



CONSTRUCTION EQUIPMENT

6005 VOLVO A40G 341221 - DIESEL ENGINE



Sample No: VCP434277
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 6005



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-----|
| Sample Number | VCP434277 | VCP345065 | VCP233960 | --- |
| Sample Date | 22 Apr 2024 | 07 Dec 2021 | 11 Feb 2019 | --- |
| Machine Hours | 8970 | 6583 | 4173 | --- |
| Oil Hours | 0 | 500 | 0 | --- |
| Oil Changed | Changed | Changed | Not Changd | --- |
| Sample Status | NORMAL | SEVERE | NORMAL | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|-------|-----|
| Visc @ 100°C | cSt | 12.4 | 12.5 | 14.17 | --- |
| Base Number (BN) | mg KOH/g | 8.9 | 9.9 | --- | --- |
| Oxidation (PA) | % | 58 | 82 | 59 | --- |

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.



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|------|-------|-----|
| Water | % | NEG | NEG | 0.116 | --- |
| Soot % | % | 0.2 | 0.4 | 0.1 | --- |
| Nitration (PA) | % | 64 | 79 | 68 | --- |
| Sulfation (PA) | % | 51 | 64 | 53 | --- |
| Glycol | % | NEG | NEG | NEG | --- |
| Fuel | % | <1.0 | <1.0 | <1.0 | --- |
| Silicon | ppm | 6 | 177 | 8 | --- |
| Sodium | ppm | <1 | 9 | 2 | --- |
| Potassium | ppm | <1 | 17 | 15 | --- |



WEAR METALS

| | | | | | |
|------------|-----|--------------|-----|----|-----|
| Iron | ppm | 7 | 155 | 4 | --- |
| Copper | ppm | <1 | 5 | 3 | --- |
| Lead | ppm | 0 | 3 | <1 | --- |
| Tin | ppm | <1 | 3 | 0 | --- |
| Aluminum | ppm | 3 | 49 | 1 | --- |
| Chromium | ppm | <1 | 8 | <1 | --- |
| Molybdenum | ppm | 65 | 42 | <1 | --- |
| Nickel | ppm | 0 | 4 | <1 | --- |
| Titanium | ppm | 0 | 4 | 88 | --- |
| Silver | ppm | 0 | <1 | 0 | --- |
| Manganese | ppm | <1 | 2 | <1 | --- |
| Vanadium | ppm | 0 | <1 | <1 | --- |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|-----|
| Calcium | ppm | 1114 | 1957 | 1707 | --- |
| Magnesium | ppm | 876 | 569 | 396 | --- |
| Zinc | ppm | 1145 | 1085 | 1096 | --- |
| Phosphorus | ppm | 973 | 982 | 957 | --- |
| Barium | ppm | 0 | 0 | 0 | --- |
| Boron | ppm | 20 | 42 | 117 | --- |

Depot: LEOMAD
Unique No: 11007267
Signed: Jonathan Hester
Report Date: 06 May 2024



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GRAPHS

