

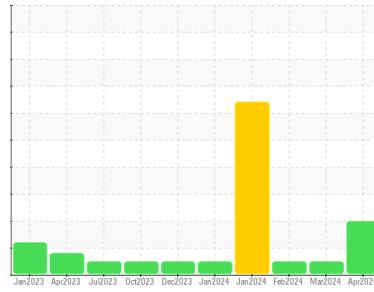


OIL ANALYSIS REPORT



Machine Id
443001
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

Sample Rating Trend



WATER



DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | GFL0117203 | GFL0114021 | GFL0109823 |
| Sample Date | Client Info | 03 Apr 2024 | 13 Mar 2024 | 14 Feb 2024 |
| Machine Age | hrs | 16050 | 15918 | 15760 |
| Oil Age | hrs | 0 | 0 | 0 |
| Oil Changed | Client Info | Not Changed | Not Changed | Not Changed |
| Sample Status | | ABNORMAL | NORMAL | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|-----------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >50 | 20 | 15 | 12 |
| Chromium | ppm | ASTM D5185m >4 | 2 | <1 | 1 |
| Nickel | ppm | ASTM D5185m >2 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >9 | 3 | 2 | 2 |
| Lead | ppm | ASTM D5185m >30 | 3 | <1 | 3 |
| Copper | ppm | ASTM D5185m >35 | 18 | 15 | 13 |
| Tin | ppm | ASTM D5185m >4 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|------------------|--------------|----------|------|
| Boron | ppm | ASTM D5185m 50 | 8 | 12 | 27 |
| Barium | ppm | ASTM D5185m 5 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 50 | 57 | 51 | 54 |
| Manganese | ppm | ASTM D5185m 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 560 | 578 | 516 | 560 |
| Calcium | ppm | ASTM D5185m 1510 | 1764 | 1476 | 1540 |
| Phosphorus | ppm | ASTM D5185m 780 | 793 | 731 | 789 |
| Zinc | ppm | ASTM D5185m 870 | 1052 | 905 | 998 |
| Sulfur | ppm | ASTM D5185m 2040 | 3096 | 2419 | 2588 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|-------------------|----------------|----------|-----|
| Silicon | ppm | ASTM D5185m >+100 | 11 | 4 | 6 |
| Sodium | ppm | ASTM D5185m | 67 | 67 | 62 |
| Potassium | ppm | ASTM D5185m >20 | 18 | 21 | 21 |
| Water | % | ASTM D6304 >0.1 | ▲ 0.294 | --- | --- |
| ppm Water | ppm | ASTM D6304 >1000 | ▲ 2940 | --- | --- |

INFRA-RED

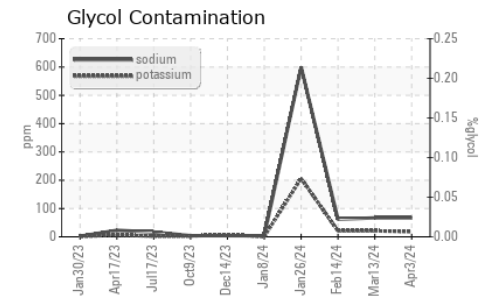
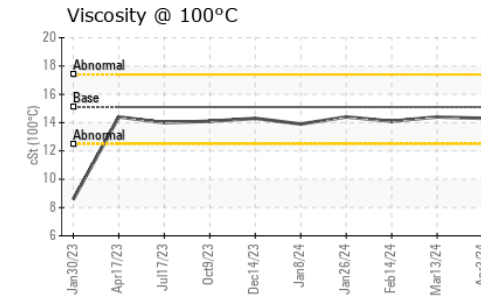
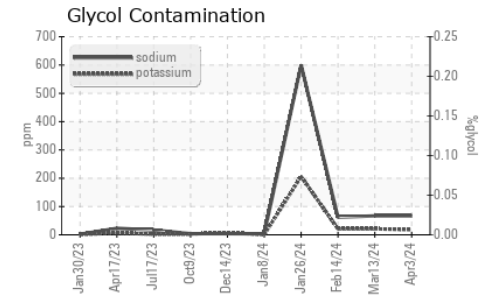
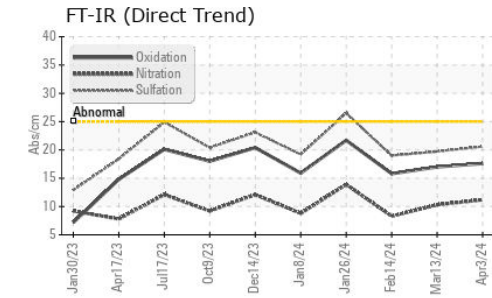
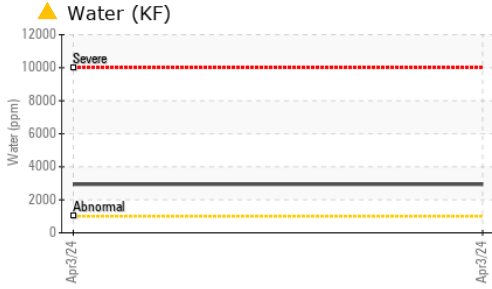
| method | limit/base | current | history1 | history2 | |
|-----------|------------|-----------------|-------------|----------|------|
| Soot % | % | *ASTM D7844 | 0.1 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 >20 | 11.2 | 10.3 | 8.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | 20.6 | 19.7 | 19.0 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|-----------------|-------------|----------|------|
| Oxidation | Abs/.1mm | *ASTM D7414 >25 | 17.6 | 17.0 | 15.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 10.2 | 5.0 | 5.4 | 7.9 |



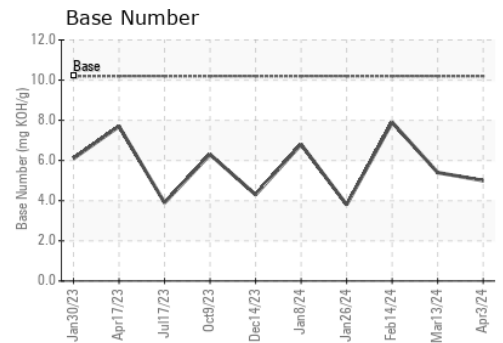
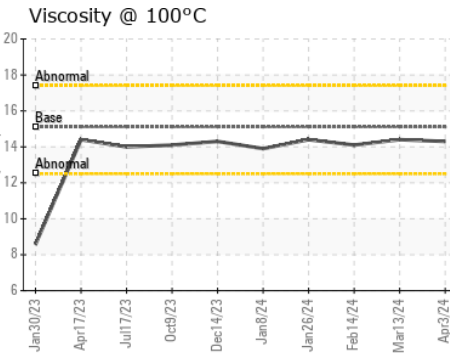
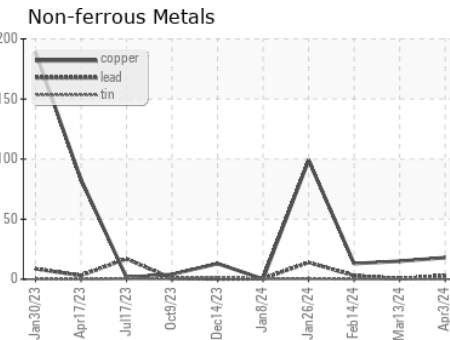
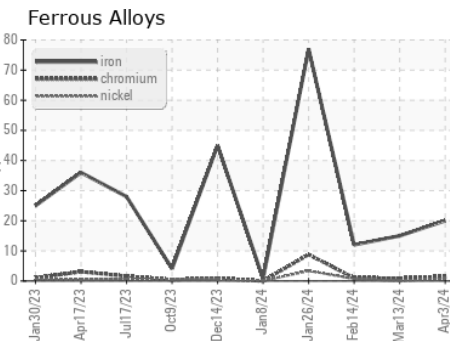
OIL ANALYSIS REPORT



| 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 | 0.2% | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 14.3 | 14.4 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0117203

Lab Number : 06140841

Unique Number : 10965649

Test Package : FLEET (Additional Tests: Glycol, KF)

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)

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