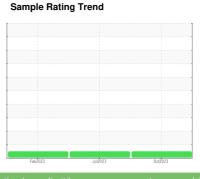


# **OIL ANALYSIS REPORT**

# (35102Z) Walgreens - Tractor [Walgreens - Tractor] 136A62586

**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

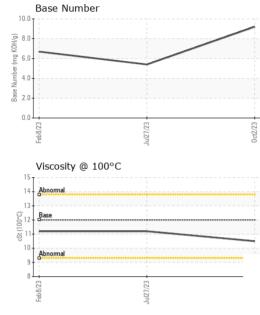
### **Fluid Condition**

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

|   |          | Fet               | 2023       | Jul2023 Oct203 |             |             |  |
|---|----------|-------------------|------------|----------------|-------------|-------------|--|
| SAMPLE INFORM   | MATION   | method            | limit/base | current        | history1    | history2    |  |
| Sample Number   |          | Client Info       |            | PCA0107362     | PCA0101921  | PCA0090889  |  |
| Sample Date   |          | Client Info       |            | 02 Oct 2023    | 27 Jul 2023 | 08 Feb 2023 |  |
| Machine Age   | mls      | Client Info       |            | 233920         | 208070      | 156822      |  |
| Oil Age   | mls      | Client Info       |            | 50000          | 50000       | 50000       |  |
| 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        |  |
| Glycol  |          | WC Method         |            | NEG            | NEG         | NEG         |  |
| WEAR METAL  | S        | method            | limit/base | current        | history1    | history2    |  |
| Iron  | ppm      | ASTM D5185m       | >80        | 57             | 24          | 16          |  |
| Chromium  | ppm      | ASTM D5185m       | >5         | 2              | 2           | 1           |  |
| Nickel  | ppm      | ASTM D5185m       | >2         | <1             | 0           | 0           |  |
| Titanium  | ppm      | ASTM D5185m       |            | 0              | <1          | 0           |  |
| Silver  | ppm      | ASTM D5185m       | >3         | <1             | 0           | 0           |  |
| Aluminum  | ppm      | ASTM D5185m       | >30        | 10             | 8           | 9           |  |
| Lead  | ppm      | ASTM D5185m       | >30        | 0              | <1          | <1          |  |
| Copper  | ppm      | ASTM D5185m       | >150       | 6              | 11          | 19          |  |
| Tin   | ppm      | ASTM D5185m       | >5         | <1             | <1          | 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          | 17             | <1          | 4           |  |
| Barium  | ppm      | ASTM D5185m       | 0          | <1             | 0           | 0           |  |
| Molybdenum  | ppm      | ASTM D5185m       | 50         | 55             | 65          | 62          |  |
| Manganese   | ppm      | ASTM D5185m       | 0          | <1             | <1          | 1           |  |
| Magnesium   | ppm      | ASTM D5185m       | 950        | 848            | 998         | 867         |  |
| Calcium   | ppm      | ASTM D5185m       | 1050       | 996            | 1207        | 1098        |  |
| Phosphorus  | ppm      | ASTM D5185m       | 995        | 954            | 985         | 792         |  |
| Zinc  | ppm      | ASTM D5185m       | 1180       | 1161           | 1307        | 1106        |  |
| Sulfur  | ppm      | ASTM D5185m       | 2600       | 3267           | 3159        | 2576        |  |
| CONTAMINAN  | TS       | method            | limit/base | current        | history1    | history2    |  |
| Silicon   | ppm      | ASTM D5185m       | >20        | 15             | 4           | 4           |  |
| Sodium  | ppm      | ASTM D5185m       |            | 47             | 2           | 1           |  |
| Potassium   | ppm      | ASTM D5185m       | >20        | 9              | 13          | 17          |  |
| INFRA-RED   |          | method            | limit/base | current        | history1    | history2    |  |
| Soot %  | %        | *ASTM D7844       | >3         | 0.9            | 1           | 0.7         |  |
| Nitration   | Abs/cm   | *ASTM D7624       | >20        | 10.9           | 9.5         | 8.5         |  |
| Sulfation   | Abs/.1mm | *ASTM D7415       | >30        | 24.4           | 22.0        | 20.2        |  |
| FLUID DEGRADATION method limit/base current history1 history2 |          |                   |            |                |             |             |  |
| Oxidation   | Abs/.1mm | *ASTM D7414       | >25        | 21.7           | 17.7        | 15.5        |  |
| Base Number (BN)  | mg KOH/g | <b>ASTM D2896</b> |            | 9.2            | 5.4         | 6.7         |  |
| base number (bin)   | mg nomg  | 7101111 22000     |            | -              |             |             |  |



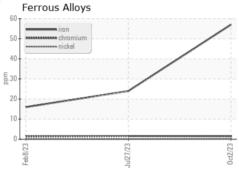
# **OIL ANALYSIS REPORT**

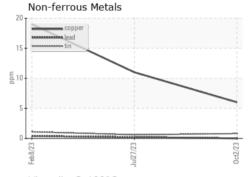


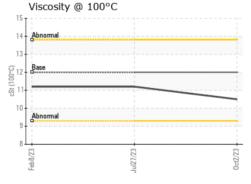
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal          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

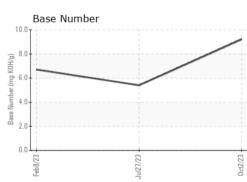
| L LOID PROPI | EHILO | method    |       |      | riistory i | HISTORYZ |
|--------------|-------|-----------|-------|------|------------|----------|
| Visc @ 100°C | cSt   | ASTM D445 | 12.00 | 10.5 | 11.2       | 11.2     |

## **GRAPHS**













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10726970 Test Package : FLEET

: PCA0107362 : 05998610

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

: 06 Nov 2023 : 06 Nov 2023 Diagnostician : Wes Davis

Transervice - Shop 1370 - Berkeley-Perrysburg 28727 Oregon Road Perrysburg, OH

US 43551 Contact: Curtis Hart chart@transervice.com

T: (419)666-3277 F: (419)666-3279

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)