



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



Machine Id  
**413065**  
Component  
**1 Differential**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: 1st Axle / Pusher )

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>GFL0123579</b>  | GFL0094111  | ---      |
| Sample Date    |     | Client Info |           | <b>01 Jul 2024</b> | 02 Nov 2023 | ---      |
| Machine Age    | mls | Client Info |           | <b>58077</b>       | 32468       | ---      |
| Oil Age        | mls | Client Info |           | <b>58077</b>       | 32468       | ---      |
| Filter Age     | mls | Client Info |           | <b>58077</b>       | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Changed     | ---      |
| Filter Changed |     | Client Info |           | <b>Not Changed</b> | N/A         | ---      |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | ---      |

**WEAR**

All component wear rates are normal.

|              |        |             |       |              |      |     |
|--------------|--------|-------------|-------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >1200 | <b>143</b>   | 83   | --- |
| Chromium     | ppm    | ASTM D5185m | >8    | <b>1</b>     | <1   | --- |
| Nickel       | ppm    | ASTM D5185m | >20   | <b>4</b>     | 3    | --- |
| Titanium     | ppm    | ASTM D5185m | >4    | <b>0</b>     | 0    | --- |
| Silver       | ppm    | ASTM D5185m |       | <b>0</b>     | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >30   | <b>2</b>     | <1   | --- |
| Lead         | ppm    | ASTM D5185m | >25   | <b>&lt;1</b> | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >50   | <b>6</b>     | <1   | --- |
| Tin          | ppm    | ASTM D5185m | >5    | <b>&lt;1</b> | 0    | --- |
| 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**

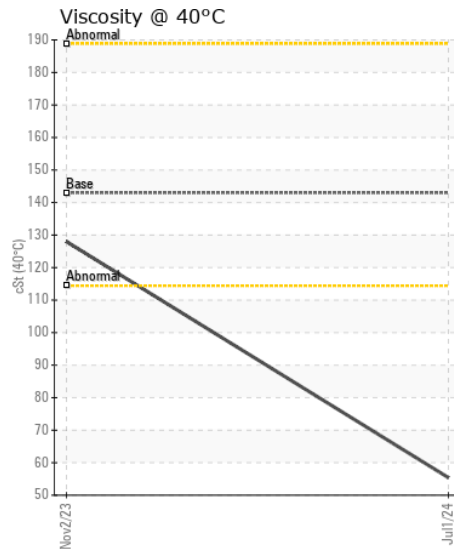
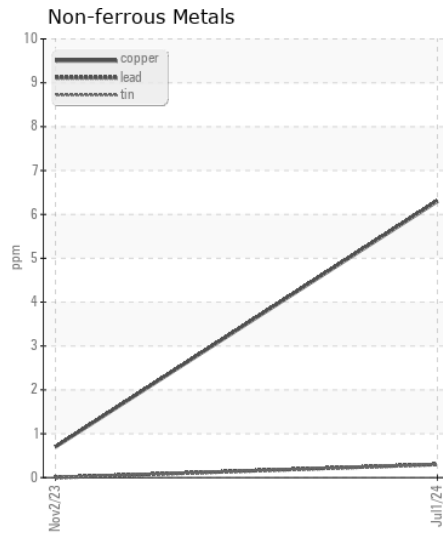
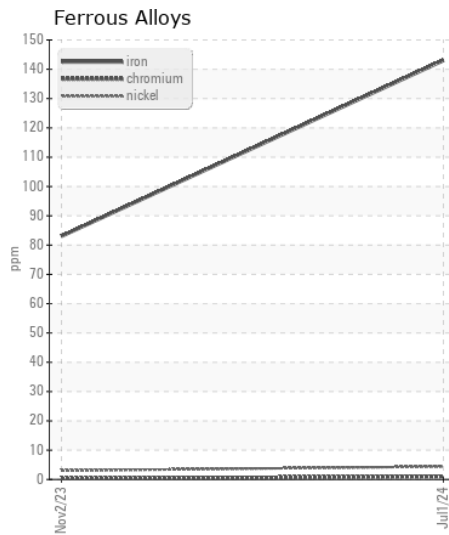
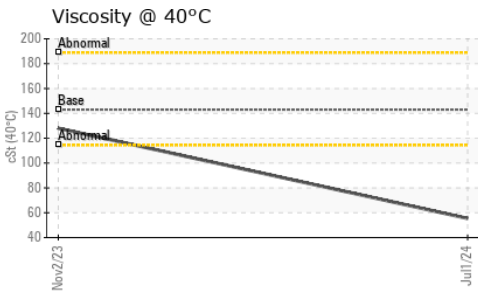
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |     |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >230  | <b>67</b>    | 55    | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | <1    | --- |
| 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**

The condition of the oil is acceptable for the time in service.

|             |     |             |       |              |       |     |
|-------------|-----|-------------|-------|--------------|-------|-----|
| Sodium      | ppm | ASTM D5185m | >170  | <b>3</b>     | 4     | --- |
| Boron       | ppm | ASTM D5185m | 400   | <b>100</b>   | 240   | --- |
| Barium      | ppm | ASTM D5185m | 200   | <b>0</b>     | 0     | --- |
| Molybdenum  | ppm | ASTM D5185m | 12    | <b>0</b>     | 0     | --- |
| Manganese   | ppm | ASTM D5185m |       | <b>3</b>     | 2     | --- |
| Magnesium   | ppm | ASTM D5185m | 12    | <b>2</b>     | 2     | --- |
| Calcium     | ppm | ASTM D5185m | 150   | <b>5</b>     | 17    | --- |
| Phosphorus  | ppm | ASTM D5185m | 1650  | <b>760</b>   | 897   | --- |
| Zinc        | ppm | ASTM D5185m | 125   | <b>28</b>    | 11    | --- |
| Sulfur      | ppm | ASTM D5185m | 22500 | <b>22702</b> | 19862 | --- |
| Visc @ 40°C | cSt | ASTM D445   | 143   | <b>55.4</b>  | 128   | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123579  
**Lab Number** : 06230579  
**Unique Number** : 11114072  
**Test Package** : FLEET

**Received** : 08 Jul 2024  
**Tested** : 10 Jul 2024  
**Diagnosed** : 10 Jul 2024 - Sean Felton

**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: