

OIL ANALYSIS REPORT







Machine Id **125288** 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

Metal levels are typical for a new component breaking in.

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 | ΛΑΤΙΟΝ | method | | | | history2 |
|---|--|---|---|---|--|--|
| Sample Number | | Client Info | | PCA0093355 | | |
| Sample Date | | Client Info | | 11 Mar 2024 | | |
| Machine Age | mls | Client Info | | 18792 | | |
| Oil Age | mls | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Not Changd | | |
| 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 | S | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Iron | ppm | ASTM D5185m | >100 | 9 | | |
| Chromium | ppm | ASTM D5185m | >20 | 0 | | |
| Nickel | ppm | ASTM D5185m | >4 | 0 | | |
| Titanium | ppm | ASTM D5185m | . 0 | 0 | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | | |
| Aluminum | ppm | | >20 | 2 | | |
| Lead | ppm | ASTM D5185m | >40 | 0 | | |
| Copper | ppm | | >330 | 2 | | |
| Tin | ppm | ASTM D5185m | >15 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | | | | biotory () |
| ABBIIIVE0 | | methou | IIIIII/Dase | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 2 | 7 | nistory i | |
| Boron Barium | ppm ppm | | | | | |
| Boron Barium Molybdenum | | ASTM D5185m ASTM D5185m ASTM D5185m | 2 | 7 | | |
| Boron Barium Molybdenum Manganese | ppm | ASTM D5185m ASTM D5185m | 2 0 | 7 0 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 | 7 0 58 0 976 | | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 | 7 0 58 0 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 | 7 0 58 0 976 1163 1107 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 | 7 0 58 0 976 1163 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 | 7 0 58 0 976 1163 1107 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 | 7 0 58 0 976 1163 1107 1337 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 | 7 0 58 0 976 1163 1107 1337 3947 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | 7 0 58 0 976 1163 1107 1337 3947 current | history1 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINAN Silicon | ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | 7 0 58 0 976 1163 1107 1337 3947 current 7 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >25 | 7 0 58 0 976 1163 1107 1337 3947 <u>current</u> 7 1 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 imit/base >25 >20 | 7 0 58 0 976 1163 1107 1337 3947 <u>current</u> 7 1 0 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >25 -20 imit/base | 7 0 58 0 976 1163 1107 1337 3947 current 7 1 0 0 current | history1 history1 | history2 history2 |
| Boron Barium 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 | 2 0 50 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 | 7 0 58 0 976 1163 1107 1337 3947 <i>current</i> 7 1 0 <i>current</i> 0.2 | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm spm ppm | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 imit/base >25 >20 imit/base >20 | 7 0 58 0 976 1163 1107 1337 3947 <i>current</i> 7 1 0 <i>current</i> 0.2 6.3 | history1 history1 | history2 history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844 | 2 0 0 50 0 950 1050 995 1180 2600 2600 25 20 220 20 20 33 20 30 30 | 7 0 58 0 976 1163 1107 1337 3947 <i>current</i> 7 1 0 <i>current</i> 0.2 6.3 17.4 | history1 history1 history1 | history2 history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm spm ppm | ASTM D5185m ASTM D5185m | 2 0 50 50 950 1050 995 1180 2600 imit/base >25 20 imit/base >3 >20 >30 | 7 0 58 0 976 1163 1107 1337 3947 current 7 1 0 current 0.2 6.3 17.4 current | history1 history1 history1 history1 | history2 history2 history2 history2 |



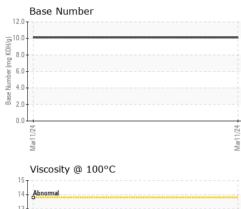
cSt (100°C) Ba

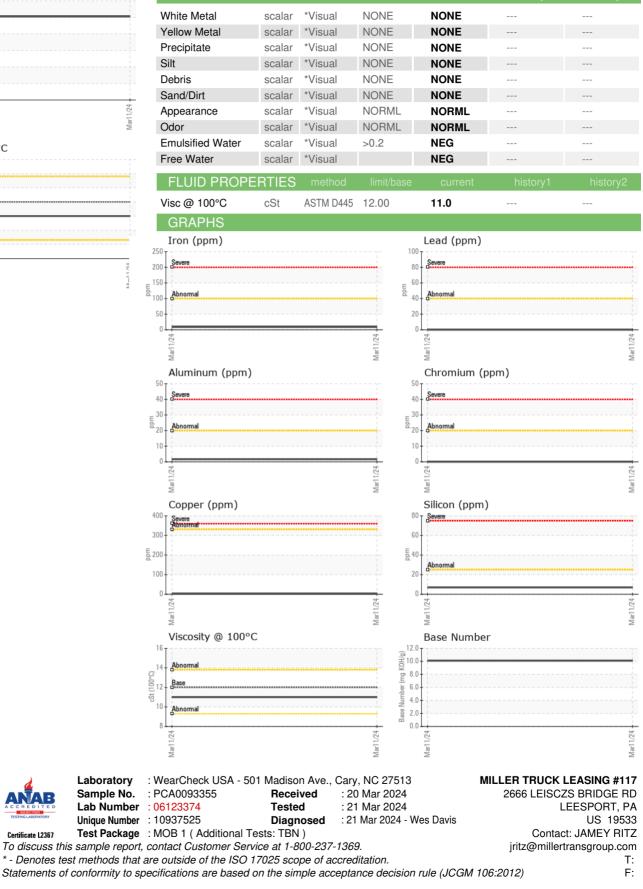
Abnorma

Marl

OIL ANALYSIS REPORT

VISUAL





Certificate L2367

Contact/Location: JAMEY RITZ - MILLEEPA