

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id WL243655 Component Diesel Engine Fluid {not provided} (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|------------------|----------|-------------|-----------|-------------|----------|----------|
| No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. | Sample Number | | Client Info | | PCA0122919 | | |
| | Sample Date | | Client Info | | 25 Jun 2024 | | |
| | Machine Age | hrs | Client Info | | 0 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | N/A | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | NORMAL | | |
| | | | | | | | |
| WEAR | Iron | ppm | ASTM D5185m | >100 | 5 | | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >20 | 0 | | |
| | Nickel | ppm | ASTM D5185m | >2 | <1 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | >2 | <1 | | |
| | Aluminum | ppm | ASTM D5185m | >25 | 2 | | |
| | Lead | ppm | ASTM D5185m | | <1 | | |
| | Copper | ppm | ASTM D5185m | >330 | 15 | | |
| | Tin | ppm | ASTM D5185m | >15 | 0 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | ~ | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 12 | | |
| Fuel content negligible. There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | | 5 | | |
| | Fuel | % | ASTM D3524 | | 0.1 | | |
| | Water | | WC Method | >0.2 | NEG | | |
| | Glycol | | WC Method | 0 | NEG | | |
| | Soot % | % | *ASTM D7844 | | 0 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 7.3 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 16.3 | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 4 | | |
| | Boron | ppm | ASTM D5185m | | 77 | | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 83 | | |
| | Manganese | ppm | ASTM D5185m | | 2 | | |
| | Magnesium | ppm | ASTM D5185m | | 56 | | |
| | Calcium | ppm | ASTM D5185m | | 2202 | | |
| | Phosphorus | ppm | ASTM D5185m | | 1040 | | |
| | Zinc | ppm | ASTM D5185m | | 1213 | | |
| | Sulfur | ppm | ASTM D5185m | | 4773 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 12.4 | | |
| | | | | ~ | 12.7 | | |

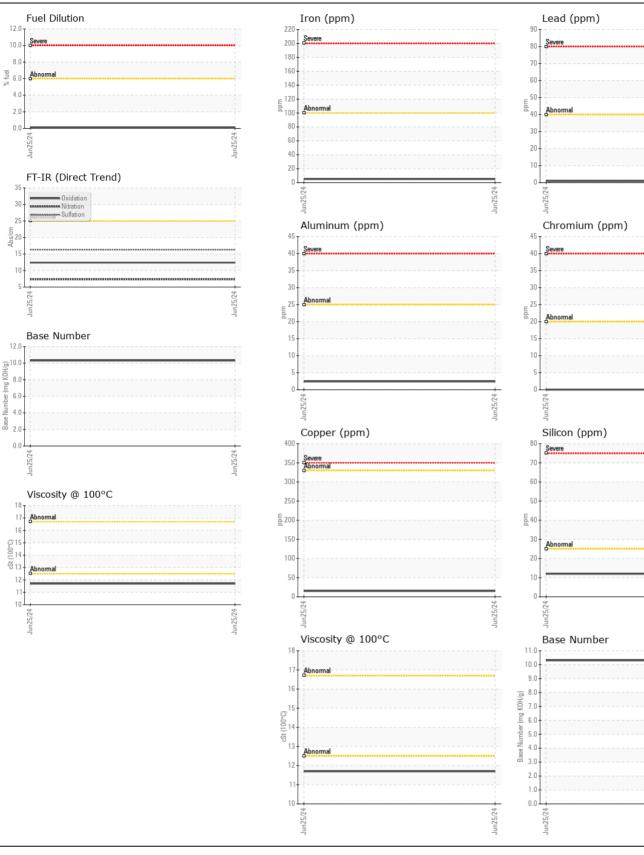
Base Number (BN) mg KOH/g ASTM D2896

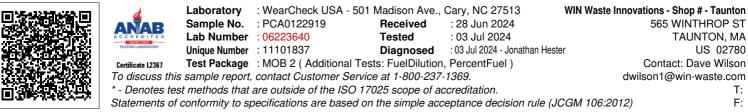
ASTM D445

Visc @ 100°C cSt

10.31

11.7





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