

OIL ANALYSIS REPORT

(EGX027) 2870

Component **Diesel Engine**

PETRO CANADA DURON SHP 15W40 (7 GAL)

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

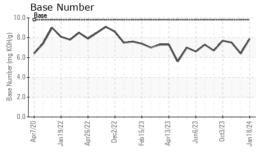
Fluid Condition

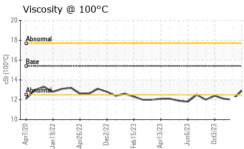
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| 7 AL) 3/2020 Jan2022 Apr2022 Dec2022 Feb.2023 Apr2023 Jan2023 Occ2023 Jan202 | | | | | | |
|---|----------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GFL0107200 | GFL0107253 | GFL0080872 |
| Sample Date | | Client Info | | 18 Jan 2024 | 29 Dec 2023 | 23 Oct 2023 |
| Machine Age | hrs | Client Info | | 8674 | 8533 | 8277 |
| Oil Age | hrs | Client Info | | 141 | 552 | 296 |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Sample Status | | | | NORMAL | ATTENTION | ATTENTION |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >3.0 | <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 | >165 | 7 | 17 | 6 |
| Chromium | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 4 | 2 |
| Lead | ppm | ASTM D5185m | >150 | 0 | <1 | 1 |
| Copper | ppm | ASTM D5185m | >90 | 2 | 10 | 7 |
| Tin | ppm | ASTM D5185m | >5 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 5 | 10 | 10 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 10 |
| Molybdenum | ppm | ASTM D5185m | 60 | 62 | 61 | 64 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 1010 | 971 | 822 | 749 |
| Calcium | ppm | ASTM D5185m | 1070 | 1085 | 1053 | 1063 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1063 | 980 | 829 |
| Zinc | ppm | ASTM D5185m | 1270 | 1295 | 1126 | 1109 |
| Sulfur | ppm | ASTM D5185m | 2060 | 3271 | 2619 | 3008 |
| CONTAMINAN | ITS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >35 | 3 | 5 | 4 |
| Sodium | ppm | ASTM D5185m | | 2 | 4 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 5 | 8 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >7.5 | 0.2 | 0.5 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.8 | 8.8 | 7.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.6 | 18.8 | 17.9 |
| FLUID DEGRA | AOITAC | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 12.6 | 14.6 | 13.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 7.9 | 6.4 | 7.5 |
| | | | | | | |



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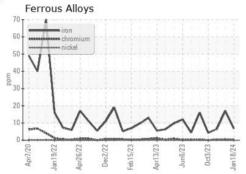


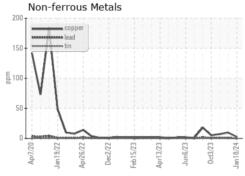


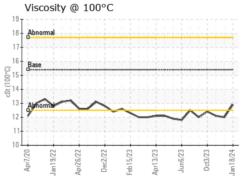
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

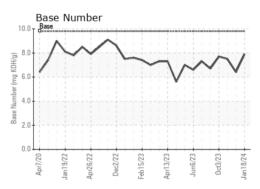
| FLUID PROPERTIES | | memoa | | | riistory i | History2 | |
|------------------|-----|-----------|------|------|-------------|-------------|--|
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 12.9 | 12.0 | 12.1 | |

GRAPHS













Certificate L2367

Test Package : FLEET

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0107200 : 06065410

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

Recieved : 10836792

: 19 Jan 2024 Diagnosed Diagnostician : Wes Davis

: 22 Jan 2024

GFL Environmental - 010 - Stockbridge

1280 Rum Creek Parkway Stockbridge, GA US 30281

Contact: TECHNICIAN ACCOUNT

wcgfldemo@gmail.com

T:

* - 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)

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