

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 624567

Component Diesel Engine Fluid

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

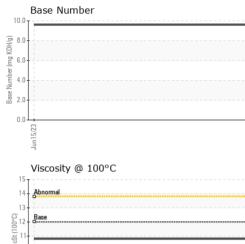
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

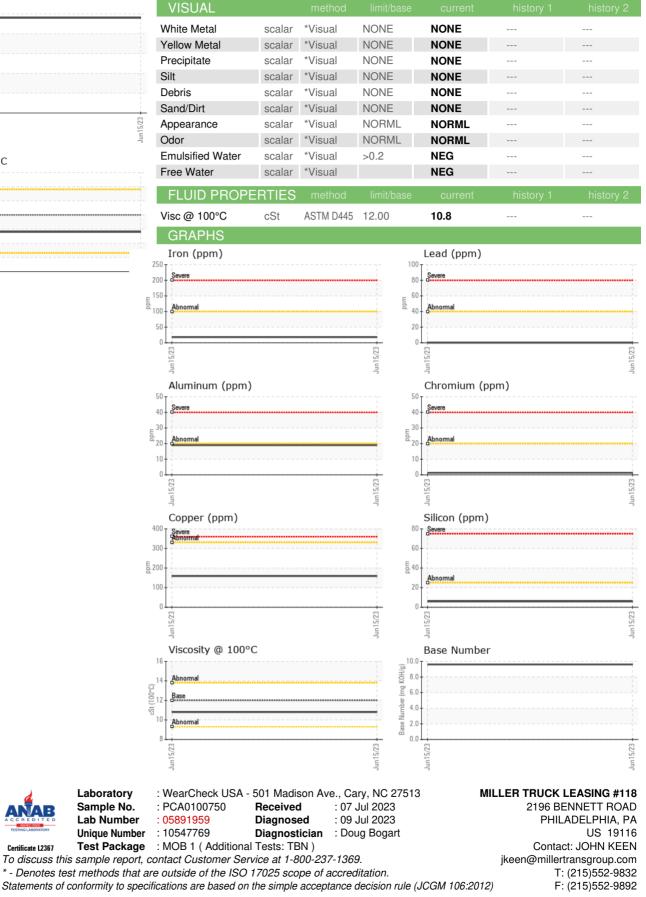
| SAMPLE INFORI | | method | limit/base | current | history 1 | history 2 |
|---|--|---|--|---|--|--|
| Sample Number | | Client Info | | PCA0100750 | | |
| Sample Date | | Client Info | | 15 Jun 2023 | | |
| Machine Age | mls | Client Info | | 23271 | | |
| Oil Age | mls | Client Info | | 23271 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINAT | ION | method | limit/base | current | history 1 | history 2 |
| Fuel | | WC Method | >5 | <1.0 | | |
| Glycol | | WC Method | | NEG | | |
| | 0 | un otto o d | line it //s s s s | | latatam. 1 | bistom: O |
| WEAR METAL | 5 | method | limit/base | current | history 1 | history 2 |
| Iron | ppm | ASTM D5185m | >100 | 18 | | |
| Chromium | ppm | ASTM D5185m | >20 | 1 | | |
| Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 17 | | |
| Silver | ppm | ASTM D5185m | >3 | 2 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 19 | | |
| Lead | ppm | ASTM D5185m | >40 | 0 | | |
| Copper | ppm | ASTM D5185m | >330 | 159 | | |
| Tin | ppm | ASTM D5185m | >15 | 3 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | <1 | | |
| ADDITIVES | | method | | | history 1 | history 2 |
| 100111120 | | | | | inotory i | |
| Boron | ppm | ASTM D5185m | 2 | 60 | | |
| | ppm ppm | | | | | · · · · · · |
| Boron | | ASTM D5185m | 2 | 60 | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | 2 0 | 60 0 | | |
| Boron Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 | 60 0 36 | | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 | 60 0 36 2 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 | 60 0 36 2 635 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 | 60 0 36 2 635 1508 | | |
| 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 | 2 0 50 0 950 1050 995 | 60 0 36 2 635 1508 887 | | |
| 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 50 950 1050 995 1180 | 60 0 36 2 635 1508 887 1086 | | |
| 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 50 950 1050 995 1180 2600 | 60 0 36 2 635 1508 887 1086 3541 | | |
| 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 | 60 0 36 2 635 1508 887 1086 3541 current | history 1 | history 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm 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 | 2 0 50 950 1050 995 1180 2600 limit/base >25 | 60 0 36 2 635 1508 887 1086 3541 <i>current</i> 6 | history 1 | history 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm 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 | 2 0 50 950 1050 995 1180 2600 limit/base >25 | 60 0 36 2 635 1508 887 1086 3541 <u>current</u> 6 3 | history 1 | history 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 limit/base >25 | 60 0 36 2 635 1508 887 1086 3541 current 6 3 44 | history 1 | history 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 Imit/base >25 >20 Imit/base >3 | 60 0 36 2 635 1508 887 1086 3541 current 6 3 44 current | history 1 history 1 | history 2 history 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 Imit/base >25 >20 Imit/base >3 | 60 0 36 2 635 1508 887 1086 3541 <i>current</i> 6 3 44 <i>current</i> | history 1 history 1 | history 2 history 2 |
| 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 ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> | 60 0 36 2 635 1508 887 1086 3541 current 6 3 44 current 0.2 6.8 | history 1 history 1 history 1 | history 2 history 2 |
| 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 ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7844 | 2 0 0 50 0 950 1050 995 1180 2600 2600 255 20 220 20 1 imit/base >3 20 >30 3 3 0 | 60 0 36 2 635 1508 887 1086 3541 <i>current</i> 6 3 344 <i>current</i> 0.2 6.8 20.0 <i>current</i> | history 1 history 1 history 1 | history 2 history 2 history 2 |
| 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 ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 1050 955 1050 995 1180 2600 imit/base >25 imit/base >3 >20 | 60 0 36 2 635 1508 887 1086 3541 <u>current</u> 6 3 44 <u>current</u> 0.2 6.8 20.0 | history 1 history 1 history 1 history 1 | history 2 history 2 history 2 history 2 |



Abnorma

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Certificate L2367

Contact/Location: JOHN KEEN - MILPHINE