



# OIL ANALYSIS REPORT

Sample Rating Trend

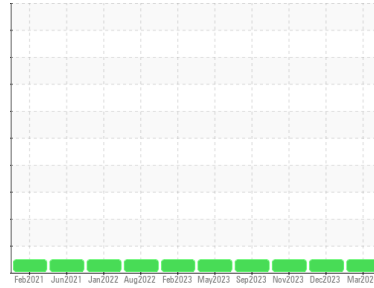
**NORMAL**



Machine Id  
**929020-1274**

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>GFL0104655</b>	GFL0096327	GFL0096315
Sample Date	Client Info		<b>05 Mar 2024</b>	20 Dec 2023	28 Nov 2023
Machine Age	hrs	Client Info	<b>12714</b>	12207	12042
Oil Age	hrs	Client Info	<b>0</b>	9880	0
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not 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>2</b>	9	7
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>11</b>	6	5
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	4	4
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>0</b>	1	0
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>108</b>	189	213
Barium	ppm	ASTM D5185m	<b>0</b>	9	2
Molybdenum	ppm	ASTM D5185m	<b>47</b>	94	86
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>677</b>	685	616
Calcium	ppm	ASTM D5185m	<b>1497</b>	1541	1400
Phosphorus	ppm	ASTM D5185m 760	<b>710</b>	750	667
Zinc	ppm	ASTM D5185m 830	<b>805</b>	879	788
Sulfur	ppm	ASTM D5185m 2770	<b>3291</b>	2626	2794

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	5	4
Sodium	ppm	ASTM D5185m	<b>3</b>	0	3
Potassium	ppm	ASTM D5185m >20	<b>5</b>	11	9

## INFRA-RED

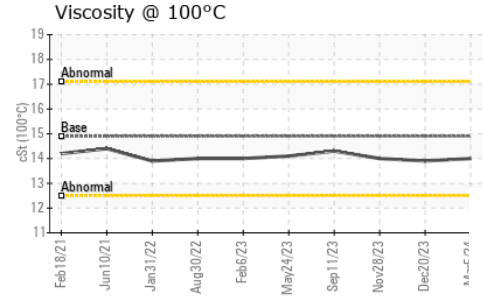
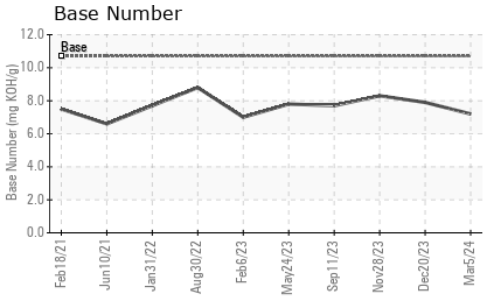
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.0</b>	8.9	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.5</b>	21.8	21.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.3</b>	16.2	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	<b>7.2</b>	7.9	8.3



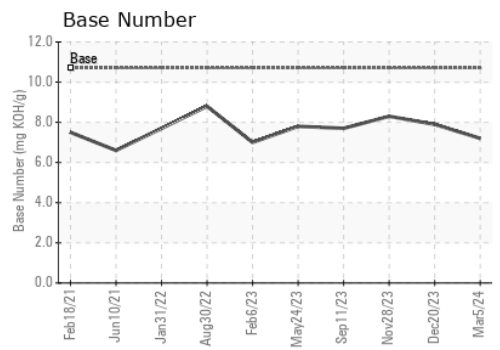
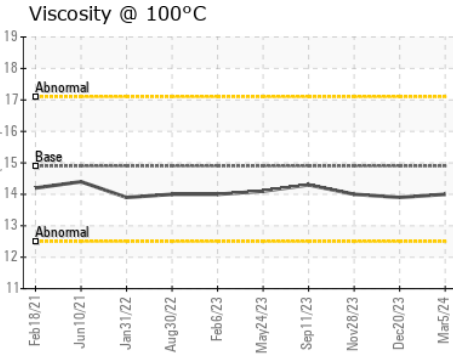
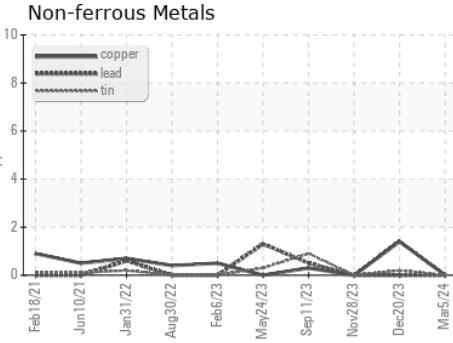
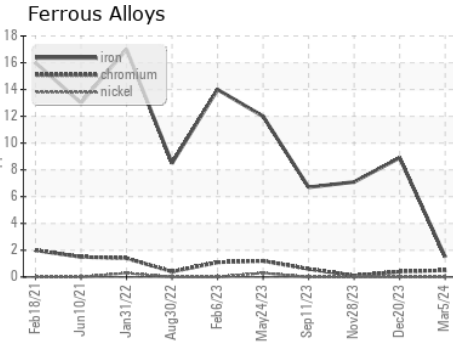
# OIL ANALYSIS REPORT



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>14.0</b>	13.9	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104655 **Received** : 12 Mar 2024  
**Lab Number** : **06116387** **Tested** : 13 Mar 2024  
**Unique Number** : 10925220 **Diagnosed** : 13 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 624 - Elmira Hauling**  
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 Elmira, MI  
 US 49730  
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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)