

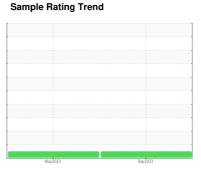
# **OIL ANALYSIS REPORT**



# (AS401G) Supermarket - Tractor MACK 107A1880

Component **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

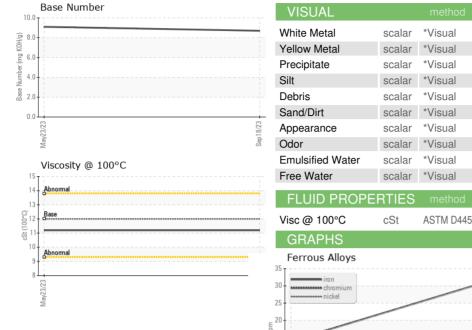
### **Fluid Condition**

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

| <u> </u>            |                   |                    | May2023    | Sep 2023        |                  |          |
|---------------------|-------------------|--------------------|------------|-----------------|------------------|----------|
| SAMPLE INFORM       | 1ATION            | method             | limit/base | current         | history1         | history2 |
| Sample Number       |                   | Client Info        |            | PCA0104090      | PCA0097069       |          |
| Sample Date         |                   | Client Info        |            | 18 Sep 2023     | 23 May 2023      |          |
| Machine Age         | mls               | Client Info        |            | 291643          | 291304           |          |
| Oil Age             | mls               | Client Info        |            | 1788            | 1449             |          |
| Oil Changed         |                   | Client Info        |            | Changed         | Not Changd       |          |
| Sample Status       |                   |                    |            | NORMAL          | NORMAL           |          |
| CONTAMINATION       | NC                | method             | limit/base | current         | history1         | history2 |
| Fuel                |                   | WC Method          | >3.0       | <1.0            | <1.0             |          |
| Glycol              |                   | WC Method          |            | NEG             | NEG              |          |
| WEAR METALS         | 3                 | method             | limit/base | current         | history1         | history2 |
| Iron                | ppm               | ASTM D5185m        | >120       | 32              | 14               |          |
| Chromium            | ppm               | ASTM D5185m        | >20        | <1              | <1               |          |
| Nickel              | ppm               | ASTM D5185m        | >5         | <1              | <1               |          |
| Titanium            | ppm               | ASTM D5185m        | >2         | 0               | <1               |          |
| Silver              | ppm               | ASTM D5185m        | >2         | 0               | <1               |          |
| Aluminum            | ppm               | ASTM D5185m        | >20        | 3               | 2                |          |
| Lead                | ppm               | ASTM D5185m        | >40        | 0               | <1               |          |
| Copper              | ppm               | ASTM D5185m        | >330       | 1               | <1               |          |
| Tin                 | ppm               | ASTM D5185m        | >15        | <1              | <1               |          |
| Vanadium            | ppm               | ASTM D5185m        |            | 0               | <1               |          |
| Cadmium             | ppm               | ASTM D5185m        |            | 0               | <1               |          |
| ADDITIVES           |                   | method             | limit/base | current         | history1         | history2 |
| Boron               | ppm               | ASTM D5185m        | 2          | 33              | 28               |          |
| Barium              | ppm               | ASTM D5185m        | 0          | 0               | 0                |          |
| Molybdenum          | ppm               | ASTM D5185m        | 50         | 66              | 63               |          |
| Manganese           | ppm               | ASTM D5185m        | 0          | <1              | <1               |          |
| Magnesium           | ppm               | ASTM D5185m        | 950        | 960             | 924              |          |
| Calcium             | ppm               | ASTM D5185m        | 1050       | 1165            | 1077             |          |
| Phosphorus          | ppm               | ASTM D5185m        | 995        | 1089            | 1034             |          |
| Zinc                | ppm               | ASTM D5185m        | 1180       | 1304            | 1240             |          |
| Sulfur              | ppm               | ASTM D5185m        | 2600       | 3968            | 3844             |          |
| CONTAMINANT         | ΓS                | method             | limit/base | current         | history1         | history2 |
| Silicon             | ppm               | ASTM D5185m        | >25        | 4               | 6                |          |
| Sodium              | ppm               | ASTM D5185m        |            | 1               | 3                |          |
| Potassium           | ppm               | ASTM D5185m        | >20        | <1              | 2                |          |
| INFRA-RED           |                   | method             | limit/base | current         | history1         | history2 |
| Soot %              | %                 | *ASTM D7844        | >4         | 0.1             | 0.1              |          |
| Nitration           | Abs/cm            | *ASTM D7624        | >20        | 5.6             | 5.4              |          |
| Sulfation           | Abs/.1mm          | *ASTM D7415        | >30        | 17.2            | 17.5             |          |
| FLUID DEODAD        |                   |                    |            |                 |                  |          |
| FLUID DEGRAD        | ATION             | method             | limit/base | current         | history1         | history2 |
| Oxidation Oxidation | ATION<br>Abs/.1mm | method *ASTM D7414 |            | current<br>13.1 | history1<br>13.0 | history2 |
| Oxidation           | Abs/.1mm          |                    |            |                 | •                |          |

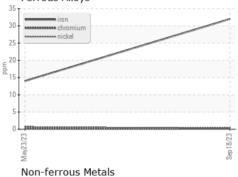


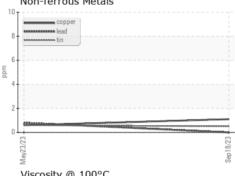
## **OIL ANALYSIS REPORT**

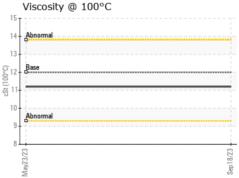


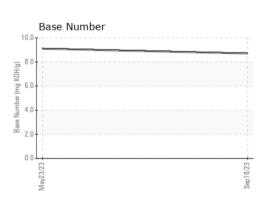
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     |          |
| Yellow Metal            | 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 PROPE             | RTIES  | method  | limit/base | current | history1 | history2 |

| FLUID PROP   | EKIIES | metnoa    | ilmit/base | current | nistory i | nistory2 |
|--------------|--------|-----------|------------|---------|-----------|----------|
| Visc @ 100°C | cSt    | ASTM D445 | 12.00      | 11.2    | 11.2      |          |











Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10659651

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0104090 : 05958438

Received : 22 Sep 2023 Diagnosed Diagnostician : Wes Davis

: 22 Sep 2023

Transervice - Shop 1071 - Supermarket-Dayton 60 A Tower Road Dayton, NJ

US 08810 Contact: Brian Quinn

bquinn@transervice.com

T: F:

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)