



# OIL ANALYSIS REPORT

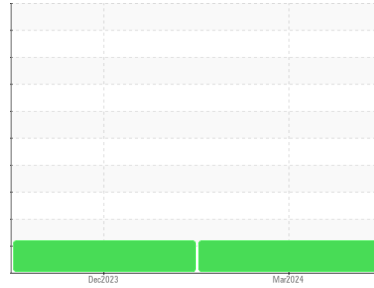
Sample Rating Trend

FUEL

Area  
**(BD56785)**  
Machine Id  
**213034**

Component  
**Front Diesel Engine**  
Fluid

**CHEVRON DELO 400 LE 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0104593</b>	GFL0096319	---
Sample Date	Client Info	<b>08 Mar 2024</b>	19 Dec 2023	---
Machine Age	hrs	<b>8309</b>	339	---
Oil Age	hrs	<b>0</b>	0	---
Oil Changed	Client Info	<b>N/A</b>	Changed	---
Sample Status		<b>ABNORMAL</b>	ABNORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>100	<b>23</b>	44	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>2	<b>10</b>	2	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	9	---
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>4</b>	25	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		<b>93</b>	57	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>39</b>	5	---
Manganese	ppm	ASTM D5185m		<b>1</b>	4	---
Magnesium	ppm	ASTM D5185m		<b>654</b>	655	---
Calcium	ppm	ASTM D5185m		<b>1397</b>	1280	---
Phosphorus	ppm	ASTM D5185m	1200	<b>723</b>	843	---
Zinc	ppm	ASTM D5185m	1300	<b>802</b>	1070	---
Sulfur	ppm	ASTM D5185m	3200	<b>3180</b>	3142	---

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	26	---
Sodium	ppm	ASTM D5185m		<b>3</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	---
Fuel	%	ASTM D3524	>5	<b>▲ 6.6</b>	▲ 6.8	---

## INFRA-RED

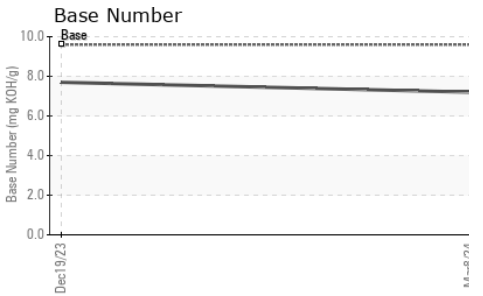
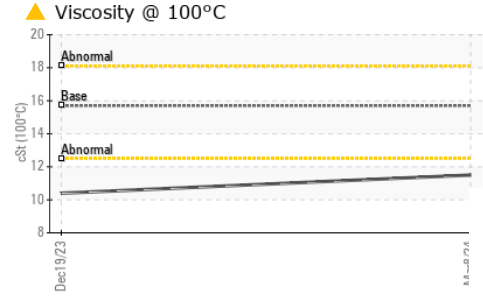
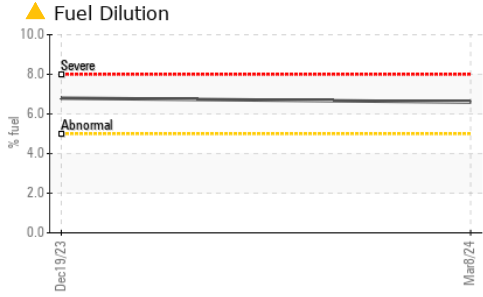
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	10.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.7</b>	21.5	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	16.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>7.2</b>	7.7	---



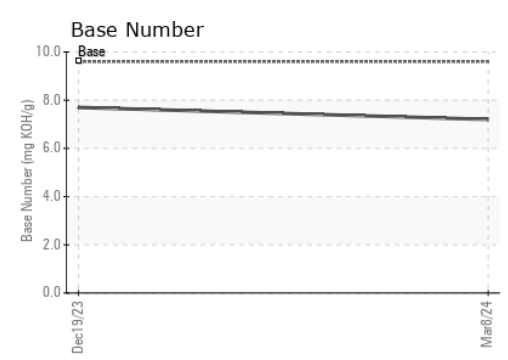
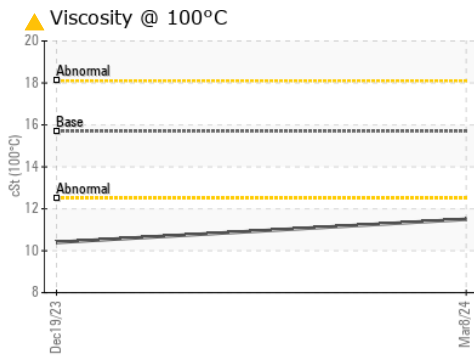
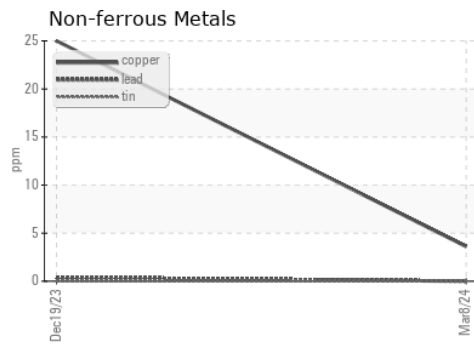
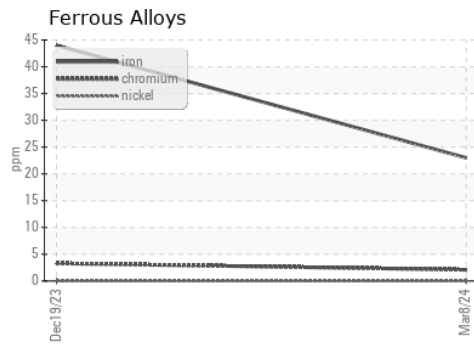
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	▲ 11.5	▲ 10.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104593      **Received** : 12 Mar 2024  
**Lab Number** : 06116386      **Tested** : 13 Mar 2024  
**Unique Number** : 10925219      **Diagnosed** : 13 Mar 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

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