

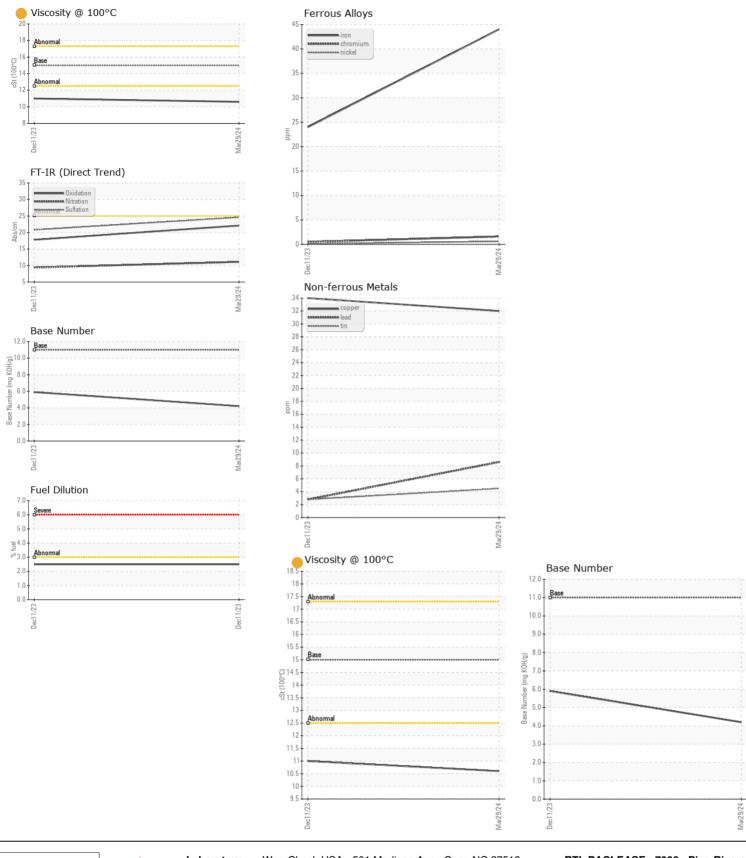
Machine Id **CUMMINS 846-5190** Component **1 Diesel Engine** Fluid **MOBIL DELVAC 1 5W40 (46 QTS)**

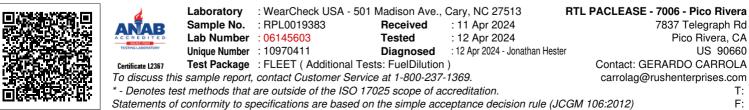
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | | History1 | History2 |
|---|------------------|----------|-------------|-----------|-------------|-------------|----------|
| No corrective action is recommended at this time. Resample at the next service interval to monitor. | Sample Number | | Client Info | | RPL0019383 | RPL0016826 | |
| | Sample Date | | Client Info | | 29 Mar 2024 | 11 Dec 2023 | |
| | Machine Age | mls | Client Info | | 20126 | 9709 | |
| | Oil Age | mls | Client Info | | 20126 | 9709 | |
| | Filter Age | mls | Client Info | | 20126 | 9709 | |
| | Oil Changed | | Client Info | | Not Changd | N/A | |
| | Filter Changed | | Client Info | | Not Changd | N/A | |
| | Sample Status | | | | ATTENTION | ABNORMAL | |
| | Iron | nnm | ASTM D5185m | . 00 | A A | 24 | |
| WEAR Metal levels are typical for a new component breaking in. | Iron | ppm | | | 44 | | |
| | Chromium | ppm | ASTM D5185m | | 2 | <1 | |
| | Nickel | ppm | ASTM D5185m | | <1 | <1 | |
| | Titanium | ppm | ASTM D5185m | | <1 | 0 | |
| | Silver | ppm | ASTM D5185m | | 0 | <1 | |
| | Aluminum | ppm | ASTM D5185m | | 17 | 10 | |
| | Lead | ppm | ASTM D5185m | | 9 | 3 | |
| | Copper | ppm | ASTM D5185m | | 32 | 34 | |
| | Tin | ppm | ASTM D5185m | >15 | 4 | 3 | |
| | Vanadium | ppm | ASTM D5185m | | <1 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >25 | 41 | 40 | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | | 45 | 19 | |
| | Fuel | % | ASTM D3524 | | <1.0 | ▲ 2.5 | |
| | Water | | WC Method | | NEG | NEG | |
| | Glycol | | WC Method | | NEG | NEG | |
| | Soot % | % | *ASTM D7844 | >6 | 0.4 | 0.2 | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 11.1 | 9.4 | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 24.6 | 20.8 | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| | Odor | scalar | *Visual | NORML | NORML | NORML | |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| | | | | | | | |
| FLUID CONDITION The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. | Sodium | ppm | ASTM D5185m | | 6 | 4 | |
| | Boron | ppm | ASTM D5185m | | 19 | 43 | |
| | Barium | ppm | ASTM D5185m | | 5 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | 8.0 | 15 | 12 | |
| | Manganese | ppm | ASTM D5185m | | 6 | 4 | |
| | Magnesium | ppm | ASTM D5185m | 624 | 739 | 684 | |
| | Calcium | ppm | ASTM D5185m | 2158 | 1324 | 1236 | |
| | Phosphorus | ppm | ASTM D5185m | 1132 | 720 | 640 | |
| | Zinc | ppm | ASTM D5185m | 1300 | 843 | 779 | |
| | Sulfur | ppm | ASTM D5185m | 3616 | 3078 | 2803 | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 22.1 | 17.8 | |
| | Base Number (BN) | mg KOH/g | ASTM D2896 | 11.0 | 4.2 | 5.9 | |
| | Vien C 10000 | ~C+ | | 15.0 | | 0 + + . | |

Visc @ 100°C cSt

11.0

ASTM D445 15.0 **10.6**





Submitted By: TECHNICIAN ACCOUNT Page 2 of 2