

OIL ANALYSIS REPORT

Area (97183X) Walgreens Machine Id [Walgreens] 136A62094 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Eluid

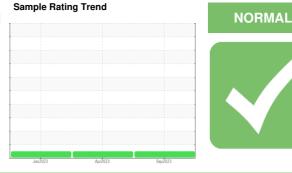
All component wear rates are normal.

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 INFORM | MATION | method | limit/base | current | | history2 |
|--|--|--|--|---|---|---|
| Sample Number | | Client Info | | PCA0103825 | PCA0094715 | PCA0089870 |
| Sample Date | | Client Info | | 11 Sep 2023 | 28 Apr 2023 | 13 Jan 2023 |
| Machine Age | mls | Client Info | | 381255 | 355590 | 327984 |
| Oil Age | mls | Client Info | | 25665 | 27189 | 53183 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ON | 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 | 34 | 22 | 18 |
| Chromium | ppm | ASTM D5185m | >5 | 2 | 2 | 2 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | 15 | 5 | 9 |
| Lead | ppm | ASTM D5185m | >30 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >150 | 6 | 5 | 6 |
| Tin | ppm | ASTM D5185m | >5 | <1 | <1 | 0 |
| 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 | 0 | 3 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| | ppm | ASTIVI DOTODITI | 0 | U | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 65 | 64 | 60 |
| | | | | - | 64 <1 | |
| Molybdenum | ppm | ASTM D5185m | 50 0 950 | 65 | 64 <1 952 | 60 <1 922 |
| Molybdenum Manganese | ppm ppm | ASTM D5185m ASTM D5185m | 50 0 | 65 <1 | 64 <1 | 60 <1 |
| Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 | 65 <1 1061 1163 1033 | 64 <1 952 1077 1017 | 60 <1 922 1050 923 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 | 65 <1 1061 1163 | 64 <1 952 1077 1017 1270 | 60 <1 922 1050 923 1144 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 | 65 <1 1061 1163 1033 | 64 <1 952 1077 1017 | 60 <1 922 1050 923 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 | 65 <1 1061 1163 1033 1293 | 64 <1 952 1077 1017 1270 | 60 <1 922 1050 923 1144 2844 history2 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 2600 | 65 <1 1061 1163 1033 1293 3157 | 64 <1 952 1077 1017 1270 2905 | 60 <1 922 1050 923 1144 2844 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 2600 limit/base | 65 <1 1061 1163 1033 1293 3157 current | 64 <1 952 1077 1017 1270 2905 history1 | 60 <1 922 1050 923 1144 2844 history2 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | 50 0 950 1050 995 1180 2600 limit/base | 65 <1 1061 1163 1033 1293 3157 current 5 | 64 <1 952 1077 1017 1270 2905 history1 4 | 60 <1 922 1050 923 1144 2844 history2 5 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | 50 0 950 1050 995 1180 2600 limit/base >20 | 65 <1 1061 1163 1033 1293 3157 current 5 3 | 64 <1 952 1077 1017 1270 2905 history1 4 <1 | 60 <1 922 1050 923 1144 2844 history2 5 0 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 2600 limit/base >20 | 65 <1 1061 1163 1033 1293 3157 current 5 3 2 | 64 <1 952 1077 1017 1270 2905 history1 4 <1 2 | 60 <1 922 1050 923 1144 2844 history2 5 0 0 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 2600 imit/base >20 imit/base | 65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current | 64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 | 60 <1 922 1050 923 1144 2844 history2 5 0 0 0 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 50 0 950 1050 995 1180 2600 <i>limit/base</i> >20 >20 <i>limit/base</i> >3 | 65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current 0.8 | 64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5 | 60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7624 | 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >20 | 65 <1 1061 1163 1033 1293 3157 current 5 3 2 2 current 0.8 9.8 | 64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5 8.0 | 60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8 10.1 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7624 | 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3 >20 >30 | 65 <1 1061 1163 1033 1293 3157 current 5 3 2 current 0.8 9.8 22.6 | 64 <1 952 1077 1017 1270 2905 history1 4 <1 2 history1 0.5 8.0 18.1 | 60 <1 922 1050 923 1144 2844 history2 5 0 0 0 history2 0.8 10.1 23.0 |

5.6

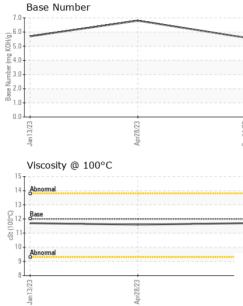
Base Number (BN) mg KOH/g ASTM D2896

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OIL ANALYSIS REPORT



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| E NONE ML NORML ML NORML NEG NEG pry1 history2 |
| ML NORML ML NORML NEG NEG Dry1 history2 |
| ML NORML NEG NEG Dry1 history2 |
| NEG NEG ory1 history2 |
| NEG bry1 history2 |
| ory1 history2 |
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Submitted By: Erien White

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