



Machine Id  
**420086**  
 Component  
**1 Differential**  
 Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

**RECOMMENDATION**

( Customer Sample Comment: 1st Axle / Pusher )

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>GFL0112054</b>  | GFL0075333  | ---      |
| Sample Date    |     | Client Info |           | <b>04 May 2024</b> | 20 May 2023 | ---      |
| Machine Age    | mls | Client Info |           | <b>223991</b>      | 190226      | ---      |
| Oil Age        | mls | Client Info |           | <b>223991</b>      | 0           | ---      |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | ---      |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | N/A         | ---      |
| Sample Status  |     |             |           | <b>ATTENTION</b>   | NORMAL      | ---      |

**WEAR**

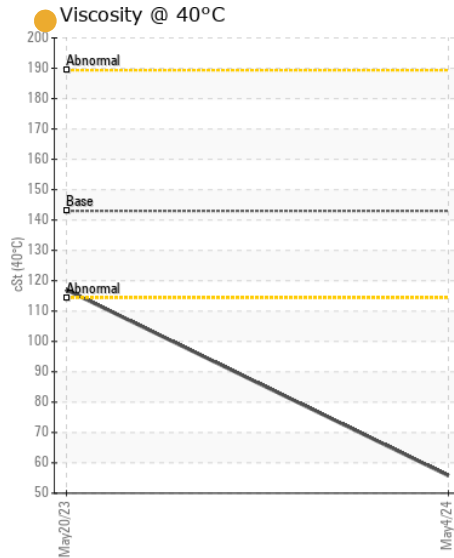
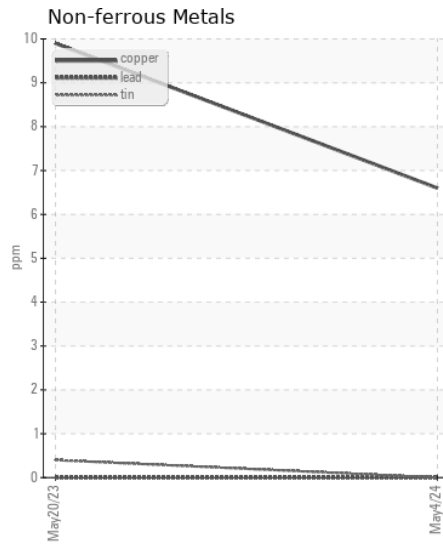
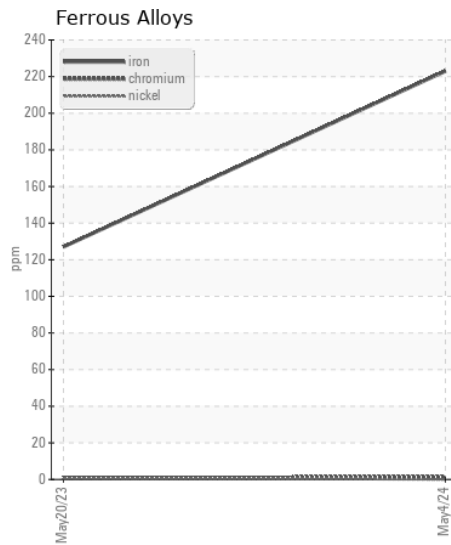
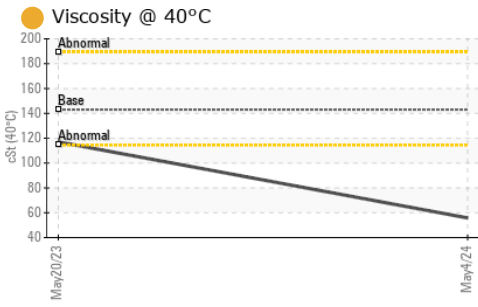
|              |        |             |      |              |      |     |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >500 | <b>223</b>   | 127  | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>1</b>     | 1    | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | --- |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>2</b>     | 0    | --- |
| Lead         | ppm    | ASTM D5185m | >25  | <b>0</b>     | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >100 | <b>7</b>     | 10   | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |

**CONTAMINATION**

|                  |        |             |       |              |       |     |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>29</b>    | 59    | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>&lt;1</b> | 3     | --- |
| Water            |        | WC Method   | >.2   | <b>NEG</b>   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Emulsified Water | scalar | *Visual     | >.2   | <b>NEG</b>   | NEG   | --- |

**FLUID CONDITION**

|             |     |             |       |             |       |     |
|-------------|-----|-------------|-------|-------------|-------|-----|
| Sodium      | ppm | ASTM D5185m | >170  | <b>2</b>    | 3     | --- |
| Boron       | ppm | ASTM D5185m | 400   | <b>18</b>   | 101   | --- |
| Barium      | ppm | ASTM D5185m | 200   | <b>0</b>    | 0     | --- |
| Molybdenum  | ppm | ASTM D5185m | 12    | <b>2</b>    | <1    | --- |
| Manganese   | ppm | ASTM D5185m |       | <b>6</b>    | 18    | --- |
| Magnesium   | ppm | ASTM D5185m | 12    | <b>3</b>    | 8     | --- |
| Calcium     | ppm | ASTM D5185m | 150   | <b>217</b>  | 16    | --- |
| Phosphorus  | ppm | ASTM D5185m | 1650  | <b>396</b>  | 751   | --- |
| Zinc        | ppm | ASTM D5185m | 125   | <b>330</b>  | 22    | --- |
| Sulfur      | ppm | ASTM D5185m | 22500 | <b>3978</b> | 20098 | --- |
| Visc @ 40°C | cSt | ASTM D445   | 143   | <b>55.8</b> | 117   | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0112054  
**Lab Number** : 06174307  
**Unique Number** : 11020360  
**Test Package** : FLEET

**Received** : 09 May 2024  
**Tested** : 10 May 2024  
**Diagnosed** : 13 May 2024 - Don Baldrige

**GFL Environmental - 983 - Sugar Land Hauling**  
 16011 West Belfort Street  
 Sugar Land, TX  
 US 77498  
 Contact: TECHNICIAN ACCOUNT  
 wcgfldemo@gmail.com

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:  
F: