

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **841 M** Component **Diesel Engine**

PETRO CANADA DURON SHP 15W40 (3 G

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Resample)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

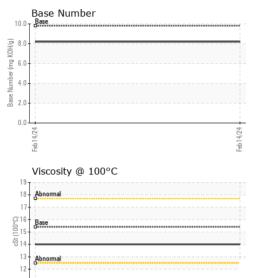
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORM Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Fuel Water Glycol WEAR METAL | hrs hrs | Client Info Client Info Client Info Client Info Client Info Client Info WC Method WC Method | limit/base limit/base >5 | current GFL0106677 14 Feb 2024 7262 0 Changed NORMAL current | history1 history1 | history2 history2 |
|---|------------|---|--------------------------|--|-------------------|-------------------|
| Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Fuel Water Glycol | hrs hrs | Client Info Client Info Client Info Client Info Client Info Client Info WC Method WC Method | limit/base >5 | GFL0106677 14 Feb 2024 7262 0 Changed NORMAL | | |
| Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Fuel Water Glycol | hrs | Client Info Client Info Client Info Client Info WC Method WC Method | >5 | 14 Feb 2024 7262 0 Changed NORMAL | | |
| Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Fuel Water Glycol | hrs | Client Info Client Info Client Info Method WC Method WC Method | >5 | 7262 0 Changed NORMAL | | |
| Oil Age Oil Changed Sample Status CONTAMINAT Fuel Water Glycol | hrs | Client Info Client Info method WC Method WC Method | >5 | 0 Changed NORMAL | | |
| Oil Changed Sample Status CONTAMINAT Fuel Water Glycol | ION | method WC Method WC Method | >5 | Changed NORMAL | | |
| Sample Status CONTAMINAT Fuel Water Glycol | | method WC Method WC Method | >5 | NORMAL | | |
| CONTAMINAT Fuel Water Glycol | | WC Method | >5 | | | |
| Fuel Water Glycol | | WC Method | >5 | current | history1 | historv2 |
| Water Glycol | | WC Method | | | | |
| Glycol | 0 | | | <1.0 | | |
| | 0 | MO M-41 1 | >0.2 | NEG | | |
| WEAR METAL | 0 | WC Method | | NEG | | |
| | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 18 | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | | |
| Nickel | ppm | ASTM D5185m | >2 | <1 | | |
| Titanium | ppm | ASTM D5185m | >2 | <1 | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >25 | 3 | | |
| Lead | ppm | ASTM D5185m | >40 | <1 | | |
| Copper | ppm | ASTM D5185m | >330 | 1 | | |
| Tin | ppm | ASTM D5185m | >15 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 1 | | |
| Barium | ppm | ASTM D5185m | 0 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 60 | 62 | | |
| Manganese | ppm | ASTM D5185m | 0 | 0 | | |
| Magnesium | ppm | ASTM D5185m | 1010 | 1057 | | |
| Calcium | ppm | ASTM D5185m | 1070 | 1117 | | |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1108 | | |
| Zinc | ppm | ASTM D5185m | 1270 | 1365 | | |
| Sulfur | ppm | ASTM D5185m | 2060 | 3124 | | |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 5 | | |
| Sodium | ppm | ASTM D5185m | | 2 | | |
| Potassium | ppm | ASTM D5185m | >20 | 1 | | |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | | |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.6 | | |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.1 | | |
| FLUID DEGRA | DATION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.7 | | |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 8.2 | | |



Feb14/24

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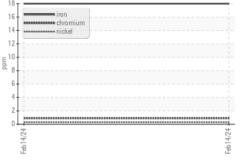


| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Precipitate | scalar | *Visual | NONE | NONE | | |
| Silt | scalar | *Visual | NONE | NONE | | |
| Debris | scalar | *Visual | NONE | NONE | | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| Appearance | scalar | *Visual | NORML | NORML | | |
| Odor | scalar | *Visual | NORML | NORML | | |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| Free Water | scalar | *Visual | | NEG | | |
| FLUID PROPE | RTIES | method | limit/base | current | history1 | history2 |

14.0

| Visc @ | 100°C |
|--------|-------|
| CBA | рце |

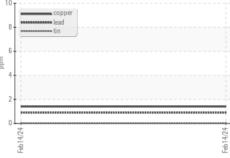
Ferrous Alloys

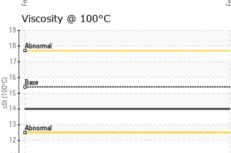


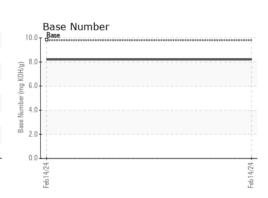
cSt

ASTM D445 15.4













Certificate L2367

Laboratory Sample No.

Lab Number : 06092660 Unique Number : 10885513 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0106677 Received **Tested**

Diagnosed

: 19 Feb 2024 : 20 Feb 2024

: 20 Feb 2024 - Don Baldridge

GFL Environmental - 405 - Arbor Hills

7400 Napier Rd NORTHVILLE, MI US 48168

Contact: Anthony Hopkins ahopkins@gflenv.com

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)

T:

F: