



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

Machine Id  
**124007-630**  
 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>GFL0110939</b>  | GFL0096102  | GFL0084518  |
| Sample Date    |     | Client Info |           | <b>21 May 2024</b> | 18 Dec 2023 | 07 Aug 2023 |
| Machine Age    | hrs | Client Info |           | <b>18740</b>       | 0           | 16764       |
| Oil Age        | hrs | Client Info |           | <b>4226</b>        | 0           | 2250        |
| Filter Age     | hrs | Client Info |           | <b>4226</b>        | 0           | 2250        |
| 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 | >110 | <b>14</b>    | 23   | 18   |
| Chromium     | ppm    | ASTM D5185m | >4   | <b>0</b>     | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >2   | <b>0</b>     | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>7</b>     | 11   | 16   |
| Silver       | ppm    | ASTM D5185m | >2   | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>3</b>     | 4    | 3    |
| Lead         | ppm    | ASTM D5185m | >45  | <b>9</b>     | 32   | 28   |
| Copper       | ppm    | ASTM D5185m | >85  | <b>&lt;1</b> | 1    | 1    |
| Tin          | ppm    | ASTM D5185m | >4   | <b>0</b>     | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

**CONTAMINATION**

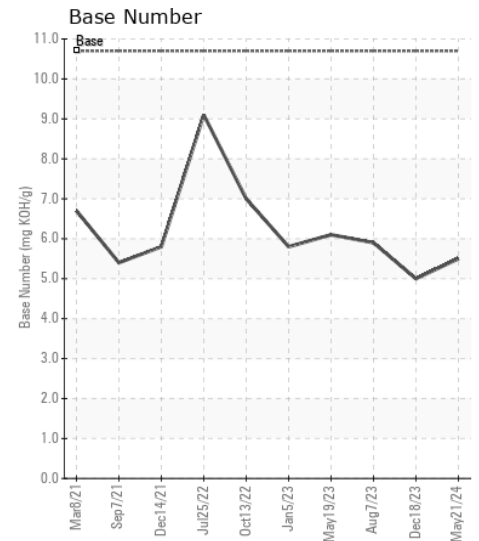
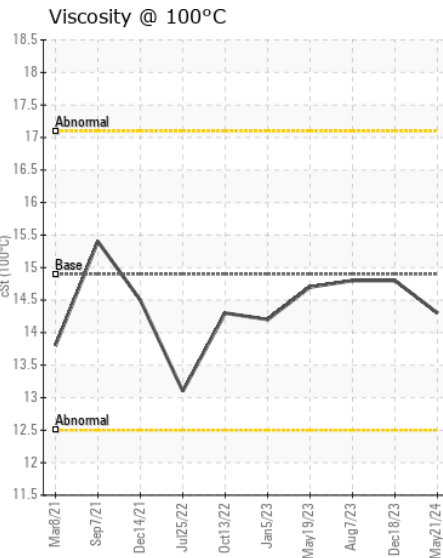
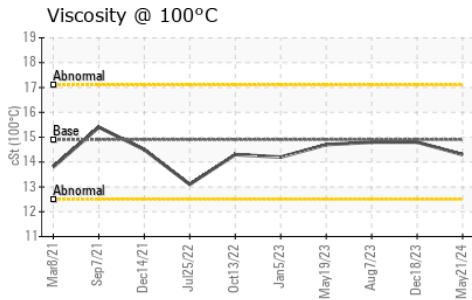
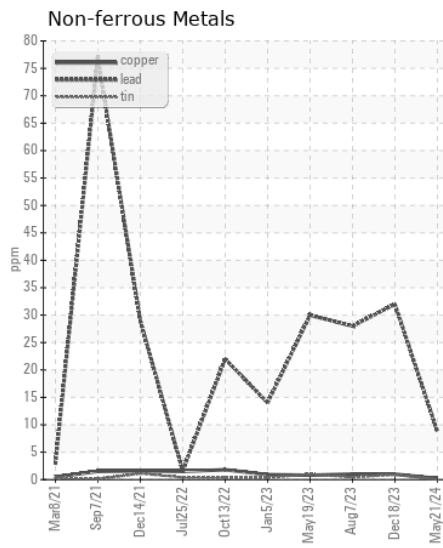
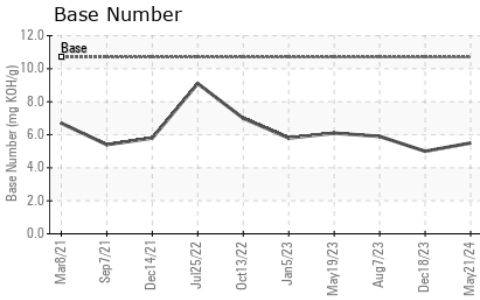
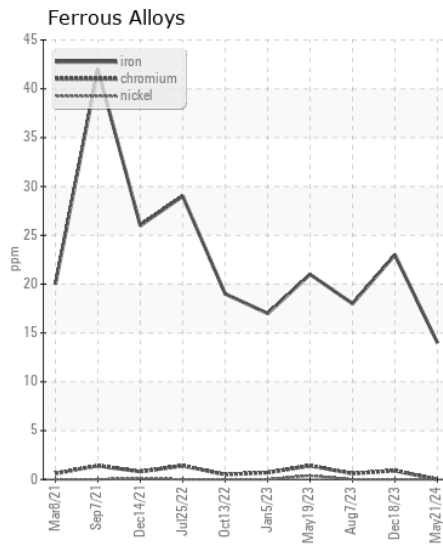
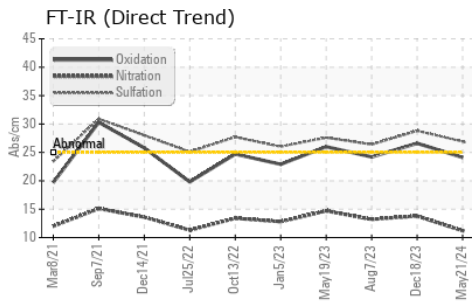
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >30   | <b>28</b>      | 7     | 5     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>3</b>       | 6     | 5     |
| 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   |
| Soot %           | %        | *ASTM D7844 | >3    | <b>0.4</b>     | 0.5   | 0.4   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>11.2</b>    | 13.8  | 13.2  |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>26.9</b>    | 28.8  | 26.4  |
| 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>4</b>     | 6    | 6    |
| Boron            | ppm      | ASTM D5185m |      | <b>173</b>   | 76   | 51   |
| Barium           | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>77</b>    | 70   | 48   |
| Manganese        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | <1   | <1   |
| Magnesium        | ppm      | ASTM D5185m |      | <b>615</b>   | 784  | 848  |
| Calcium          | ppm      | ASTM D5185m |      | <b>1645</b>  | 1759 | 1931 |
| Phosphorus       | ppm      | ASTM D5185m | 760  | <b>1039</b>  | 930  | 784  |
| Zinc             | ppm      | ASTM D5185m | 830  | <b>1204</b>  | 1100 | 997  |
| Sulfur           | ppm      | ASTM D5185m | 2770 | <b>3688</b>  | 3454 | 3871 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>24.1</b>  | 26.6 | 24.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10.7 | <b>5.5</b>   | 5.0  | 5.9  |
| Visc @ 100°C     | cSt      | ASTM D445   | 14.9 | <b>14.3</b>  | 14.8 | 14.8 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110939  
**Lab Number** : 06191665  
**Unique Number** : 11048417  
**Test Package** : FLEET

**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)

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F: