



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

Machine Id
2714C
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0079613 | GFL0112897 | GFL0112932 |
| Sample Date | | Client Info | | 18 Jun 2024 | 03 Apr 2024 | 21 Mar 2024 |
| Machine Age | hrs | Client Info | | 3340 | 153 | 3340 |
| Oil Age | hrs | Client Info | | 460 | 3340 | 153 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | SEVERE |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 7 | 2 | 8 |
| Chromium | ppm | ASTM D5185m | >4 | 1 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 2 | 1 | 3 |
| Lead | ppm | ASTM D5185m | >30 | 3 | 2 | 4 |
| Copper | ppm | ASTM D5185m | >35 | 2 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >4 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

There is no indication of any contamination in the oil.

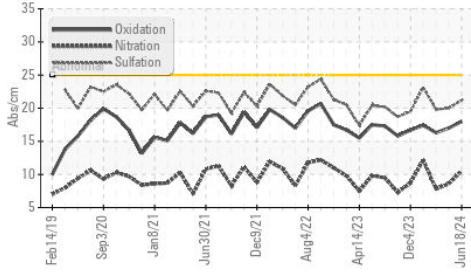
| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|--------|
| Silicon | ppm | ASTM D5185m | >+100 | 6 | 4 | 10 |
| Potassium | ppm | ASTM D5185m | >20 | 483 | 386 | ▲ 578 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Glycol | | WC Method | | --- | --- | ▲ 0.10 |
| Soot % | % | *ASTM D7844 | | 0 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.5 | 8.6 | 7.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.2 | 20.0 | 19.8 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

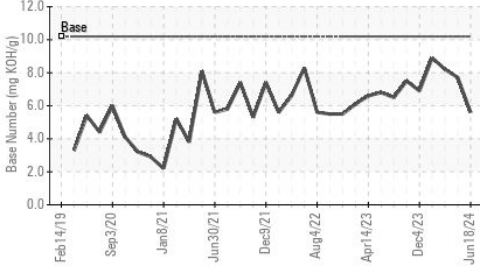
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 32 | 25 | ▲ 36 |
| Boron | ppm | ASTM D5185m | 50 | 13 | 24 | 48 |
| Barium | ppm | ASTM D5185m | 5 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 60 | 47 | 73 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 560 | 601 | 567 | 810 |
| Calcium | ppm | ASTM D5185m | 1510 | 1764 | 1490 | 2193 |
| Phosphorus | ppm | ASTM D5185m | 780 | 736 | 779 | 1087 |
| Zinc | ppm | ASTM D5185m | 870 | 1092 | 918 | 1365 |
| Sulfur | ppm | ASTM D5185m | 2040 | 2955 | 2741 | 3481 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.0 | 17.0 | 16.3 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.2 | 5.6 | 7.7 | 8.2 |
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 14.6 | 14.6 | 14.4 |

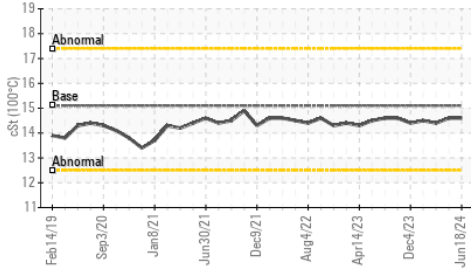
FT-IR (Direct Trend)



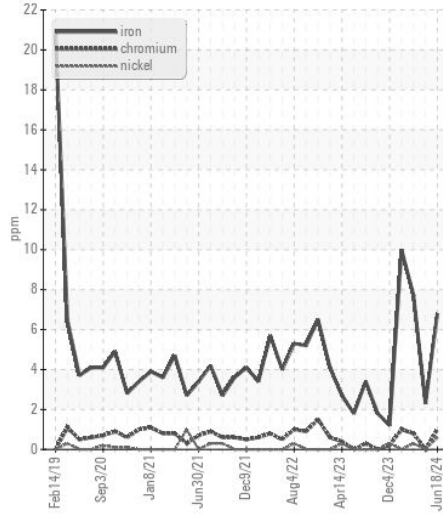
Base Number



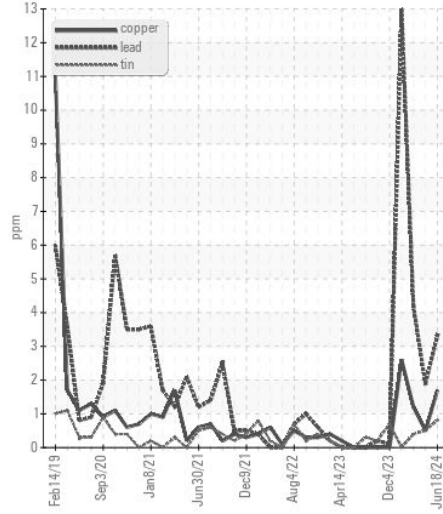
Viscosity @ 100°C



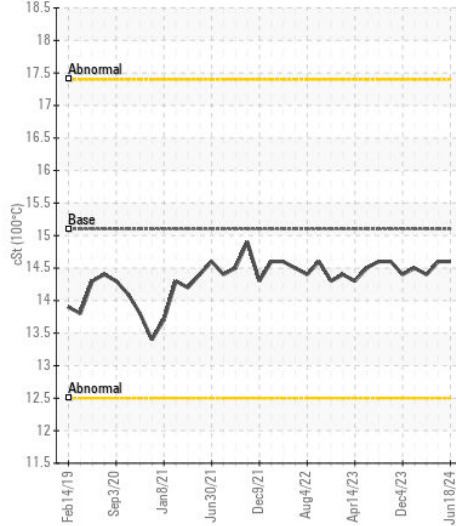
Ferrous Alloys



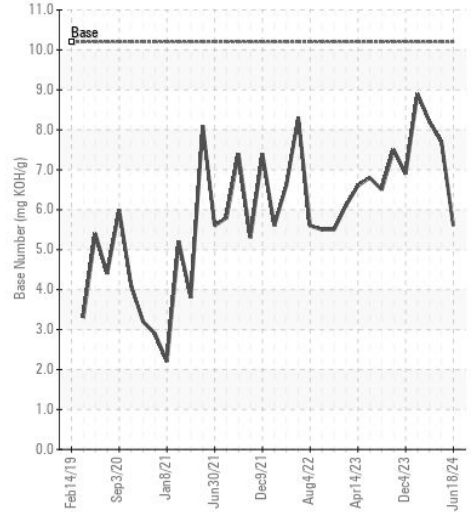
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079613
Lab Number : 06213138
Unique Number : 11086002
Test Package : FLEET

Received : 18 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

GFL Environmental - 017 - Durham
 148 Stone Park Court
 Durham, NC
 US 27703
 Contact:

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)

bill.waring@wearcheck.com

T: (919)596-1363

F: (919)598-1852