



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |



Area
GFL218
Machine Id
833045
Component
Natural Gas Engine
Fluid
NOT GIVEN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0124658 | GFL0116357 | GFL0104510 |
| Sample Date | | Client Info | | 13 Jun 2024 | 11 Mar 2024 | 07 Dec 2023 |
| Machine Age | kms | Client Info | | 1787 | 9521 | 611 |
| Oil Age | kms | Client Info | | 9520 | 611 | 0 |
| Filter Age | kms | Client Info | | 0 | 611 | 0 |
| Oil Changed | | Client Info | | N/A | Changed | N/A |
| Filter Changed | | Client Info | | N/A | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|----------|-----|---------------|-----|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >50 | 8 | 16 | 42 |
| Chromium | ppm | ASTM D5185(m) | >4 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >9 | 3 | 9 | 5 |
| Lead | ppm | ASTM D5185(m) | >30 | <1 | <1 | 1 |
| Copper | ppm | ASTM D5185(m) | >35 | <1 | 2 | 15 |
| Tin | ppm | ASTM D5185(m) | >4 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

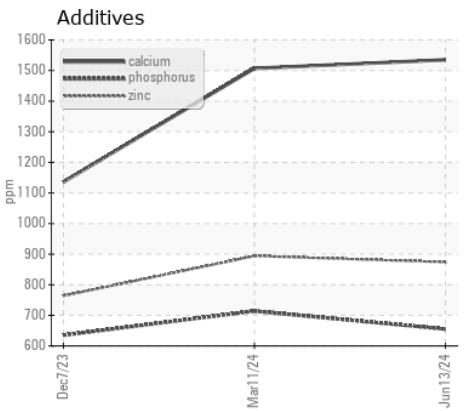
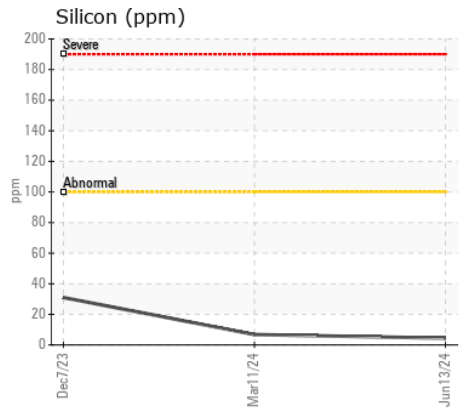
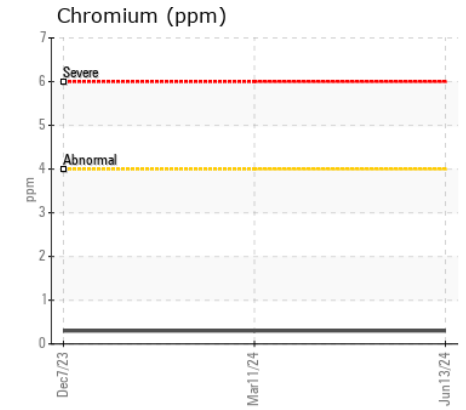
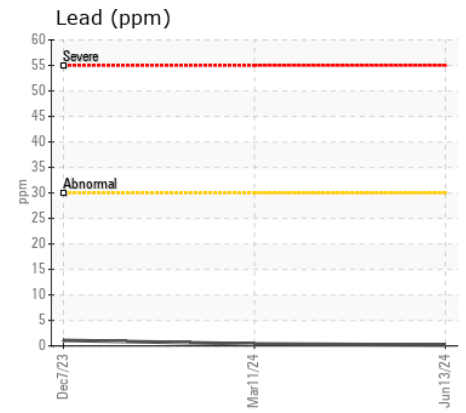
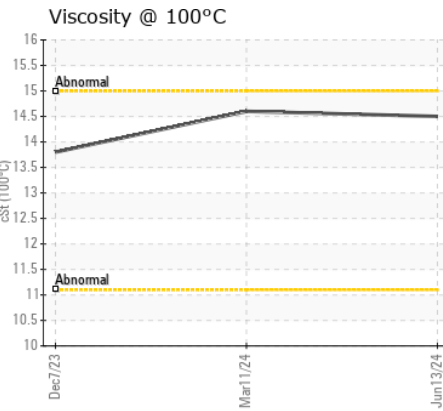
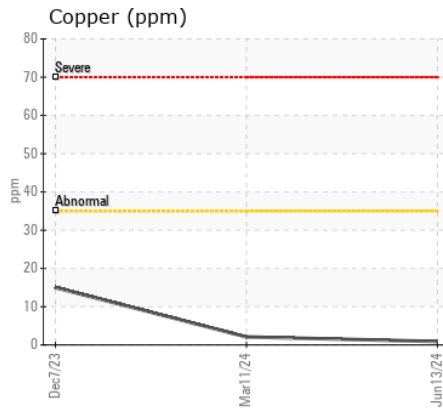
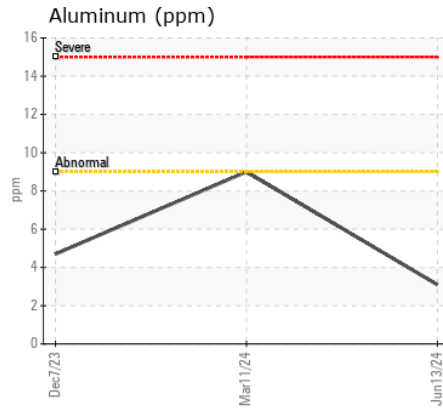
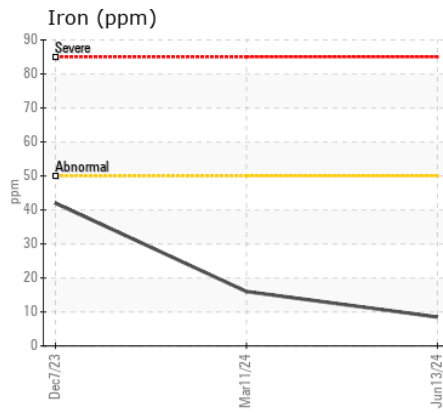
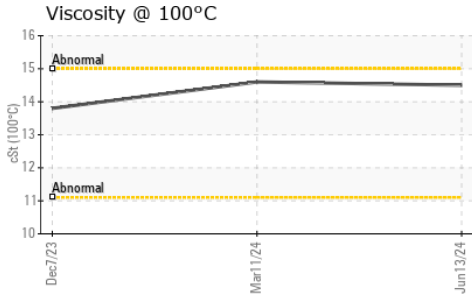
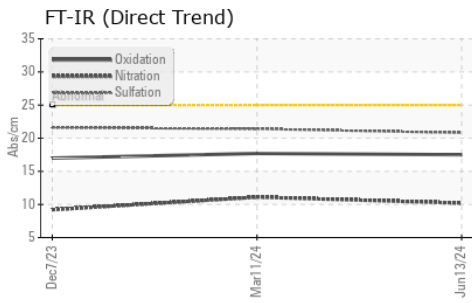
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|-------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >+100 | 4 | 7 | 31 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | 1 | <1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 10.2 | 11.1 | 9.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 20.8 | 21.4 | 21.6 |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 7 | 8 | 3 |
| Boron | ppm | ASTM D5185(m) | | 11 | 9 | 11 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 2 |
| Molybdenum | ppm | ASTM D5185(m) | | 50 | 54 | 92 |
| Manganese | ppm | ASTM D5185(m) | | <1 | <1 | 7 |
| Magnesium | ppm | ASTM D5185(m) | | 531 | 584 | 590 |
| Calcium | ppm | ASTM D5185(m) | | 1535 | 1507 | 1136 |
| Phosphorus | ppm | ASTM D5185(m) | | 655 | 714 | 635 |
| Zinc | ppm | ASTM D5185(m) | | 874 | 894 | 764 |
| Sulfur | ppm | ASTM D5185(m) | | 1967 | 2113 | 2175 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 17.5 | 17.7 | 17.0 |
| Visc @ 100°C | cSt | ASTM D7279(m) | | 14.5 | 14.6 | 13.8 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0124658
Lab Number : 02642282
Unique Number : 5799821
Test Package : MOB 1

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)745-8080
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.