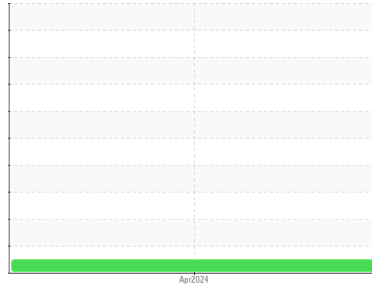




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 425126**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC ELITE 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 acceptable for the time in service.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number      | Client Info |             |            | <b>GFL0111318</b>  | ---      | ---      |
| Sample Date        | Client Info |             |            | <b>29 Apr 2024</b> | ---      | ---      |
| Machine Age        | hrs         | Client Info |            | <b>5967</b>        | ---      | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | ---      | ---      |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | ---      | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ---      | ---      |

| CONTAMINATION |           | method | limit/base | current        | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel          | WC Method | >5     |            | <b>&lt;1.0</b> | ---      | ---      |
| Water         | WC Method | >0.2   |            | <b>NEG</b>     | ---      | ---      |
| Glycol        | WC Method |        |            | <b>NEG</b>     | ---      | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >80        | <b>16</b>    | ---      | ---      |
| Chromium    | ppm | ASTM D5185m | >5         | <b>&lt;1</b> | ---      | ---      |
| Nickel      | ppm | ASTM D5185m | >2         | <b>0</b>     | ---      | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | ---      | ---      |
| Aluminum    | ppm | ASTM D5185m | >30        | <b>7</b>     | ---      | ---      |
| Lead        | ppm | ASTM D5185m | >30        | <b>&lt;1</b> | ---      | ---      |
| Copper      | ppm | ASTM D5185m | >150       | <b>3</b>     | ---      | ---      |
| Tin         | ppm | ASTM D5185m | >5         | <b>0</b>     | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>103</b>   | ---      | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>125</b>   | ---      | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>684</b>   | ---      | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>1252</b>  | ---      | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>786</b>   | ---      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>873</b>   | ---      | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>3916</b>  | ---      | ---      |

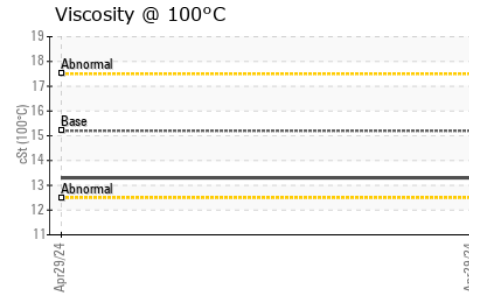
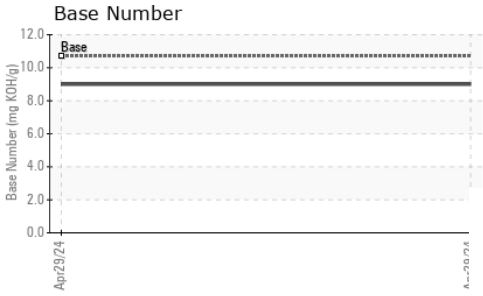
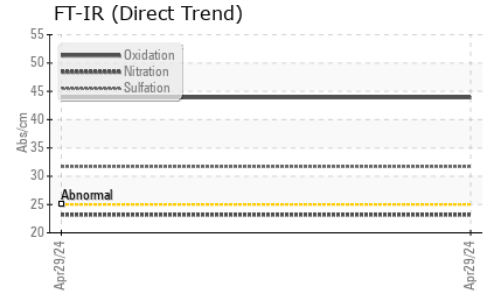
| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >20        | <b>7</b> | ---      | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b> | ---      | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>3</b> | ---      | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.4</b>  | ---      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>23.2</b> | ---      | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>31.7</b> | ---      | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>43.9</b> | ---      | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  | 10.7       | <b>9.0</b>  | ---      | ---      |



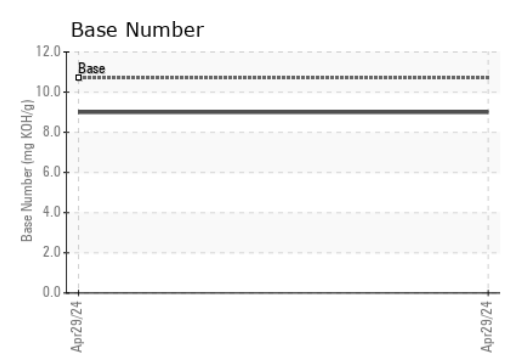
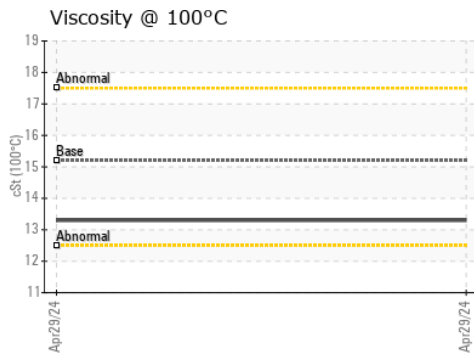
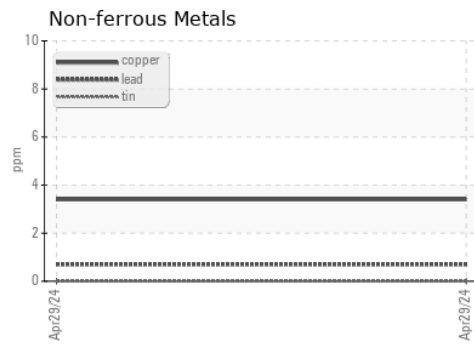
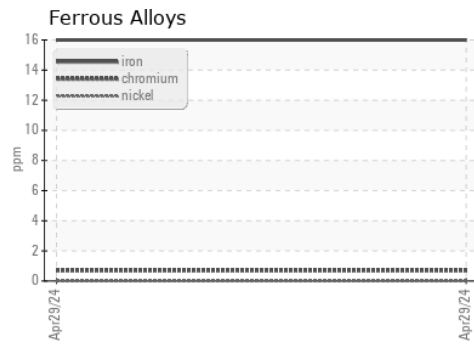
# OIL ANALYSIS REPORT



| 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  | 15.2    | 13.3     | ---      |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111318      **Received** : 09 Jul 2024  
**Lab Number** : 06231207      **Tested** : 10 Jul 2024  
**Unique Number** : 11114700      **Diagnosed** : 10 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 981 - Port Arthur Hauling**  
 1000 S Business Park Dr  
 Port Arthur, TX  
 US 77640  
 Contact: MICHAEL KAY  
 mkay@gflenv.com  
 T: (336)660-9331  
 F:

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)