



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

Machine Id
3589C AUTOCAR ACX
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (48 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0117502 | GFL0094647 | GFL0094698 |
| Sample Date | | Client Info | | 28 May 2024 | 12 Dec 2023 | 06 Oct 2023 |
| Machine Age | mls | Client Info | | 95436 | 24450 | 23895 |
| Oil Age | mls | Client Info | | 70986 | 555 | 1254 |
| Filter Age | mls | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Chngd | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 25 | 20 | 14 |
| Chromium | ppm | ASTM D5185m | >4 | 2 | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 5 | 3 | 7 |
| Lead | ppm | ASTM D5185m | >30 | 15 | 16 | 6 |
| Copper | ppm | ASTM D5185m | >35 | 1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >4 | 2 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| 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.

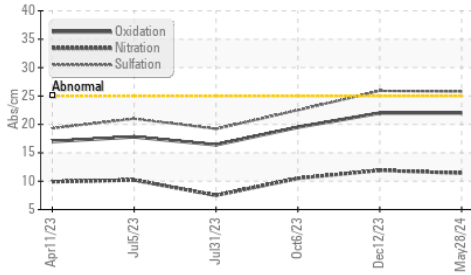
| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >+100 | 10 | 13 | 14 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 4 | 2 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0.1 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 11.4 | 11.9 | 10.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 25.8 | 25.9 | 22.5 |
| 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

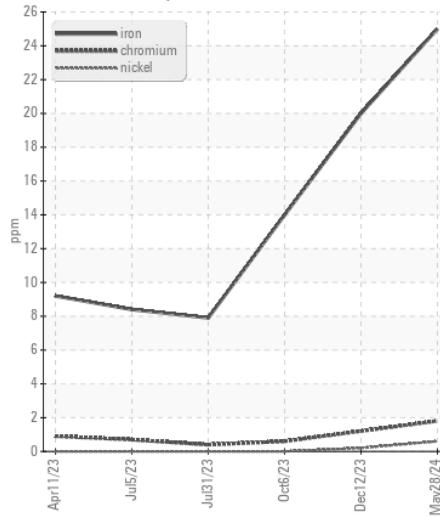
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 9 | 7 | 9 |
| Boron | ppm | ASTM D5185m | 50 | 18 | 10 | 10 |
| Barium | ppm | ASTM D5185m | 5 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 61 | 57 | 55 |
| Manganese | ppm | ASTM D5185m | 0 | 1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 560 | 715 | 600 | 598 |
| Calcium | ppm | ASTM D5185m | 1510 | 1898 | 1687 | 1673 |
| Phosphorus | ppm | ASTM D5185m | 780 | 971 | 779 | 738 |
| Zinc | ppm | ASTM D5185m | 870 | 1166 | 1001 | 1035 |
| Sulfur | ppm | ASTM D5185m | 2040 | 2965 | 2873 | 2571 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 22.0 | 22.0 | 19.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.2 | 5.4 | 3.4 | 4.5 |
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 15.1 | 14.8 | 14.8 |

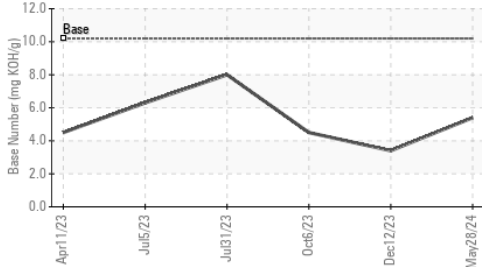
FT-IR (Direct Trend)



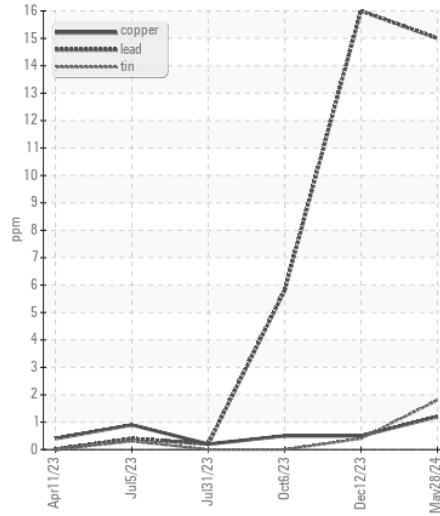
Ferrous Alloys



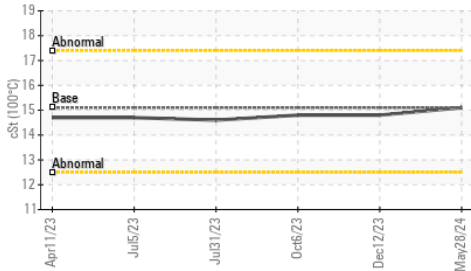
Base Number



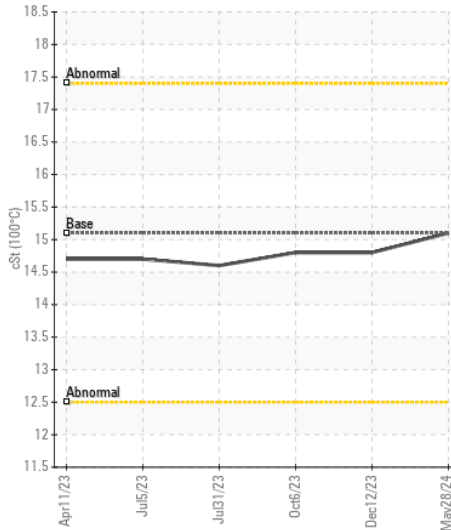
Non-ferrous Metals



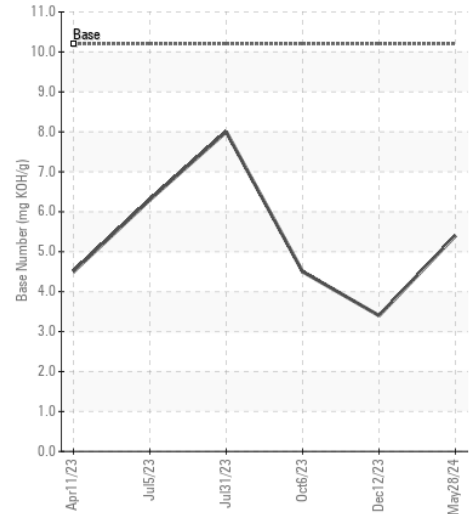
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117502
 Lab Number : 06195274
 Unique Number : 11057397
 Test Package : FLEET

GFL Environmental - 001 - Raleigh(CNG)

3741 Conquest Drive
 Garner, NC
 US 27529

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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)