



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

Machine Id
7774
 Component
Front Diesel Engine
 Fluid
CASTROL TECTION EXTRA SAE 15W-40 (40 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
 Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0118283 | GFL0111123 | GFL0089074 |
| Sample Date | | Client Info | | 11 Apr 2024 | 30 Jan 2024 | 24 Aug 2023 |
| Machine Age | hrs | Client Info | | 127925 | 28606 | 133840 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >165 | 4 | 7 | 6 |
| Chromium | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | <1 | 1 | <1 |
| Lead | ppm | ASTM D5185(m) | >150 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >90 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

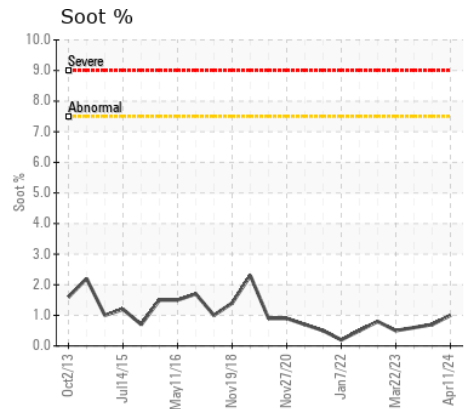
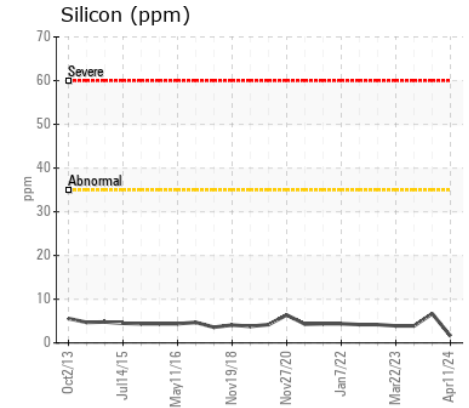
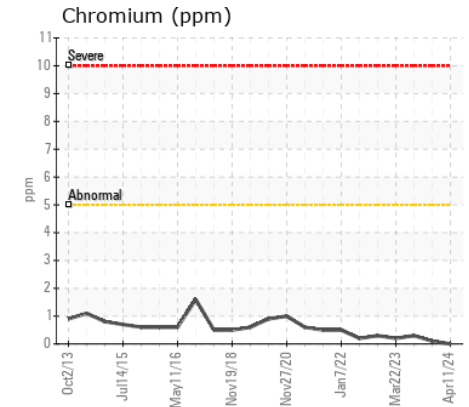
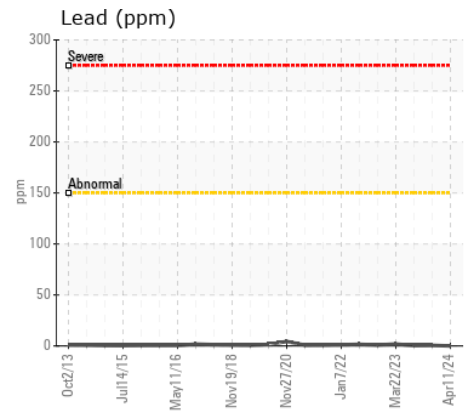
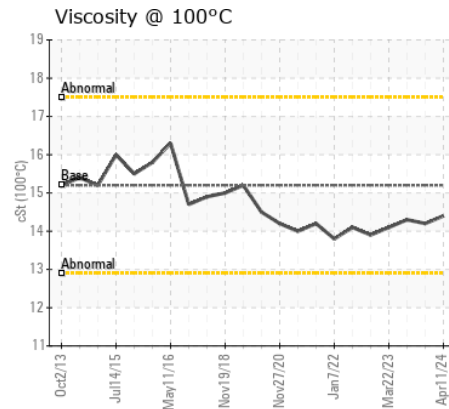
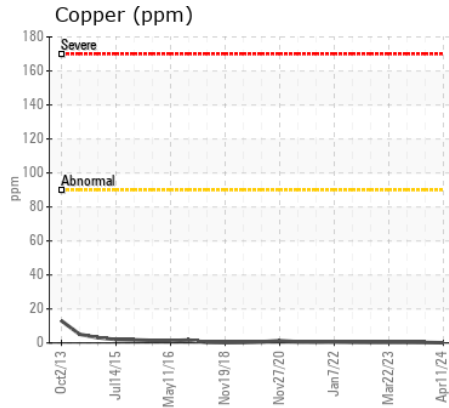
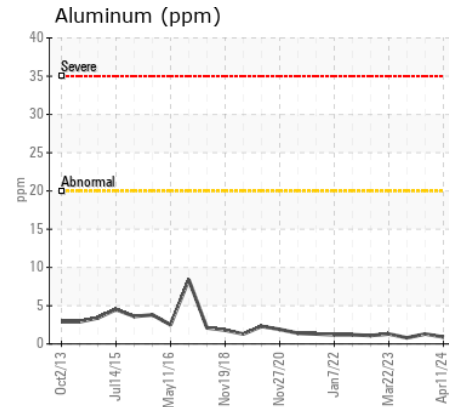
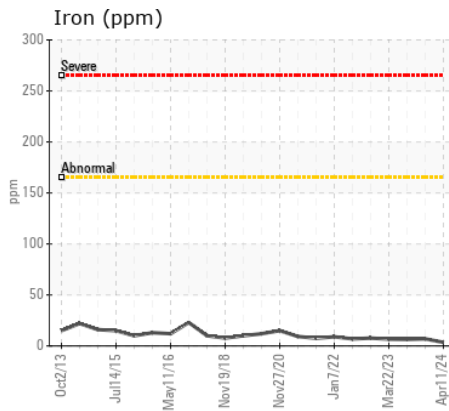
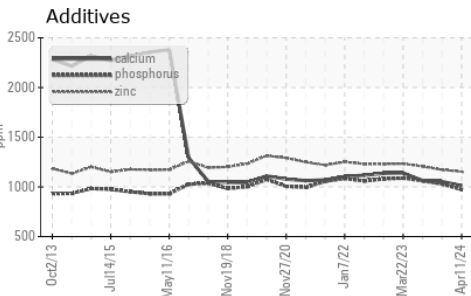
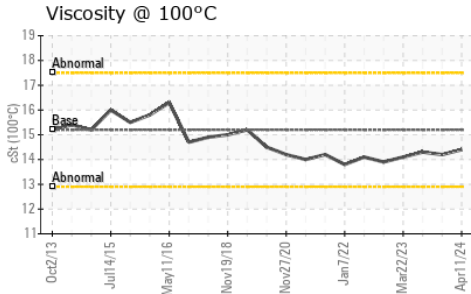
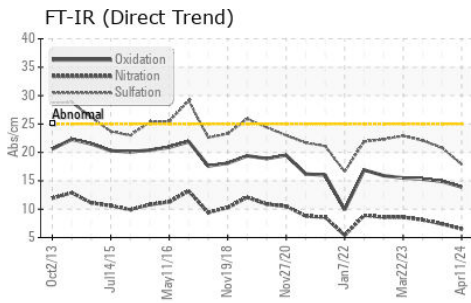
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >35 | 2 | 7 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 1 | 2 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >7.5 | 1 | 0.7 | 0.6 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 6.5 | 7.4 | 8.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 17.9 | 20.8 | 22.1 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
 The condition of the oil is acceptable for the time in service.

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 13 | 10 | 19 |
| Boron | ppm | ASTM D5185(m) | 30 | 3 | 4 | 2 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 57 | 60 | 59 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 110 | 950 | 960 | 975 |
| Calcium | ppm | ASTM D5185(m) | 2740 | 1012 | 1053 | 1063 |
| Phosphorus | ppm | ASTM D5185(m) | 1240 | 972 | 1028 | 1061 |
| Zinc | ppm | ASTM D5185(m) | 1350 | 1152 | 1172 | 1206 |
| Sulfur | ppm | ASTM D5185(m) | 3520 | 2513 | 2719 | 2550 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 13.9 | 14.9 | 15.3 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.2 | 14.4 | 14.2 | 14.3 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118283
Lab Number : 02629849
Unique Number : 5762981
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.