

Area DAVID LEPPAMAN [6528] Machine Id VOLVO PENTA TAMD41D CE13T 2204147685

Component Diesel Engine Fluid

{not provided} (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|------------------|----------|-------------|-----------|---|----------|----------|
| Manadala that was also for the second state of | Sample Number | | Client Info | | VPA051548 | | |
| We advise that you check for the source of water entry. Resample at the next service interval to monitor. | Sample Date | | Client Info | | 07 Feb 2024 | | |
| | Machine Age | hrs | Client Info | | 2127 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Not Changd | | |
| | Filter Changed | | Client Info | | Not Changd | | |
| | Sample Status | | | | ABNORMAL | | |
| | | | | . 00 | FC | | |
| WEAR | Iron | ppm | ASTM D5185m | | 56 | | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | | 6 | | |
| | Nickel | ppm | ASTM D5185m | | 4 | | |
| | Titanium | ppm | ASTM D5185m | | <1 | | |
| | Silver | ppm | ASTM D5185m | | <1 | | |
| | Aluminum | ppm | ASTM D5185m | | 4 | | |
| | Lead | ppm | ASTM D5185m | | 19 | | |
| | Copper | ppm | ASTM D5185m | | 15 | | |
| | Tin | ppm | ASTM D5185m | >9 | 1 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >25 | 16 | | |
| CONTAMINATION | Potassium | ppm | ASTM D5185m | | 10 | | |
| There is a light concentration of water present in the oil. | Fuel | ppin | WC Method | | <1.0 | | |
| | Water | % | ASTM D6304 | | <1.0▲ 0.234 | | |
| | ppm Water | ppm | ASTM D6304 | | ▲ 2340 | | |
| | Glycol | % | *ASTM D2982 | 21000 | NEG | | |
| | Soot % | % | *ASTM D2362 | | 0.1 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 6.3 | | |
| | Sulfation | Abs/.1mm | *ASTM D7024 | | 16.5 | | |
| | 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 | | *Visual | >0.1 | 0.2% | | |
| | | | visuai | >0.1 | 0.2 /0 | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 44 | | |
| | Boron | ppm | ASTM D5185m | | 109 | | |
| 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 | | 13 | | |
| | Molybdenum | ppm | ASTM D5185m | | 9 | | |
| | Manganese | ppm | ASTM D5185m | | 2 | | |
| | Magnesium | ppm | ASTM D5185m | | 843 | | |
| | Calcium | ppm | ASTM D5185m | | 1402 | | |
| | Phosphorus | ppm | ASTM D5185m | | 844 | | |
| | Zinc | ppm | ASTM D5185m | | 1058 | | |
| | Sulfur | ppm | ASTM D5185m | | 3861 | | |
| | Ovidation | Abo/ 1mm | *AGTM D7/1/ | > 25 | 11.1 | | |

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

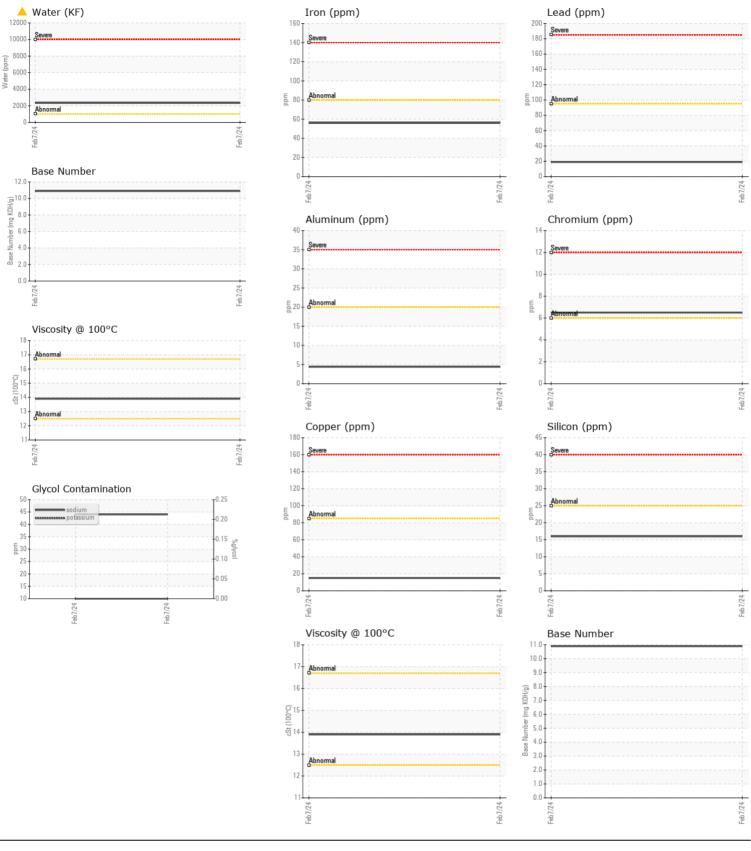
ASTM D445

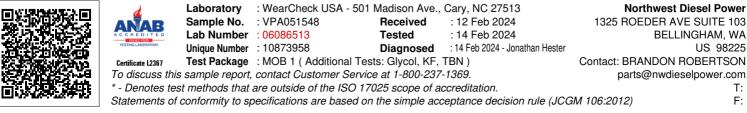
Base Number (BN) mg KOH/g ASTM D2896

11.1

10.9

13.9





Contact/Location: BRANDON ROBERTSON - VP759009