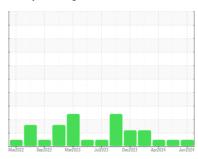


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **724027-367**

Diesel Engine

PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

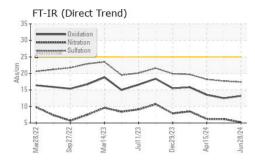
Fluid Condition

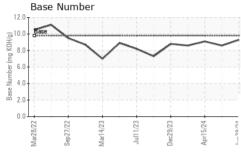
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

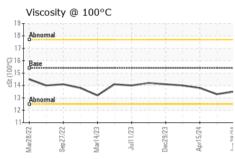
| GAL) | | Mar2022 | Sep 2022 Mar 2023 | Jul2023 Dec2023 Apr2024 | Jun2024 | |
|------------------|----------|-------------|-------------------|-------------------------|-------------|-------------|
| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GFL0125839 | GFL0118656 | GFL0118635 |
| Sample Date | | Client Info | | 28 Jun 2024 | 07 May 2024 | 15 Apr 2024 |
| Machine Age | hrs | Client Info | | 9482 | 9451 | 141371 |
| Oil Age | hrs | Client Info | | 685 | 200 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 6 | 16 | 23 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 2 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 2 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 3 | 5 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | 1 |
| Copper | ppm | ASTM D5185m | >330 | 2 | 18 | 27 |
| Tin | ppm | ASTM D5185m | >15 | 0 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 8 | 126 | 82 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 60 | 56 | 55 | 78 |
| Manganese | ppm | ASTM D5185m | 0 | 0 | 1 | 1 |
| Magnesium | ppm | ASTM D5185m | 1010 | 904 | 731 | 1090 |
| Calcium | ppm | ASTM D5185m | 1070 | 1067 | 1807 | 1842 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1033 | 1077 | 1487 |
| Zinc | ppm | ASTM D5185m | 1270 | 1229 | 1247 | 1630 |
| Sulfur | ppm | ASTM D5185m | 2060 | 2904 | 3683 | 4790 |
| CONTAMINAN | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 15 | 9 | 13 |
| Sodium | ppm | ASTM D5185m | | 10 | 38 | 61 |
| Potassium | ppm | ASTM D5185m | | 3 | 2 | 5 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.2 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.2 | 6.2 | 6.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.4 | 17.7 | 18.2 |
| FLUID DEGRA | | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 13.2 | 12.5 | 13.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 9.3 | 8.6 | 9.1 |

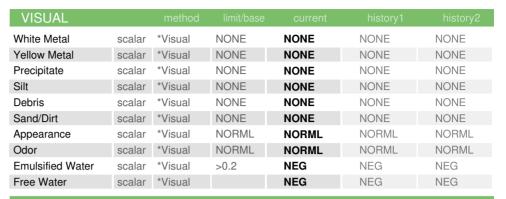


OIL ANALYSIS REPORT



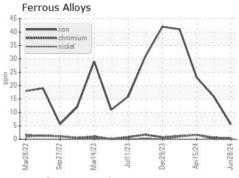


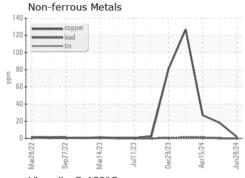


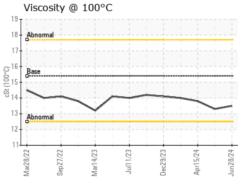


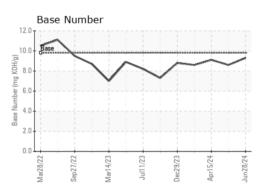
| FLUID PROPERTIES | | method | | | | history2 |
|------------------|-----|-----------|------|------|------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 13.5 | 13.3 | 13.8 |

GRAPHS













Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: GFL0125839 Lab Number : 06227034 Unique Number : 11110527

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

> **Tested** : 03 Jul 2024 Diagnosed : 03 Jul 2024 - Wes Davis

GFL Environmental - 166 - Phenix City

18 Old Brickyard Rd Phenix City, AL US 36869

Contact: EDWARD CASHMAN ecashman@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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)

T:

F: