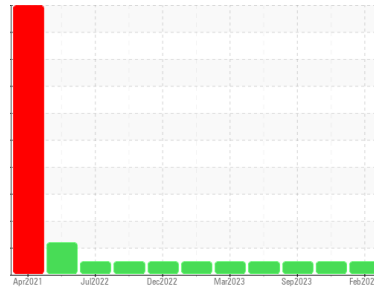




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**929016-1270**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 XLE 15W40 (10 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>GFL0096231</b>	GFL0096259	GFL0064474
Sample Date	Client Info		<b>07 Feb 2024</b>	15 Nov 2023	05 Sep 2023
Machine Age	hrs	Client Info	<b>11935</b>	11291	10663
Oil Age	hrs	Client Info	<b>750</b>	0	659
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 >100	<b>12</b>	9	12
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>11</b>	5	7
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	3	1
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>72</b>	173	111
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>47</b>	93	82
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>677</b>	668	735
Calcium	ppm	ASTM D5185m	<b>1412</b>	1536	1674
Phosphorus	ppm	ASTM D5185m 760	<b>694</b>	682	713
Zinc	ppm	ASTM D5185m 830	<b>811</b>	849	876
Sulfur	ppm	ASTM D5185m 2770	<b>2926</b>	2888	3293

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	5
Sodium	ppm	ASTM D5185m	<b>4</b>	0	5
Potassium	ppm	ASTM D5185m >20	<b>10</b>	8	9

## INFRA-RED

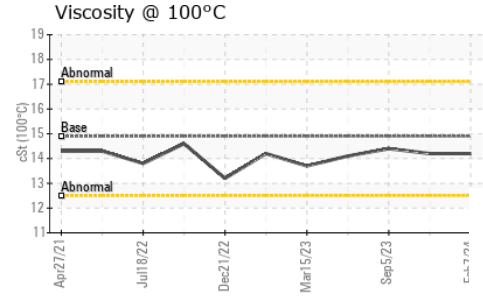
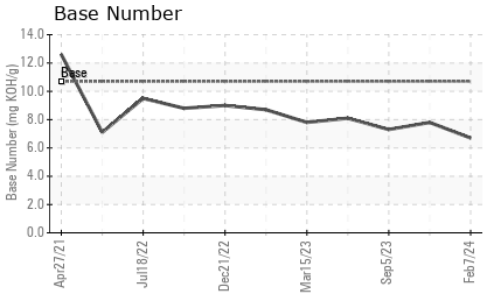
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.1</b>	0.9	1.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.9</b>	9.7	10.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.4</b>	23.0	23.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.9</b>	17.0	16.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	<b>6.7</b>	7.8	7.3



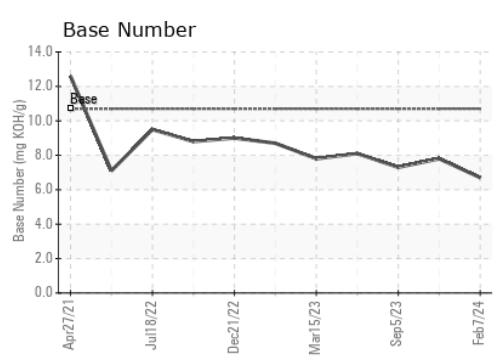
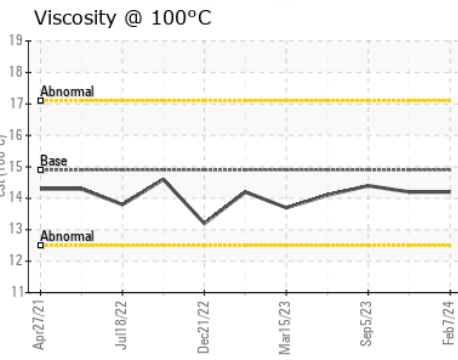
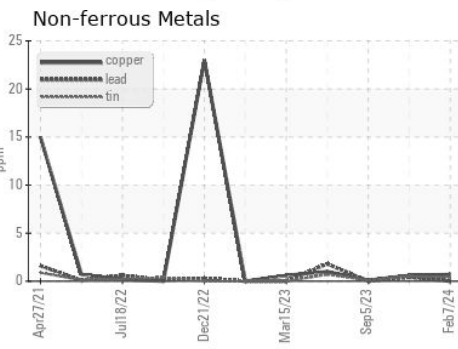
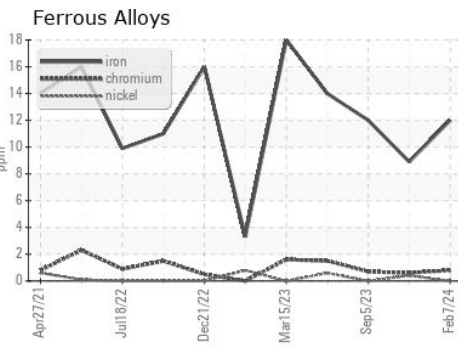
# OIL ANALYSIS REPORT



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>14.2</b>	14.2	14.4

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096231 **Received** : 14 Feb 2024  
**Lab Number** : 06089346 **Tested** : 15 Feb 2024  
**Unique Number** : 10876791 **Diagnosed** : 15 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 624 - Elmira Hauling**  
 10164 M-32  
 Elmira, MI  
 US 49730  
 Contact: ANDY GROBASKI  
 andyg@americanwaste.org  
 T: (989)370-2941  
 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)