

Current

History1

History2

Machine Id **FSP145486** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 40 (--- QTS)**

Metal levels are typical for a new component breaking in.

There is no indication of any contamination in the oil.

RECOMMENDATION

WEAR

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.

Test

Sulfur

Oxidation

Visc @ 100°C

UOM

Method

Limit/Abn

| | Sample Number | | Client Info | | WC0875712 | | |
|--------------------|------------------|----------|-------------|-------|-------------|--|--|
| as not GENERIC) | Sample Date | | Client Info | | 16 Jan 2024 | | |
| | Machine Age | mls | Client Info | | 50049 | | |
| | Oil Age | mls | Client Info | | 0 | | |
| ext sample. | Filter Age | mls | Client Info | | 0 | | |
| | - | 11115 | Client Info | | - | | |
| | Oil Changed | | | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| | Iron | ppm | ASTM D5185m | >100 | 15 | | |
| | Chromium | ppm | ASTM D5185m | >20 | <1 | | |
| | Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | >3 | 0 | | |
| | Aluminum | ppm | | >20 | 8 | | |
| | Lead | ppm | ASTM D5185m | >40 | <1 | | |
| | Copper | ppm | ASTM D5185m | >330 | 71 | | |
| | Tin | ppm | ASTM D5185m | >15 | <1 | | |
| | Vanadium | ppm | ASTM D5185m | 210 | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| | Silicon | ppm | ASTM D5185m | >25 | 8 | | |
| | Potassium | ppm | ASTM D5185m | >20 | 10 | | |
| | Fuel | | WC Method | >5 | <1.0 | | |
| | Water | | WC Method | >0.2 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | >3 | 0.7 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 8.0 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.0 | | |
| | 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 | | |
| | | | | | | | |
| ning in the | Sodium | ppm | ASTM D5185m | >216 | 1 | | |
| | Boron | ppm | ASTM D5185m | 250 | 10 | | |
| | Barium | ppm | ASTM D5185m | 10 | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | 100 | 57 | | |
| | Manganese | ppm | ASTM D5185m | | 1 | | |
| | Magnesium | ppm | ASTM D5185m | 450 | 867 | | |
| | Calcium | ppm | ASTM D5185m | 3000 | 1205 | | |
| | Phosphorus | ppm | ASTM D5185m | 1150 | 1016 | | |
| | Zinc | ppm | ASTM D5185m | 1350 | 1229 | | |

ppm ASTM D5185m 4250

Abs/.1mm *ASTM D7414 >25

ASTM D445

14.4

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

cSt

FLUID CONDITION

CONTAMINATION

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

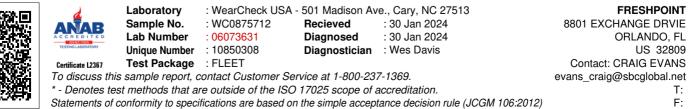
2875

14.7

8.3

13.0





Contact/Location: CRAIG EVANS - FREORL