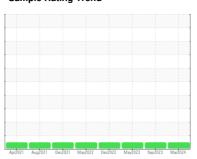


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **2026850**

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

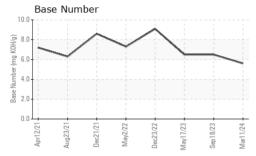
Fluid Condition

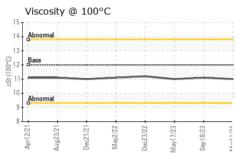
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Sample Number Client Info PCA0111506 PCA0104009 PCA005 Sample Date Client Info 11 Mar 2024 18 Sep 2023 17 May Machine Age mls Client Info 40000 40000 20208 Client Info 40000 40000 20208 Client Info 40000 Changed Changed | QTS) Redozi Auglozi Dedozi Majłożz Dedozi Majłożz Sepłoża Majłoża Sepłoża Majłoża | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| Sample Date | ory2 | | | | | | | | |
| Machine Age | 7158 | | | | | | | | |
| Oil Age | 2023 | | | | | | | | |
| Oil Changed Sample Status Client Info Changed NORMAL Change NoRMAL <th></th> | | | | | | | | | |
| Sample Status | | | | | | | | | |
| CONTAMINATION method limit/base current history1 hist Fuel WC Method >5 <1.0 <1.0 <1.0 <1.0 Water WC Method >0.2 NEG NEG NEG NEG Glycol WC Method NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 hist Iron ppm ASTM D5185m >100 37 27 34 Chromium ppm ASTM D5185m >20 <1 <1 <1 <1 Nickel ppm ASTM D5185m >20 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <th>d</th> | d | | | | | | | | |
| Fuel WC Method >5 <1.0 | L | | | | | | | | |
| Water WC Method >0.2 NEG NEG NEG Glycol WC Method NEG NEG NEG WEAR METALS method limit/base current history1 hist Iron ppm ASTM D5185m >100 37 27 34 Chromium ppm ASTM D5185m >20 <1 <1 <1 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >3 0 0 <1 Aluminum ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >30 7 6 6 Copper ppm ASTM D5185m >30 7 6 0 Tin ppm ASTM D5185m >15 <1 <1 <1 <1 <1 <t< th=""><th>ory2</th></t<> | ory2 | | | | | | | | |
| Select | | | | | | | | | |
| WEAR METALS method limit/base current history1 hist Iron ppm ASTM D5185m >100 37 27 34 Chromium ppm ASTM D5185m >20 <1 <1 <1 Nickel ppm ASTM D5185m 0 0 0 1 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >3 0 0 <1 Aluminum ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >330 7 6 6 Copper ppm ASTM D5185m >15 <1 <1 <1 2 Vanadium ppm ASTM D5185m 0 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 | | | | | | | | | |
| Iron | | | | | | | | | |
| Chromium ppm ASTM D5185m ≥20 <1 | ory2 | | | | | | | | |
| Nickel ppm ASTM D5185m >4 0 0 1 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >3 0 0 <1 Aluminum ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >40 <1 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <2 Vanadium ppm ASTM D5185m >330 7 6 6 6 6 6 7 1 <1 <1 <2 Vanadium ppm ASTM D5185m 0 | | | | | | | | | |
| Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >3 0 0 <1 Aluminum ppm ASTM D5185m >20 3 4 3 Lead ppm ASTM D5185m >40 <1 1 <1 <1 Copper ppm ASTM D5185m >330 7 6 6 6 Tin ppm ASTM D5185m >15 <1 <1 2 1 2 0 | | | | | | | | | |
| Silver ppm ASTM D5185m >3 0 0 <1 | | | | | | | | | |
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| Lead ppm ASTM D5185m >40 <1 | | | | | | | | | |
| Copper ppm ASTM D5185m >330 7 6 6 Tin ppm ASTM D5185m >15 <1 <1 2 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 hist Boron ppm ASTM D5185m 2 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 61 61 57 Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 Magnesium ppm ASTM D5185m 950 919 895 950 Calcium ppm ASTM D5185m 1050 1073 1118 1110 Phosphorus ppm ASTM D5185m 2600 <td< th=""><th></th></td<> | | | | | | | | | |
| Tin ppm ASTM D5185m >15 <1 | | | | | | | | | |
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| Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 50 61 61 57 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 950 919 895 950 Calcium ppm ASTM D5185m 1050 1073 1118 1110 Phosphorus ppm ASTM D5185m 995 970 1001 973 Zinc ppm ASTM D5185m 2600 3185 3092 3557 CONTAMINANTS method limit/base current history1 hist Silicon ppm ASTM D5185m >25 5 4 5 Sodium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | ory2 | | | | | | | | |
| Molybdenum ppm ASTM D5185m 50 61 61 57 Manganese ppm ASTM D5185m 0 <1 | | | | | | | | | |
| Manganese ppm ASTM D5185m 0 <1 | | | | | | | | | |
| Magnesium ppm ASTM D5185m 950 919 895 950 Calcium ppm ASTM D5185m 1050 1073 1118 1110 Phosphorus ppm ASTM D5185m 995 970 1001 973 Zinc ppm ASTM D5185m 1180 1236 1212 1287 Sulfur ppm ASTM D5185m 2600 3185 3092 3557 CONTAMINANTS method limit/base current history1 hist Silicon ppm ASTM D5185m >25 5 4 5 Sodium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | | | | | | | | | |
| Calcium ppm ASTM D5185m 1050 1073 1118 1110 Phosphorus ppm ASTM D5185m 995 970 1001 973 Zinc ppm ASTM D5185m 1180 1236 1212 1287 Sulfur ppm ASTM D5185m 2600 3185 3092 3557 CONTAMINANTS method limit/base current history1 hist Silicon ppm ASTM D5185m >25 5 4 5 Sodium ppm ASTM D5185m 1 0 2 Potassium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | | | | | | | | | |
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| Sulfur ppm ASTM D5185m 2600 3185 3092 3557 CONTAMINANTS method limit/base current history1 hist Silicon ppm ASTM D5185m >25 5 4 5 Sodium ppm ASTM D5185m 1 0 2 Potassium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | | | | | | | | | |
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| Silicon ppm ASTM D5185m >25 5 4 5 Sodium ppm ASTM D5185m 1 0 2 Potassium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | | | | | | | | | |
| Sodium ppm ASTM D5185m 1 0 2 Potassium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | ory2 | | | | | | | | |
| Potassium ppm ASTM D5185m >20 1 3 3 INFRA-RED method limit/base current history1 hist | | | | | | | | | |
| INFRA-RED method limit/base current history1 hist | | | | | | | | | |
| · | | | | | | | | | |
| Cast 0/ 0/ *ACTM D7044 0 0.4 0.4 | ory2 | | | | | | | | |
| Soot % | | | | | | | | | |
| Nitration Abs/cm *ASTM D7624 >20 10.5 9.1 9.9 | | | | | | | | | |
| Sulfation Abs/.1mm *ASTM D7415 >30 21.4 20.3 21.2 | | | | | | | | | |
| FLUID DEGRADATION method limit/base current history1 hist | ory2 | | | | | | | | |
| Oxidation Abs/.1mm *ASTM D7414 >25 18.0 15.8 16.9 | | | | | | | | | |
| Base Number (BN) mg KOH/g ASTM D2896 5.6 6.5 | | | | | | | | | |



OIL ANALYSIS REPORT

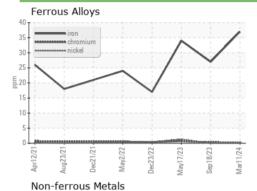


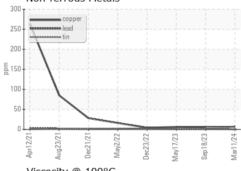


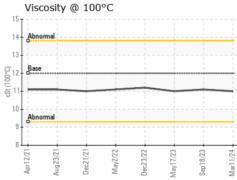
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate |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

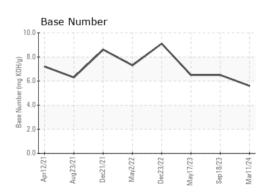
| FLUID PROP | ERTIES | method | | | | history2 |
|--------------|--------|-----------|-------|------|------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 11.0 | 11.1 | 11.0 |

GRAPHS











Laboratory Sample No.

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

Lab Number : 06118164 Unique Number: 10926997 Test Package : FLEET

: PCA0111506

Received : 14 Mar 2024 **Tested** Diagnosed

: 15 Mar 2024 : 15 Mar 2024 - Wes Davis

PERDUE FARMS - Lewiston 210 GRIFFINS QUARTER RD LEWISTON, NC

US 27849

Contact: NELSON WALLACE nelson.wallace2@perdue.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: