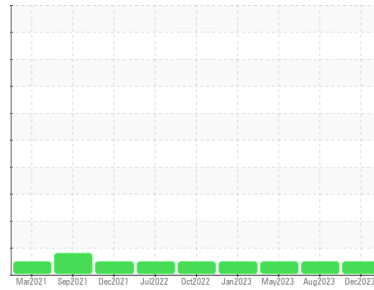




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**124007-630**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 XLE 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>GFL0096102</b>	GFL0084518	GFL0073494
Sample Date	Client Info		<b>18 Dec 2023</b>	07 Aug 2023	19 May 2023
Machine Age	hrs	Client Info	<b>0</b>	16764	15886
Oil Age	hrs	Client Info	<b>0</b>	2250	1372
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
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>23</b>	18	21
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>11</b>	16	15
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	3	4
Lead	ppm	ASTM D5185m >45	<b>32</b>	28	30
Copper	ppm	ASTM D5185m >85	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>76</b>	51	63
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>70</b>	48	46
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>784</b>	848	823
Calcium	ppm	ASTM D5185m	<b>1759</b>	1931	1888
Phosphorus	ppm	ASTM D5185m 760	<b>930</b>	784	754
Zinc	ppm	ASTM D5185m 830	<b>1100</b>	997	963
Sulfur	ppm	ASTM D5185m 2770	<b>3454</b>	3871	3903

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>7</b>	5	8
Sodium	ppm	ASTM D5185m	<b>6</b>	6	6
Potassium	ppm	ASTM D5185m >20	<b>6</b>	5	7

## INFRA-RED

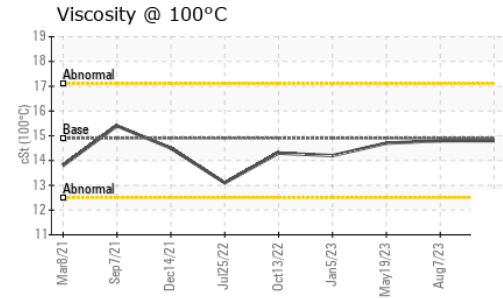
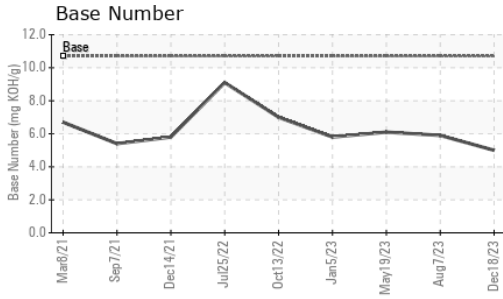
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.8</b>	13.2	14.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>28.8</b>	26.4	27.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>26.6</b>	24.2	26.0
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	<b>5.0</b>	5.9	6.1



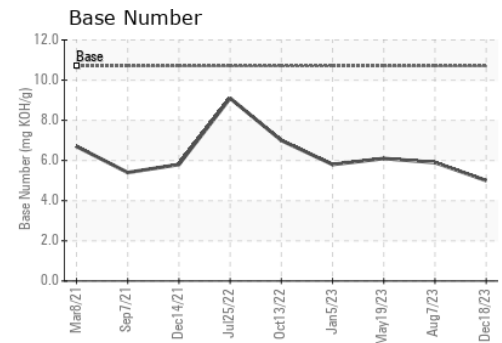
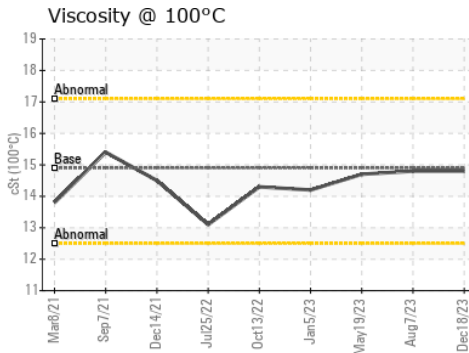
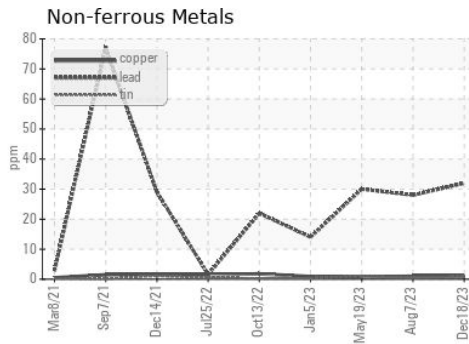
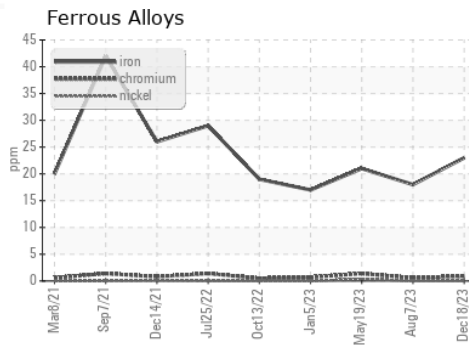
# OIL ANALYSIS REPORT



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	14.9	<b>14.8</b>	14.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096102 **Received** : 21 Dec 2023  
**Lab Number** : **06041796** **Diagnosed** : 22 Dec 2023  
**Unique Number** : 10802404 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 629 - Northern A1**  
 3947 US 131 N  
 Kalkaska, MI  
 US 49646-8428  
**Contact: MITCH HERSHBERGER**

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)

T: (231)624-0848

F: