



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**123018-816**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 XLE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0122766</b>	GFL0110967	GFL0096115
Sample Date		Client Info		<b>17 Jun 2024</b>	11 Mar 2024	22 Nov 2023
Machine Age	hrs	Client Info		<b>14515</b>	13915	13315
Oil Age	hrs	Client Info		<b>500</b>	748	600
Filter Age	hrs	Client Info		<b>500</b>	748	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	12	22
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>7</b>	13	10
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	3	5
Lead	ppm	ASTM D5185m	>40	<b>10</b>	9	14
Copper	ppm	ASTM D5185m	>330	<b>3</b>	2	29
Tin	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

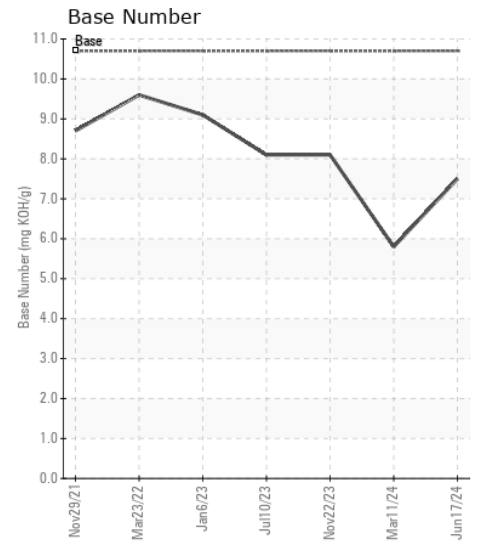
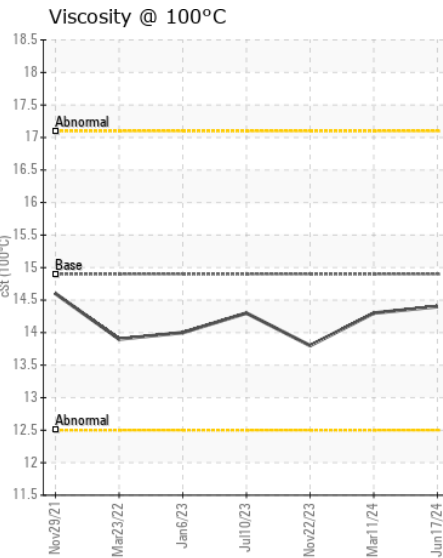
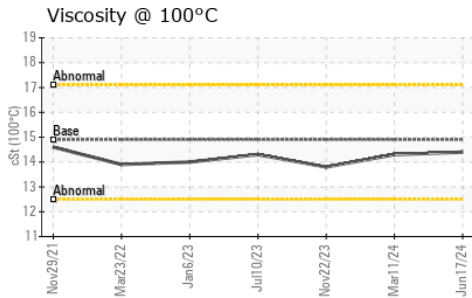
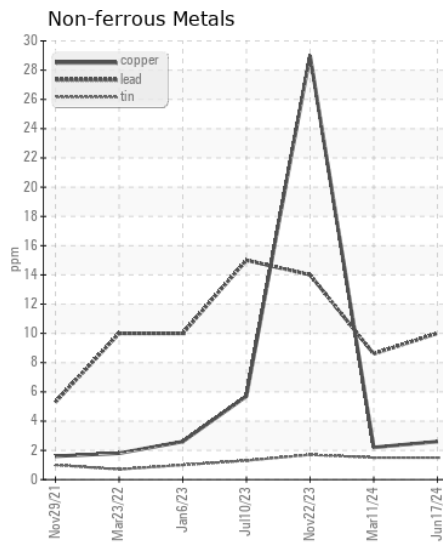
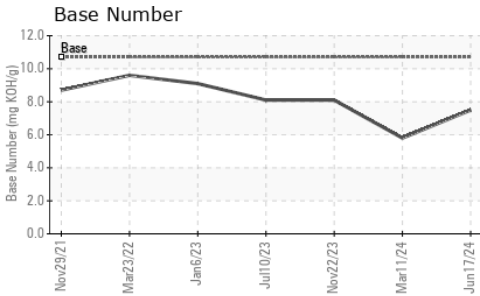
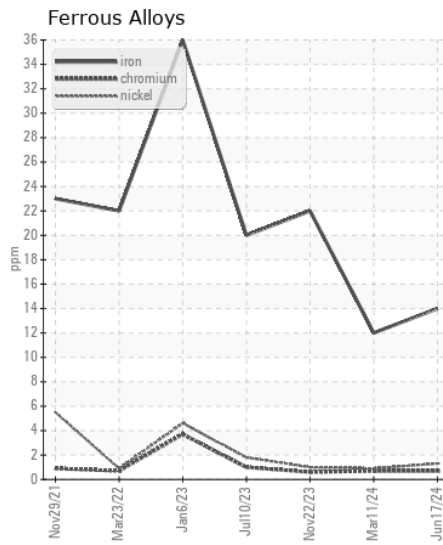
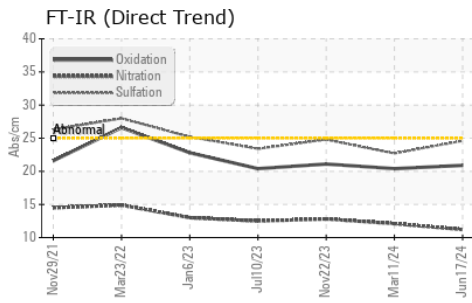
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	7	15
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	6	6
Fuel		WC Method	>2.0	<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
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.7	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	12.1	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.6</b>	22.7	24.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>2</b>	3	4
Boron	ppm	ASTM D5185m		<b>159</b>	50	68
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>75</b>	41	65
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>560</b>	755	699
Calcium	ppm	ASTM D5185m		<b>1496</b>	1651	1590
Phosphorus	ppm	ASTM D5185m	760	<b>939</b>	786	785
Zinc	ppm	ASTM D5185m	830	<b>1103</b>	917	895
Sulfur	ppm	ASTM D5185m	2770	<b>3247</b>	3889	2947
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.9</b>	20.4	21.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>7.5</b>	5.8	8.1
Visc @ 100°C	cSt	ASTM D445	14.9	<b>14.4</b>	14.3	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122766  
**Lab Number** : 06217803  
**Unique Number** : 11096000  
**Test Package** : FLEET

**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Wes Davis

**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: