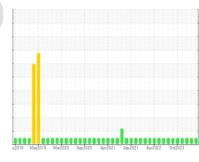


OIL ANALYSIS REPORT

(YA117956) 10538C

Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (29 QTS)



Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

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.

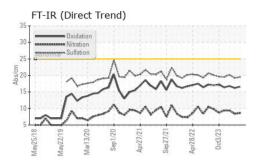
| (29 QTS) Wazdo 8 May 2018 May 2018 May 2018 May 2010 Apr 2021 Apr 2022 0-22023 | | | | | | | |
|--|----------|-------------|------------|-------------|-------------|-------------|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | |
| Sample Number | | Client Info | | GFL0125785 | GFL0112914 | GFL0112930 | |
| Sample Date | | Client Info | | 02 Jul 2024 | 07 May 2024 | 21 Mar 2024 | |
| Machine Age | hrs | Client Info | | 13144 | 13144 | 13144 | |
| Oil Age | hrs | Client Info | | 330 | 259 | 251 | |
| Oil Changed | 1110 | Client Info | | N/A | N/A | N/A | |
| Sample Status | | Olioni inio | | NORMAL | NORMAL | NORMAL | |
| CONTAMINATI | ON | method | limit/base | current | history1 | history2 | |
| Water | | WC Method | >0.1 | NEG | NEG | NEG | |
| WEAR METALS | S | method | limit/base | current | history1 | history2 | |
| Iron | ppm | ASTM D5185m | >50 | 6 | 5 | 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 | 3 | <1 | 2 | |
| Lead | ppm | ASTM D5185m | >30 | <1 | <1 | 1 | |
| Copper | ppm | ASTM D5185m | >35 | <1 | 0 | <1 | |
| Tin | ppm | ASTM D5185m | >4 | <1 | 0 | <1 | |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | |
| Boron | ppm | ASTM D5185m | 50 | 19 | 19 | 19 | |
| Barium | ppm | ASTM D5185m | 5 | <1 | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185m | 50 | 51 | 48 | 55 | |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 | |
| Magnesium | ppm | ASTM D5185m | 560 | 562 | 589 | 566 | |
| Calcium | ppm | ASTM D5185m | 1510 | 1496 | 1612 | 1596 | |
| Phosphorus | ppm | ASTM D5185m | 780 | 743 | 817 | 710 | |
| Zinc | ppm | ASTM D5185m | 870 | 938 | 970 | 958 | |
| Sulfur | ppm | ASTM D5185m | 2040 | 2143 | 2872 | 2169 | |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 | |
| Silicon | ppm | ASTM D5185m | >+100 | 4 | 4 | 6 | |
| Sodium | ppm | ASTM D5185m | | 4 | 4 | 5 | |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 0 | 13 | |
| INFRA-RED | | method | limit/base | current | history1 | history2 | |
| Soot % | % | *ASTM D7844 | | 0 | 0 | 0 | |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.6 | 8.4 | 9.4 | |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.5 | 19.2 | 20.2 | |
| FLUID DEGRAD |)ATION | method | limit/base | current | history1 | history2 | |
| | | | | | | | |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.6 | 16.2 | 16.8 | |

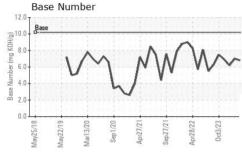
6.8

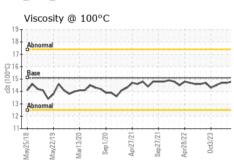
Base Number (BN) mg KOH/g ASTM D2896 10.2



OIL ANALYSIS REPORT



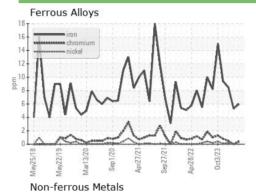


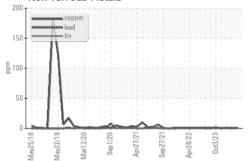


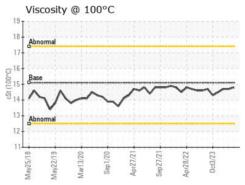
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

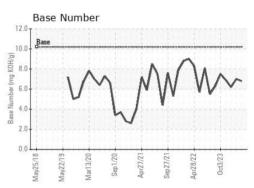
| FLUID PROPE | ERTIES | method | | | | history2 |
|--------------|--------|-----------|------|------|------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 15.1 | 14.8 | 14.7 | 14.7 |

GRAPHS













Laboratory Sample No. Lab Number : 06225807 Unique Number : 11109300

: GFL0125785

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 02 Jul 2024 **Tested** : 03 Jul 2024

Diagnosed : 03 Jul 2024 - Wes Davis

GFL Environmental - 017 - Durham

148 Stone Park Court Durham, NC

bill.waring@wearcheck.com

US 27703 Contact:

T: (919)596-1363

F: (919)598-1852

Test Package : FLEET Certificate 12367 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)

Report Id: GFL017 [WUSCAR] 06225807 (Generated: 07/03/2024 05:07:24) Rev: 1

Submitted By: Ren - William Russel