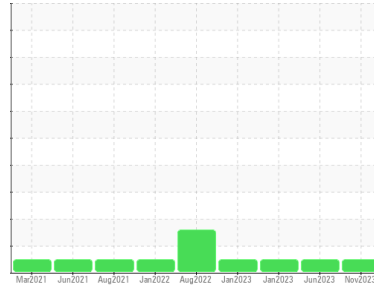




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**929015-1269**

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>GFL0096234</b>	GFL0064372	GFL0064394
Sample Date	Client Info	<b>06 Nov 2023</b>	20 Jun 2023	06 Jan 2023
Machine Age	hrs	<b>18430</b>	147000	16352
Oil Age	hrs	<b>0</b>	15000	0
Oil Changed	Client Info	<b>Changed</b>	N/A	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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>23</b>	40	16
Chromium	ppm ASTM D5185m >20	<b>1</b>	2	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>10</b>	10	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	<1	1
Lead	ppm ASTM D5185m >40	<b>5</b>	7	3
Copper	ppm ASTM D5185m >330	<b>2</b>	5	7
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>72</b>	78	163
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>56</b>	62	106
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m	<b>706</b>	628	405
Calcium	ppm ASTM D5185m	<b>1538</b>	1584	1713
Phosphorus	ppm ASTM D5185m 760	<b>741</b>	733	773
Zinc	ppm ASTM D5185m 830	<b>909</b>	887	931
Sulfur	ppm ASTM D5185m 2770	<b>2908</b>	3041	2628

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>9</b>	14	20
Sodium	ppm ASTM D5185m	<b>5</b>	6	2
Potassium	ppm ASTM D5185m >20	<b>3</b>	3	2

## INFRA-RED

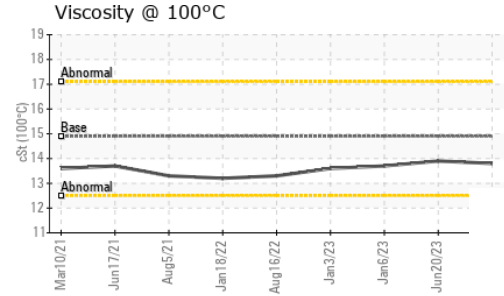
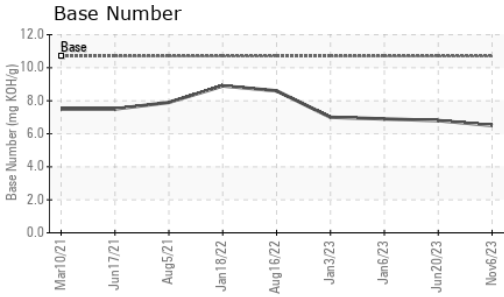
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>1</b>	1.3	0.7
Nitration	Abs/cm *ASTM D7624 >20	<b>11.4</b>	12.3	10.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>25.0</b>	27.0	23.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.3</b>	22.6	18.8
Base Number (BN)	mg KOH/g ASTM D2896 10.7	<b>6.5</b>	6.8	6.9



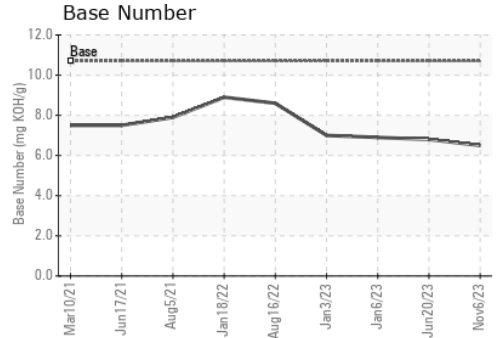
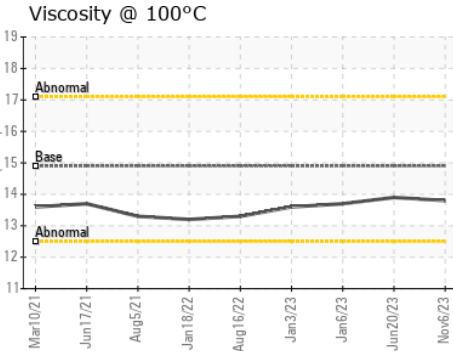
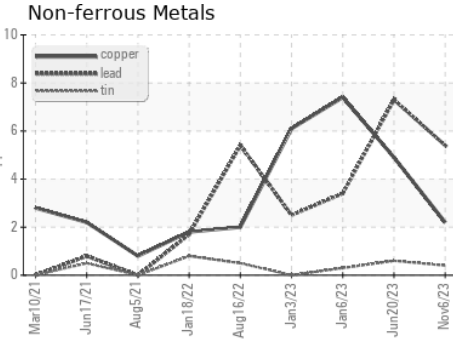
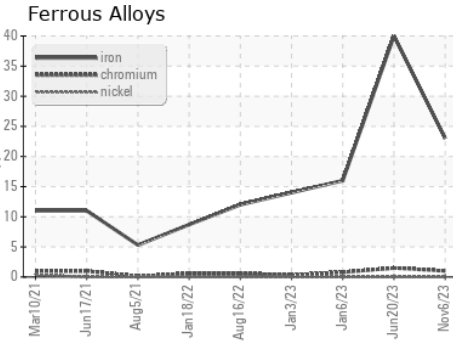
# OIL ANALYSIS REPORT



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>13.8</b>	13.9	13.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096234 **Received** : 13 Nov 2023  
**Lab Number** : 06006077 **Diagnosed** : 14 Nov 2023  
**Unique Number** : 10739839 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 624 - Elmira Hauling**  
 10164 M-32  
 Elmira, MI  
 US 49730  
 Contact: KEITH CAMPBELL  
 kcampbell@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)