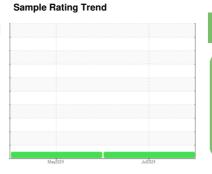


## **OIL ANALYSIS REPORT**

# (71247Z) Walgreens - Tractor [Walgreens - Tractor] 136A624315

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 GAL)





### DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

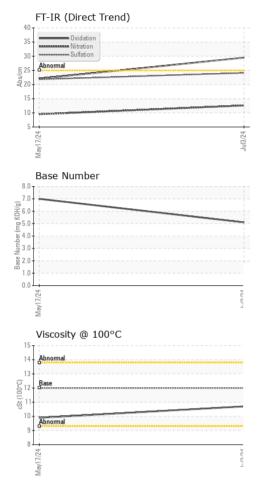
### **Fluid Condition**

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

| GAL)  |          |             | May2024    | Jui2024     |             |          |
|---|----------|-------------|------------|-------------|-------------|----------|
| SAMPLE INFORM   | MATION   | method      | limit/base | current     | history1    | history2 |
| Sample Number   |          | Client Info |            | PCA0127882  | PCA0117839  |          |
| Sample Date   |          | Client Info |            | 03 Jul 2024 | 17 May 2024 |          |
| Machine Age   | mls      | Client Info |            | 74060       | 48329       |          |
| Oil Age   | mls      | Client Info |            | 25731       | 25000       |          |
| Oil Changed   |          | Client Info |            | Not Changd  | Changed     |          |
| Sample Status   |          |             |            | NORMAL      | NORMAL      |          |
| CONTAMINATI   | ON       | method      | limit/base | current     | history1    | history2 |
| Fuel  |          | WC Method   | >5         | <1.0        | <1.0        |          |
| Water   |          | WC Method   | >0.2       | NEG         | NEG         |          |
| Glycol  |          | WC Method   |            | NEG         | NEG         |          |
| WEAR METALS   | S        | method      | limit/base | current     | history1    | history2 |
| Iron  | ppm      | ASTM D5185m | >80        | 69          | 58          |          |
| Chromium  | ppm      | ASTM D5185m | >5         | 6           | 5           |          |
| Nickel  | ppm      | ASTM D5185m | >2         | 1           | 2           |          |
| Titanium  | ppm      | ASTM D5185m |            | 0           | <1          |          |
| Silver  | ppm      | ASTM D5185m | >3         | 0           | <1          |          |
| Aluminum  | ppm      | ASTM D5185m | >30        | 58          | 65          |          |
| Lead  | ppm      | ASTM D5185m | >30        | 1           | <1          |          |
| Copper  | ppm      | ASTM D5185m | >150       | 173         | 209         |          |
| Tin   | ppm      | ASTM D5185m | >5         | 4           | 5           |          |
| Vanadium  | ppm      | ASTM D5185m |            | 0           | <1          |          |
| Cadmium   | ppm      | ASTM D5185m |            | 0           | 0           |          |
| ADDITIVES   |          | method      | limit/base | current     | history1    | history2 |
| Boron   | ppm      | ASTM D5185m | 2          | 34          | 33          |          |
| Barium  | ppm      | ASTM D5185m | 0          | <1          | 0           |          |
| Molybdenum  | ppm      | ASTM D5185m | 50         | 59          | 51          |          |
| Manganese   | ppm      | ASTM D5185m | 0          | 6           | 6           |          |
| Magnesium   | ppm      | ASTM D5185m | 950        | 604         | 553         |          |
| Calcium   | ppm      | ASTM D5185m | 1050       | 1976        | 1729        |          |
| Phosphorus  | ppm      | ASTM D5185m | 995        | 784         | 677         |          |
| Zinc  | ppm      | ASTM D5185m | 1180       | 901         | 885         |          |
| Sulfur  | ppm      | ASTM D5185m | 2600       | 2210        | 1965        |          |
| CONTAMINAN  | TS       | method      | limit/base | current     | history1    | history2 |
| Silicon   | ppm      | ASTM D5185m | >20        | 13          | 13          |          |
| Sodium  | ppm      | ASTM D5185m |            | 6           | 5           |          |
| Potassium   | ppm      | ASTM D5185m | >20        | 129         | 149         |          |
| INFRA-RED   |          | method      | limit/base | current     | history1    | history2 |
| Soot %  | %        | *ASTM D7844 | >3         | 0.5         | 0.4         |          |
| Nitration   | Abs/cm   | *ASTM D7624 | >20        | 12.6        | 9.5         |          |
| Sulfation   | Abs/.1mm | *ASTM D7415 | >30        | 24.1        | 21.8        |          |
| FLUID DEGRADATION method limit/base current history1 history2 |          |             |            |             |             |          |
| Oxidation   | Abs/.1mm | *ASTM D7414 | >25        | 29.5        | 22.1        |          |
| Base Number (BN)  | mg KOH/g | ASTM D2896  |            | 5.1         | 7.0         |          |



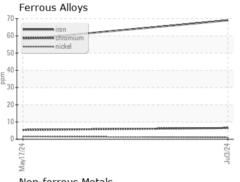
# **OIL ANALYSIS REPORT**



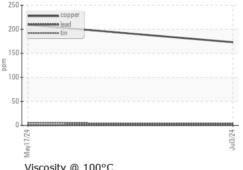
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     |          |
| Yellow Metal          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

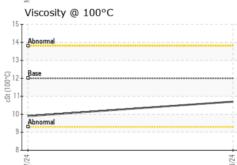
| FLUID FROFI  |     | memou     |       |      | HISTOLAL | HISTOLYZ |
|--------------|-----|-----------|-------|------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 10.7 | 9.9      |          |

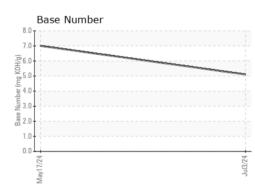
### **GRAPHS**















Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: PCA0127882 Lab Number : 06237415 Unique Number : 11126249

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 15 Jul 2024 **Tested** Diagnosed

: 16 Jul 2024 : 18 Jul 2024 - Jonathan Hester

Transervice - Shop 1366 - Berkeley-Woodland

2370 East Main Street Woodland, CA US 95776

Contact: Gary Mann gmann@transervice.com T: (530)666-7771

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)

F: (530)406-7971