



CONSTRUCTION EQUIPMENT

VOLVO A40G 352356 - DIESEL ENGINE



Sample No: VCP442804
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP442804 | VCP375016 | VCP328969 | VCP310798 |
| Sample Date | 17 Jan 2024 | 09 Aug 2022 | 30 Sep 2021 | 26 Apr 2021 |
| Machine Hours | 5047 | 3490 | 2378 | 1620 |
| Oil Hours | 0 | 0 | 0 | 500 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | ABNORMAL | ABNORMAL |

ALTA EQUIPMENT COMPANY
 5151 DR MARTIN LUTHER KING BLVD
 FORT MYERS, FL
 US 33905
 Contact: TODD LARK
 tlark@altaequipfl.com
 T:
 F: (239)481-3302



OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 100°C | cSt | 12.4 | 13.0 | 12.9 | 12.8 |
| Base Number (BN) | mg KOH/g | 9.3 | 10.4 | --- | --- |
| Oxidation (PA) | % | 82 | 88 | 86 | 75 |

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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 | NEG | NEG |
| Soot % | % | 0.3 | 0.5 | 0.3 | 0.2 |
| Nitration (PA) | % | 78 | 77 | 84 | 91 |
| Sulfation (PA) | % | 60 | 67 | 68 | 63 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | 0.5 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 6 | 4 | 18 | 4 |
| Sodium | ppm | 2 | 3 | 3 | 2 |
| Potassium | ppm | 1 | 0 | <1 | <1 |



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|------|------|
| Iron | ppm | 8 | 11 | 15 | 8 |
| Copper | ppm | 3 | 1 | ▲ 62 | ▲ 61 |
| Lead | ppm | <1 | <1 | 1 | <1 |
| Tin | ppm | <1 | <1 | 2 | 2 |
| Aluminum | ppm | 3 | 1 | 14 | 2 |
| Chromium | ppm | <1 | <1 | <1 | <1 |
| Molybdenum | ppm | 40 | 49 | 44 | 22 |
| Nickel | ppm | 2 | 0 | 4 | 1 |
| Titanium | ppm | 0 | 0 | <1 | <1 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | 1 | <1 |
| Vanadium | ppm | <1 | 0 | <1 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1513 | 1619 | 1852 | 1515 |
| Magnesium | ppm | 495 | 559 | 554 | 593 |
| Zinc | ppm | 1014 | 1115 | 1141 | 966 |
| Phosphorus | ppm | 897 | 890 | 992 | 807 |
| Barium | ppm | 0 | <1 | 0 | 0 |
| Boron | ppm | 24 | 23 | 22 | 30 |

Depot: VOLVO0090
Unique No: 10843061
Signed: Wes Davis
Report Date: 24 Jan 2024



CONSTRUCTION EQUIPMENT



GRAPHS

