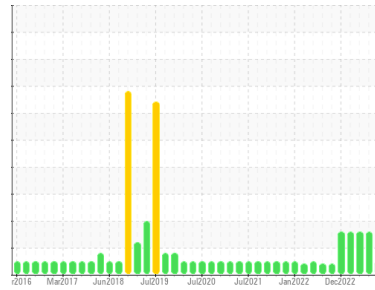




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3580C AUTOCAR ACX

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (48 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Requested resample.)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | GFL0117429 | GFL0094734 | GFL0056742 |
| Sample Date | Client Info | | 03 Jun 2024 | 14 Oct 2023 | 21 Sep 2023 |
| Machine Age | hrs | Client Info | 6574 | 4750 | 4557 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | Not Chngd | N/A | Changed |
| Sample Status | | | NORMAL | ABNORMAL | ABNORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 13 | 13 | 12 |
| Chromium | ppm | ASTM D5185m >4 | <1 | 1 | 1 |
| Nickel | ppm | ASTM D5185m >2 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >9 | 2 | 2 | 6 |
| Lead | ppm | ASTM D5185m >30 | 0 | 3 | 3 |
| Copper | ppm | ASTM D5185m >35 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m >4 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 50 | 17 | 17 | 20 |
| Barium | ppm | ASTM D5185m 5 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 50 | 53 | 17 | 20 |
| Manganese | ppm | ASTM D5185m 0 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m 560 | 678 | 150 | 216 |
| Calcium | ppm | ASTM D5185m 1510 | 1358 | 521 | 719 |
| Phosphorus | ppm | ASTM D5185m 780 | 874 | 360 | 434 |
| Zinc | ppm | ASTM D5185m 870 | 1010 | 266 | 400 |
| Sulfur | ppm | ASTM D5185m 2040 | 2842 | 1535 | 2150 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >+100 | 5 | 4 | 7 |
| Sodium | ppm | ASTM D5185m | 6 | 2 | 6 |
| Potassium | ppm | ASTM D5185m >20 | 6 | 1 | 1 |

INFRA-RED

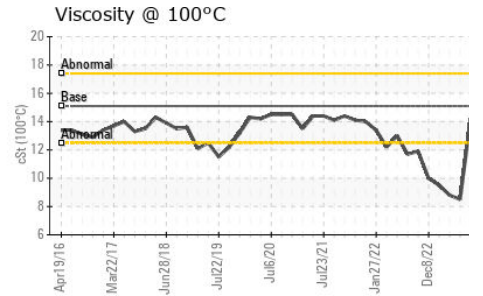
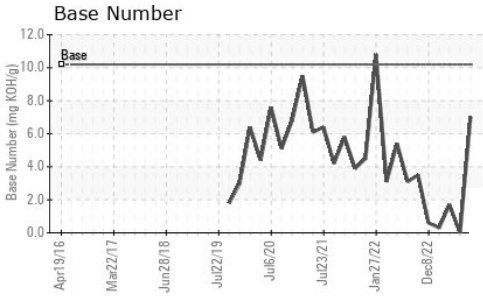
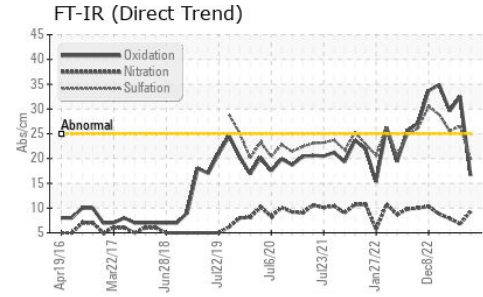
| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 | 0.4 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 >20 | 9.3 | 6.8 | 7.9 |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | 20.0 | 26.5 | 25.6 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 >25 | 16.6 | 32.5 | 29.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896 10.2 | 7.0 | ▲ 0.0 | ▲ 1.7 |



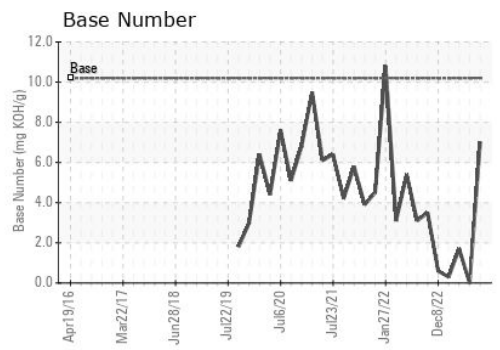
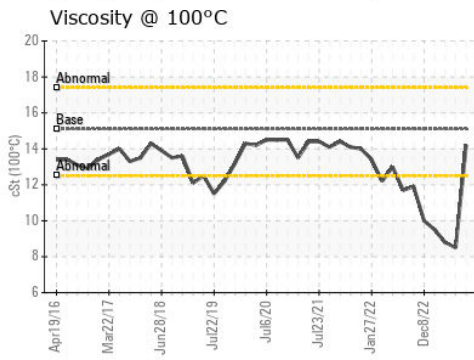
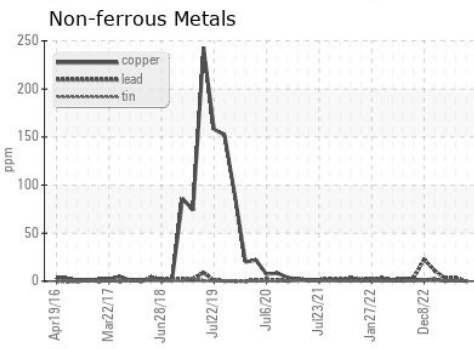
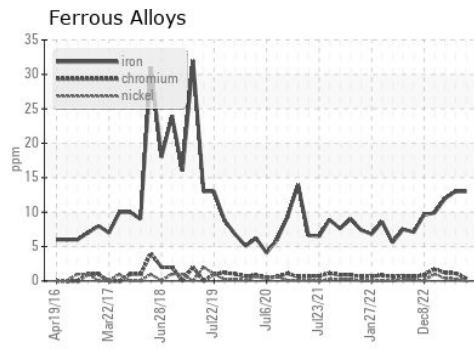
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 14.2 | 8.5 | 8.8 |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0117429
Lab Number : 06199814
Unique Number : 11061937
Test Package : FLEET

Received : 05 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 07 Jun 2024 - Sean Felton

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529
 Contact: Craig Johnson
 craig.johnson@gflenv.com
 T: (919)662-7100
 F: (919)662-7130

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)