



CONSTRUCTION EQUIPMENT

VOLVO EC380 314346 - DIESEL ENGINE



Sample No: VCP449696
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP449696 | VCP436223 | VCP396708 | VCP402513 |
| Sample Date | 18 May 2024 | 31 Oct 2023 | 14 Jun 2023 | 22 Feb 2023 |
| Machine Hours | 3416 | 2009 | 2770 | 2268 |
| Oil Hours | 0 | 0 | 500 | 500 |
| Oil Changed | N/A | N/A | Changed | Changed |
| Sample Status | ATTENTION | ATTENTION | SEVERE | NORMAL |

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
 8418 PALM RIVER ROAD
 TAMPA, FL
 US 33619
 Contact: KENNY HANEY
 khaney@flaglerce.com
 T: (813)630-0077
 F: (813)630-2233

OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|-----|------|
| Visc @ 100°C | cSt | 11.8 | 11.6 | 9.5 | 12.3 |
| Base Number (BN) | mg KOH/g | 9.2 | 9.0 | 8.6 | 10.0 |
| Oxidation (PA) | % | 79 | 83 | 78 | 83 |

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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

CONTAMINATION

| | | | | | |
|----------------|-----|----------------|-----|------|------|
| Water | % | NEG | NEG | NEG | NEG |
| Soot % | % | 0.1 | 0.1 | 0.1 | 0.1 |
| Nitration (PA) | % | 68 | 70 | 74 | 73 |
| Sulfation (PA) | % | 59 | 60 | 58 | 61 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | 1.5 | 11.2 | <1.0 |
| Silicon | ppm | 5 | 5 | 2 | 4 |
| Sodium | ppm | 3 | 2 | 2 | 0 |
| Potassium | ppm | 2 | 2 | 1 | 1 |

WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 5 | 6 | 0 | 5 |
| Copper | ppm | <1 | 1 | 1 | 3 |
| Lead | ppm | <1 | <1 | <1 | <1 |
| Tin | ppm | <1 | <1 | 0 | <1 |
| Aluminum | ppm | 2 | 2 | 6 | 2 |
| Chromium | ppm | 0 | <1 | 0 | 0 |
| Molybdenum | ppm | 43 | 47 | 51 | 43 |
| Nickel | ppm | <1 | <1 | 0 | <1 |
| Titanium | ppm | <1 | <1 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | 0 | <1 |
| Vanadium | ppm | 0 | <1 | 0 | 0 |

ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1747 | 1658 | 1809 | 1649 |
| Magnesium | ppm | 482 | 517 | 540 | 494 |
| Zinc | ppm | 1132 | 1173 | 1186 | 1088 |
| Phosphorus | ppm | 981 | 964 | 1001 | 882 |
| Barium | ppm | 0 | <1 | 12 | 2 |
| Boron | ppm | 32 | 23 | 20 | 27 |

Depot: VOLVO0093
Unique No: 11050446
Signed: Sean Felton
Report Date: 30 May 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

