



CONSTRUCTION EQUIPMENT

128876 IAA VOLVO L90H 624105 - DIESEL ENGINE



Sample No: VCP420741
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 128876 IAA



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP420741 | VCP386021 | VCP333037 | VCP329765 |
| Sample Date | 07 Aug 2023 | 23 Jan 2023 | 11 Aug 2022 | 05 Apr 2022 |
| Machine Hours | 11090 | 9962 | 8864 | 8320 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

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OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 100°C | cSt | 12.9 | 13.7 | 13.2 | 13.0 |
| Base Number (BN) | mg KOH/g | 9.7 | 9.4 | 11.5 | 11.6 |
| Oxidation (PA) | % | 85 | 80 | 88 | 88 |



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|------|------|------|
| Water | % | NEG | NEG | NEG | NEG |
| Soot % | % | 0.3 | 0.3 | 0.3 | 0.2 |
| Nitration (PA) | % | 73 | 63 | 68 | 68 |
| Sulfation (PA) | % | 59 | 55 | 66 | 65 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 4 | 6 | 6 | 6 |
| Sodium | ppm | 4 | 3 | 1 | 3 |
| Potassium | ppm | 2 | 0 | <1 | <1 |



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 6 | 8 | 8 | 9 |
| Copper | ppm | <1 | 1 | <1 | <1 |
| Lead | ppm | 1 | 0 | 0 | <1 |
| Tin | ppm | <1 | 0 | 0 | <1 |
| Aluminum | ppm | 4 | 3 | 2 | 4 |
| Chromium | ppm | 0 | <1 | <1 | <1 |
| Molybdenum | ppm | 40 | 40 | 41 | 40 |
| Nickel | ppm | 1 | 0 | 0 | <1 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | <1 |
| Manganese | ppm | <1 | <1 | <1 | <1 |
| Vanadium | ppm | <1 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1654 | 1431 | 1744 | 1804 |
| Magnesium | ppm | 515 | 495 | 485 | 550 |
| Zinc | ppm | 1157 | 969 | 1158 | 1154 |
| Phosphorus | ppm | 988 | 861 | 960 | 986 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 23 | 30 | 27 | 44 |

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: VOLVO0053
Unique No: 10964407
Signed: Wes Davis
Report Date: 05 Apr 2024



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GRAPHS

