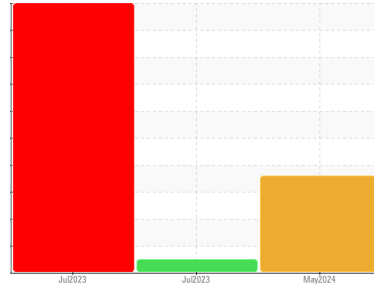




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id

427180

Component

2 Differential

Fluid

GEAR OIL SAE 80 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: 2nd Axle / Tag)

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil viscosity is lower than normal.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | GFL0123566 | GFL0089409 | GFL0085470 |
| Sample Date | Client Info | | 25 May 2024 | 19 Jul 2023 | 07 Jul 2023 |
| Machine Age | mls | Client Info | 372186 | 340882 | 339095 |
| Oil Age | mls | Client Info | 372186 | 340882 | 339095 |
| Oil Changed | Client Info | | Changed | Oil Added | Changed |
| Sample Status | | | ABNORMAL | NORMAL | SEVERE |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >.2 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|----------|--------|-------------|---------|--------------|----------|--------|
| Iron | ppm | ASTM D5185m | >500 | ▲ 736 | 73 | ▲ 2726 |
| Chromium | ppm | ASTM D5185m | >10 | 4 | <1 | ▲ 21 |
| Nickel | ppm | ASTM D5185m | >10 | 6 | 1 | ▲ 59 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 3 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | ● 19 | 3 | ● 173 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >100 | 1 | <1 | 6 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|-------------|---------|--------------|----------|-------|
| Boron | ppm | ASTM D5185m | 400 | 13 | 17 | 149 |
| Barium | ppm | ASTM D5185m | 200 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | <1 | <1 | 4 |
| Manganese | ppm | ASTM D5185m | | 8 | 1 | 29 |
| Magnesium | ppm | ASTM D5185m | 12 | 2 | <1 | 12 |
| Calcium | ppm | ASTM D5185m | 150 | 53 | 34 | 130 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 482 | 440 | 1209 |
| Zinc | ppm | ASTM D5185m | 125 | 43 | 37 | 56 |
| Sulfur | ppm | ASTM D5185m | 22500 | 13274 | 13220 | 24210 |

CONTAMINANTS

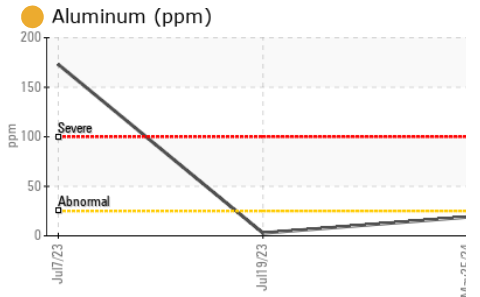
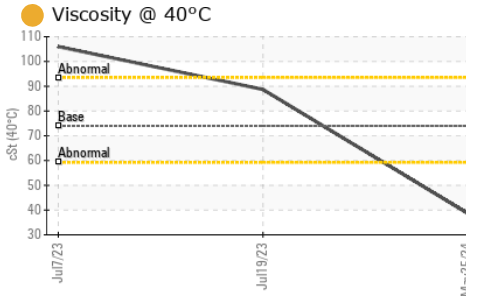
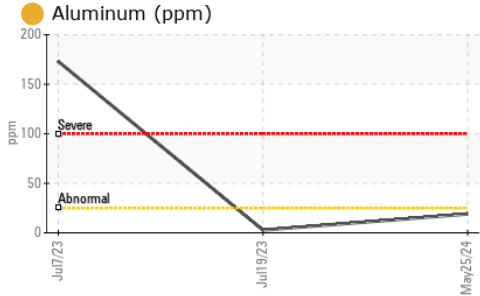
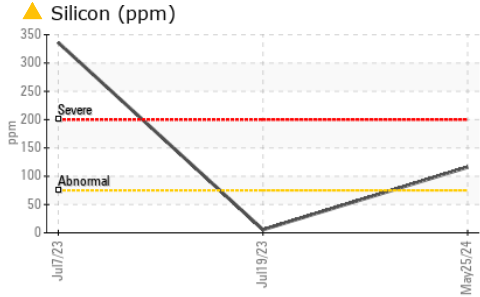
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|-------------|---------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m | >75 | ▲ 116 | 6 | ▲ 336 |
| Sodium | ppm | ASTM D5185m | | 2 | 0 | 11 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 19 |

VISUAL

| | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | MODER | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |



OIL ANALYSIS REPORT

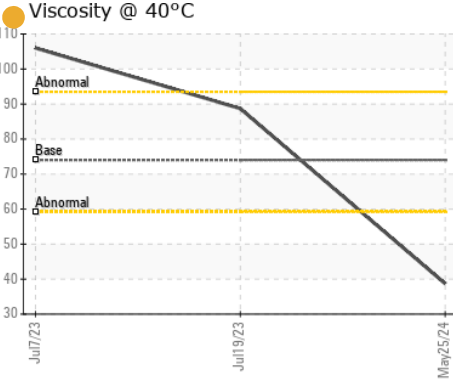
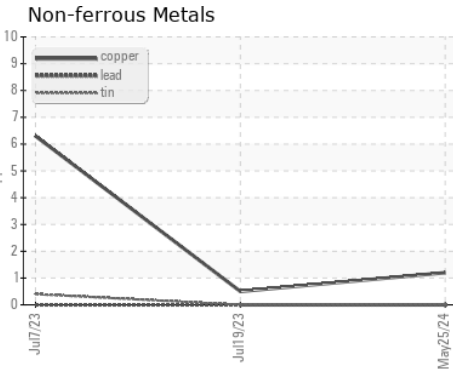
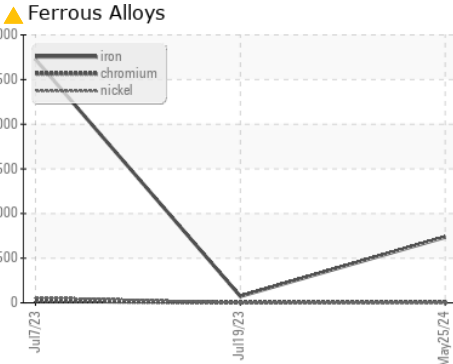


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 74 | ● 38.7 | 88.7 | 106 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

| | | | | | | |
|--------|--|--|--|----------|----------|----------|
| Color | | | | no image | no image | no image |
| Bottom | | | | no image | no image | no image |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123566
Lab Number : 06197132
Unique Number : 11059255
Test Package : FLEET

GFL Environmental - 983 - Sugar Land Hauling
 16011 West Belfort Street
 Sugar Land, TX 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)