

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area [61085] Machine Id VOVO 4465

Component Diesel Engine Fluid

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

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

🔺 Wear

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| GAL) | | | | Aug2023 | | |
|---------------|----------|---------------|------------|-------------|----------|----------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0831175 | | |
| Sample Date | | Client Info | | 11 Aug 2023 | | |
| Machine Age | mths | Client Info | | 48 | | |
| Oil Age | mths | Client Info | | 13 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | ABNORMAL | | |
| CONTAMINATIC | N | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >5 | <1.0 | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184* | | 9 | | |
| Iron | ppm | ASTM D5185(m) | >100 | <u> </u> | | |
| Chromium | ppm | ASTM D5185(m) | >20 | 3 | | |
| Nickel | ppm | ASTM D5185(m) | >4 | 6 | | |
| Titanium | ppm | ASTM D5185(m) | | <1 | | |
| Silver | ppm | ASTM D5185(m) | >3 | <1 | | |
| Aluminum | ppm | ASTM D5185(m) | >20 | 14 | | |
| Lead | ppm | ASTM D5185(m) | >40 | 3 | | |
| Copper | ppm | ASTM D5185(m) | >330 | 36 | | |
| Tin | ppm | ASTM D5185(m) | >15 | 2 | | |
| Antimony | ppm | ASTM D5185(m) | | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 1 | 1 | | |
| Barium | ppm | ASTM D5185(m) | 1 | 2 | | |
| Molybdenum | ppm | ASTM D5185(m) | 1 | 8 | | |
| Manganese | ppm | ASTM D5185(m) | 1 | 4 | | |
| Magnesium | ppm | ASTM D5185(m) | 10 | 88 | | |
| Calcium | ppm | ASTM D5185(m) | 2942 | 2429 | | |
| Phosphorus | ppm | ASTM D5185(m) | 1102 | 944 | | |
| Zinc | ppm | ASTM D5185(m) | 1351 | 1246 | | |
| Sulfur | ppm | ASTM D5185(m) | 3903 | 2660 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANT | S | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >25 | 21 | | |
| Sodium | ppm | ASTM D5185(m) | | 28 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | 13 | | |
| Glycol | % | ASTM D7922* | | 0.0 | | |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | ASTM D7844* | >3 | 1.3 | | |
| Nitration | Abs/cm | ASTM D7624* | >20 | 15.7 | | |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 35.9 | | |
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