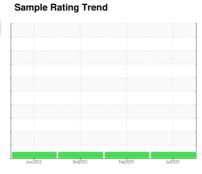


OIL ANALYSIS REPORT

(AU691W) Supermarket - Tractor **FREIGHTLINER 107A1863**

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





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

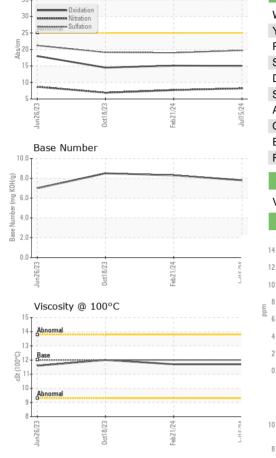
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| une) | | | | | | |
|---|----------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0124723 | PCA0116493 | PCA0104801 |
| Sample Date | | Client Info | | 15 Jul 2024 | 21 Feb 2024 | 18 Oct 2023 |
| Machine Age | mls | Client Info | | 319800 | 298921 | 278925 |
| Oil Age | mls | Client Info | | 20879 | 19996 | 7680 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| 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 | >80 | 14 | 10 | 11 |
| Chromium | ppm | ASTM D5185m | >5 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | 7 | 6 | 4 |
| Lead | ppm | ASTM D5185m | >30 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >150 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 2 | 3 | 4 | 18 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 61 | 58 | 50 |
| Manganese | ppm | ASTM D5185m | 0 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 950 | 944 | 900 | 789 |
| Calcium | ppm | ASTM D5185m | 1050 | 1128 | 1108 | 1110 |
| Phosphorus | ppm | ASTM D5185m | 995 | 950 | 983 | 947 |
| Zinc | ppm | ASTM D5185m | 1180 | 1221 | 1158 | 1139 |
| Sulfur | ppm | ASTM D5185m | 2600 | 2781 | 2794 | 2848 |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >20 | 5 | 4 | 3 |
| Sodium | ppm | ASTM D5185m | | 1 | 2 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 0 | 1 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.7 | 0.6 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.2 | 7.7 | 6.9 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.7 | 19.0 | 19.1 |
| FLUID DEGRADATION method limit/base current history1 history2 | | | | | | |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.0 | 15.1 | 14.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.8 | 8.3 | 8.5 |
| (214) | 9 | | | | | |



FT-IR (Direct Trend)

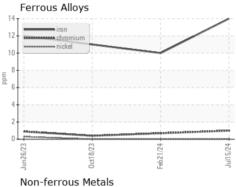
OIL ANALYSIS REPORT

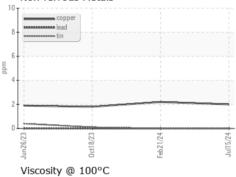


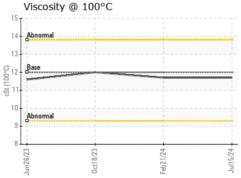
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate |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

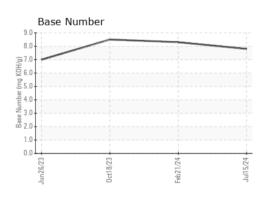
| FLUID PROPE | ERITES | method | limit/base | | history1 | history2 |
|--------------|--------|-----------|------------|------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 11.7 | 11.7 | 12.0 |

GRAPHS













Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: PCA0124723 Lab Number : 06241152 Unique Number : 11129986

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

: 18 Jul 2024 : 19 Jul 2024 Diagnosed : 19 Jul 2024 - Wes Davis

Transervice - Shop 1072 - Supermarket-Elizabeth 505 Division Street Elizabeth, NJ

US 07207 Contact: Normand Brizak nbrizak@transervice.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: