

Machine Id G16 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|------------------|----------|-------------------------------|-----------|-------------|-------------|----------|
| 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 | | WC0841443 | WC0758949 | |
| | Sample Date | | Client Info | | 07 Jun 2024 | 17 Jan 2023 | |
| brand, type, and viscosity of the on on your next sample. | Machine Age | hrs | Client Info | | 17564 | 414 | |
| | Oil Age | hrs | Client Info | | 484 | 414 | |
| | Filter Age | hrs | Client Info | | 484 | 414 | |
| | Oil Changed | | Client Info | | Changed | Changed | |
| | Filter Changed | | Client Info | | Changed | Changed | |
| | Sample Status | | | | NORMAL | NORMAL | |
| | | | | | | | |
| WEAR All component wear rates are normal. | Iron | ppm | ASTM D5185m | | 20 | 12 | |
| | Chromium | ppm | ASTM D5185m | | <1 | <1 | |
| | Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | |
| | Titanium | ppm | ASTM D5185m | | 0 | 0 | |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | |
| | Aluminum | ppm | ASTM D5185m | >25 | 2 | 2 | |
| | Lead | ppm | ASTM D5185m | | 0 | 1 | |
| | Copper | ppm | ASTM D5185m | | 1 | <1 | |
| | Tin | ppm | ASTM D5185m | >4 | 0 | <1 | |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 4 | 4 | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | | <1 | 2 | |
| | Fuel | | WC Method | | <1.0 | <1.0 | |
| | Water | | WC Method | >0.2 | NEG | NEG | |
| | Glycol | | WC Method | 0 | NEG | NEG | |
| | Soot % | % | *ASTM D7844 | | 0.6 | 1.2 | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 8.3 | 10.5 | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 20.3 | 20.5 | |
| | 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 | Sodium | ppm | ASTM D5185m | >158 | 2 | 2 | |
| | Boron | | ASTM D5185m | | 8 | 58 | |
| 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 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | | 62 | 83 | |
| | Manganese | ppm | ASTM D5185m | 100 | 0 | <1 | |
| | Magnesium | ppm | ASTM D5185m | 450 | 401 | 58 | |
| | Calcium | ppm | ASTM D5185m | | 1752 | 2067 | |
| | Phosphorus | ppm | ASTM D5185m | | 1010 | 934 | |
| | Zinc | | ASTM D5185m | | 1163 | 1170 | |
| | Sulfur | ppm | ASTM D5185m | | 3722 | 4122 | |
| | Oxidation | ppm | *ASTM D5185111 *ASTM D7414 | | 15.6 | 14.6 | |
| | Oxidation | ADS/.IMM | ASTIVI D/414 | >20 | 15.0 | 14.0 | |

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

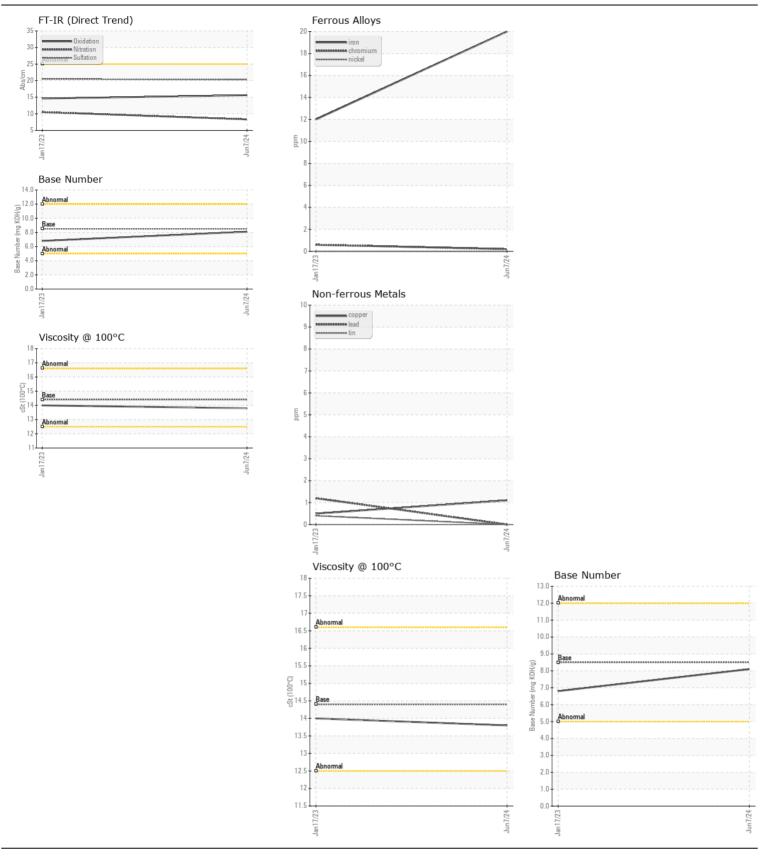
Visc @ 100°C cSt

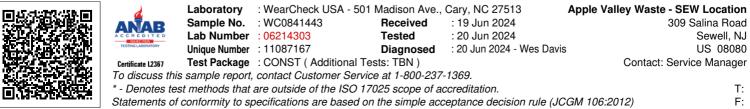
6.8

14.0

8.1

13.8





Contact/Location: Service Manager - AVWSEW Page 2 of 2