g	ASTM D2896 12.2	<b>7.4</b>	8.1	8.1



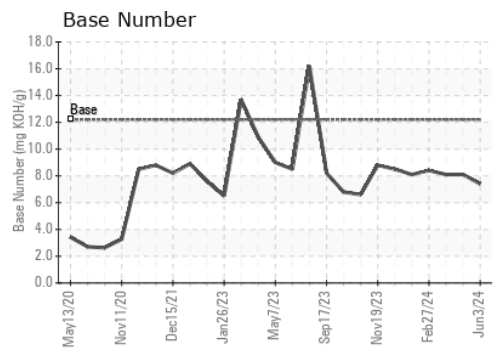
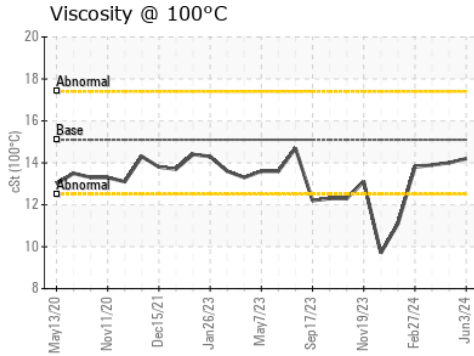
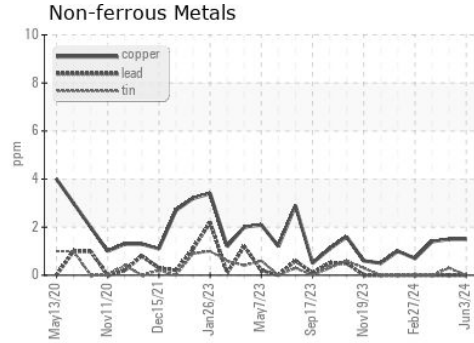
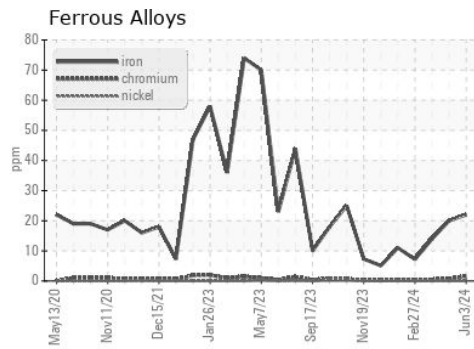
# OIL ANALYSIS REPORT



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	14.2	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122955      **Received** : 04 Jun 2024  
**Lab Number** : 06198905      **Tested** : 05 Jun 2024  
**Unique Number** : 11061028      **Diagnosed** : 06 Jun 2024 - Don Baldrige  
**Test Package** : FLEET

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

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)