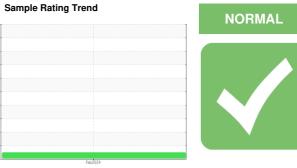


## **OIL ANALYSIS REPORT**

# (66467Z) Walgreens - Tractor [Walgreens - Tractor] 136A624270

**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.

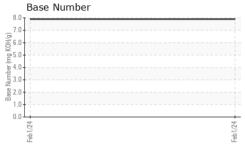
### **Fluid Condition**

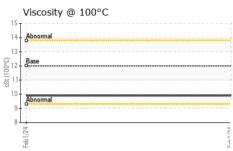
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| ual)  |  |  |  | Feb2024  |                      |                          |  |
|---|--|--|--|--|----------------------|--------------------------|--|
| SAMPLE INFORM   | MATION                                       | method   | limit/base                                   | current  | history1             | history2                 |  |
| Sample Number   |  | Client Info  |  | PCA0105888                                     |                      |                          |  |
| Sample Date   |  | Client Info  |  | 01 Feb 2024                                    |                      |                          |  |
| Machine Age   | mls  | Client Info  |  | 28642  |                      |                          |  |
| Oil Age   | mls  | Client Info  |  | 28642  |                      |                          |  |
| Oil Changed   |  | Client Info  |  | Oil Added                                      |                      |                          |  |
| Sample Status   |  |  |  | NORMAL   |                      |                          |  |
| CONTAMINATI   | ON   | method   | limit/base                                   | current  | history1             | history2                 |  |
| Fuel  |  | WC Method  | >5   | <1.0   |                      |                          |  |
| Water   |  | WC Method  | >0.2   | NEG  |                      |                          |  |
| Glycol  |  | WC Method  |  | NEG  |                      |                          |  |
| WEAR METALS   | 6  | method   | limit/base                                   | current  | history1             | history2                 |  |
| Iron  | ppm  | ASTM D5185m  | >80  | 35   |                      |                          |  |
| Chromium  | ppm  | ASTM D5185m  | >5   | 3  |                      |                          |  |
| Nickel  | ppm  | ASTM D5185m  | >2   | 3  |                      |                          |  |
| Titanium  | ppm  | ASTM D5185m  |  | <1   |                      |                          |  |
| Silver  | ppm  | ASTM D5185m  | >3   | 1  |                      |                          |  |
| Aluminum  | ppm  | ASTM D5185m  | >30  | 54   |                      |                          |  |
| Lead  | ppm  | ASTM D5185m  | >30  | <1   |                      |                          |  |
| Copper  | ppm  | ASTM D5185m  | >150   | 199  |                      |                          |  |
| Tin   | ppm  | ASTM D5185m  | >5   | 5  |                      |                          |  |
| Vanadium  | ppm  | ASTM D5185m  |  | <1   |                      |                          |  |
| Cadmium   | ppm  | ASTM D5185m  |  | 0  |                      |                          |  |
| ADDITIVES   |  | method   | limit/base                                   | current  | history1             | history2                 |  |
| Boron   | ppm  | ASTM D5185m  | 2  | 32   |                      |                          |  |
| Barium  | ppm  | ASTM D5185m  | 0  | 0  |                      |                          |  |
| Molybdenum  | ppm  | ASTM D5185m  | 50   | 43   |                      |                          |  |
| Manganese   | ppm  | ASTM D5185m  | 0  | 4  |                      |                          |  |
| Magnesium   | ppm  | ASTM D5185m  | 950  | 555  |                      |                          |  |
| Calcium   | ppm  | ASTM D5185m  | 1050   | 1566   |                      |                          |  |
| Phosphorus  | ppm  | ASTM D5185m  | 995  | 736  |                      |                          |  |
| Zinc  | ppm  | ASTM D5185m  | 1180   | 903  |                      |                          |  |
| Sulfur  | ppm  | ASTM D5185m  | 2600   | 2162   |                      |                          |  |
|   |  |  |  |  |                      |                          |  |
| CONTAMINAN  | rs –   | method   | limit/base                                   | current  | history1             | history2                 |  |
| Silicon   | ppm  | ASTM D5185m  | limit/base >20                               | 7  | history1             | history2                 |  |
| Silicon<br>Sodium   | ppm<br>ppm                                   | ASTM D5185m<br>ASTM D5185m   | >20  | 7<br>7   | •                    |                          |  |
| Silicon   | ppm  | ASTM D5185m  |  | 7  |                      |                          |  |
| Silicon<br>Sodium   | ppm<br>ppm                                   | ASTM D5185m<br>ASTM D5185m   | >20  | 7<br>7   |                      |                          |  |
| Silicon Sodium Potassium INFRA-RED Soot %                     | ppm<br>ppm<br>ppm                            | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method<br>*ASTM D7844                               | >20<br>>20<br>limit/base<br>>3               | 7<br>7<br>142<br>current<br>0.4                |                      |                          |  |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration           | ppm<br>ppm<br>ppm<br>%<br>Abs/cm             | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method<br>*ASTM D7844<br>*ASTM D7624                | >20<br>>20<br>limit/base<br>>3<br>>20        | 7<br>7<br>142<br>current<br>0.4<br>8.7         | <br><br>history1     | <br><br>history2         |  |
| Silicon Sodium Potassium INFRA-RED Soot %                     | ppm<br>ppm<br>ppm                            | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method<br>*ASTM D7844                               | >20<br>>20<br>limit/base<br>>3               | 7<br>7<br>142<br>current<br>0.4                | <br><br>history1     | <br><br>history2         |  |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration           | ppm<br>ppm<br>ppm<br>%<br>Abs/cm<br>Abs/.1mm | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method<br>*ASTM D7844<br>*ASTM D7624<br>*ASTM D7415 | >20<br>>20<br>limit/base<br>>3<br>>20        | 7<br>7<br>142<br>current<br>0.4<br>8.7         | <br><br>history1<br> | <br><br>history2<br>     |  |
| Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm<br>ppm<br>ppm<br>%<br>Abs/cm<br>Abs/.1mm | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method<br>*ASTM D7844<br>*ASTM D7624<br>*ASTM D7415 | >20<br>>20<br>limit/base<br>>3<br>>20<br>>30 | 7<br>7<br>142<br>current<br>0.4<br>8.7<br>22.7 | <br><br>history1<br> | <br><br>history2<br><br> |  |



# **OIL ANALYSIS REPORT**

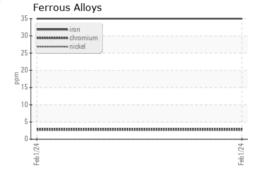


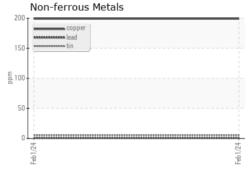


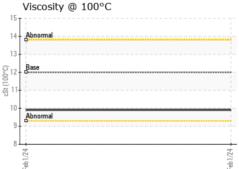
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    |          |          |
| Yellow Metal          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

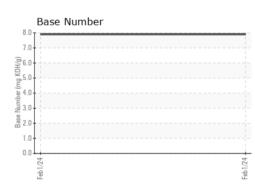
| FLUID FROFI  |     | method    |       |     | HISTOLAL | HISTOLYZ |
|--------------|-----|-----------|-------|-----|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 9.9 |          |          |

### **GRAPHS**













Certificate L2367

Laboratory Sample No.

Test Package : FLEET

: PCA0105888 Lab Number : 06081932 Unique Number: 10869377

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

: 07 Feb 2024 Diagnosed

: 08 Feb 2024 - Sean Felton

Transervice - Shop 1361 - Berkeley-Windsor 4400 State Road 19

Windsor, WI US 53598 Contact: Mike Hurda

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

: 06 Feb 2024

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (608)846-2726 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (608)846-0389