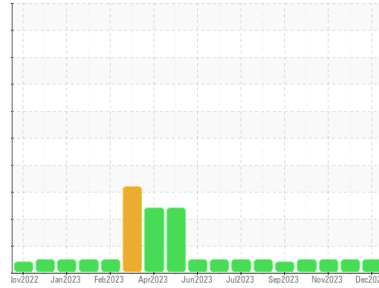




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
933022

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 | GFL0099920 | GFL0099940 | GFL0095166 |
| Sample Date | Client Info | 15 Dec 2023 | 18 Nov 2023 | 02 Nov 2023 |
| Machine Age | hrs | 2964 | 2790 | 2701 |
| Oil Age | hrs | 0 | 0 | 0 |
| Oil Changed | Client Info | Not Chngd | Not Chngd | Not Chngd |
| Sample Status | | NORMAL | NORMAL | NORMAL |

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 | 8 | 18 | 5 |
| Chromium | ppm ASTM D5185m >4 | <1 | 2 | <1 |
| Nickel | ppm ASTM D5185m >2 | 0 | <1 | <1 |
| Titanium | ppm ASTM D5185m | <1 | 0 | <1 |
| Silver | ppm ASTM D5185m >3 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >9 | 2 | 3 | 2 |
| Lead | ppm ASTM D5185m >30 | 1 | 12 | 1 |
| Copper | ppm ASTM D5185m >35 | 7 | 3 | 4 |
| Tin | ppm ASTM D5185m >4 | 0 | 1 | <1 |
| Vanadium | ppm ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm ASTM D5185m | 0 | 0 | <1 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|----------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185m 50 | 28 | 9 | 23 |
| Barium | ppm ASTM D5185m 5 | 0 | 0 | 5 |
| Molybdenum | ppm ASTM D5185m 50 | 51 | 63 | 56 |
| Manganese | ppm ASTM D5185m 0 | <1 | 1 | <1 |
| Magnesium | ppm ASTM D5185m 560 | 558 | 695 | 539 |
| Calcium | ppm ASTM D5185m 1510 | 1369 | 1838 | 1482 |
| Phosphorus | ppm ASTM D5185m 780 | 696 | 868 | 779 |
| Zinc | ppm ASTM D5185m 870 | 907 | 1122 | 941 |
| Sulfur | ppm ASTM D5185m 2040 | 2301 | 2596 | 2224 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|-----------|----------|----------|
| Silicon | ppm ASTM D5185m >+100 | 16 | 6 | 9 |
| Sodium | ppm ASTM D5185m | 0 | 9 | 0 |
| Potassium | ppm ASTM D5185m >20 | 2 | <1 | 2 |

INFRA-RED

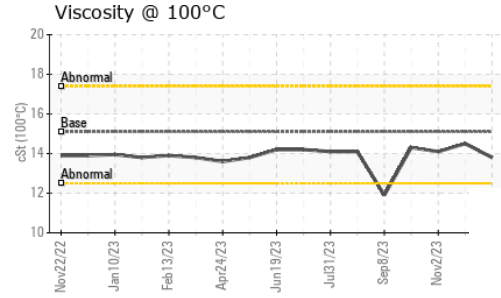
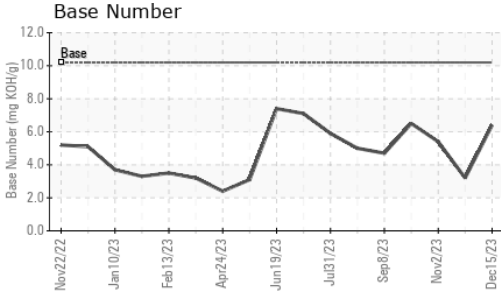
| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot % | % *ASTM D7844 | 0.1 | 0 | 0 |
| Nitration | Abs/cm *ASTM D7624 >20 | 9.4 | 12.6 | 9.9 |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | 20.4 | 28.1 | 20.6 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation | Abs/.1mm *ASTM D7414 >25 | 17.3 | 22.8 | 17.8 |
| Base Number (BN) | mg KOH/g ASTM D2896 10.2 | 6.4 | 3.2 | 5.4 |



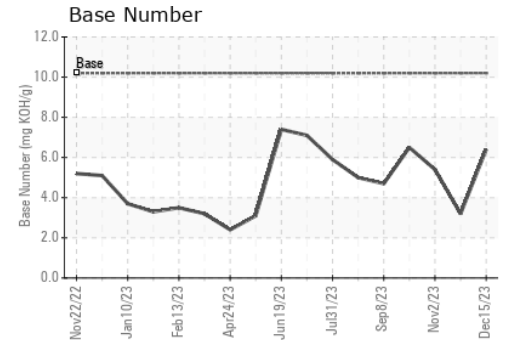
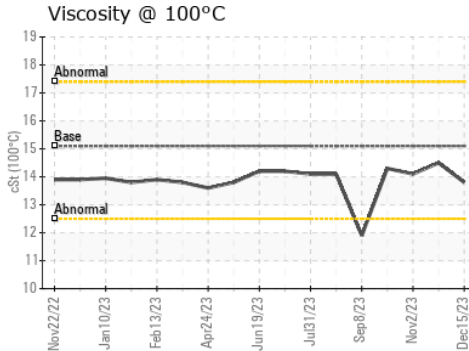
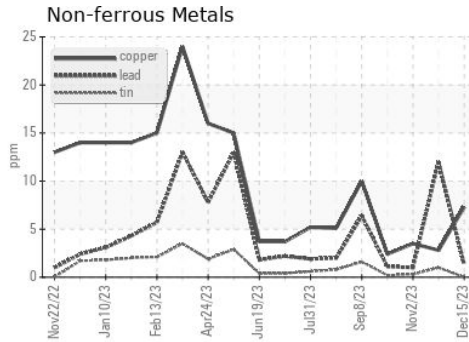
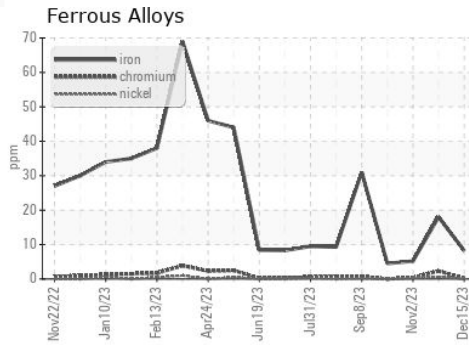
OIL ANALYSIS REPORT



| 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 | 13.8 | 14.5 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0099920 Recieved : 20 Dec 2023
 Lab Number : 06040199 Diagnosed : 21 Dec 2023
 Unique Number : 10795428 Diagnostician : Sean Felton
 Test Package : FLEET (Additional Tests: FT-IR(Diff))

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Robert Hart
 rhart@gflenv.com
 T: (580)461-1509
 F:

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)