



CONSTRUCTION EQUIPMENT

VOLVO L120H 632529 - DIESEL ENGINE



Sample No: VCP436716
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP436716 | VCP421353 | VCP365153 | VCP298928 |
| Sample Date | 07 Dec 2023 | 07 Sep 2023 | 08 Jun 2023 | 17 Mar 2021 |
| Machine Hours | 17016 | 16483 | 15919 | 8400 |
| Oil Hours | 0 | 0 | 0 | 986 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | ATTENTION | NORMAL |

FORESTRY RESOURCES

4353 MICHIGAN LINK
 FORT MYERS, FL
 US 33916
 Contact: COREY MUELLER



OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|--------|------|
| Visc @ 100°C | cSt | 13.6 | 14.2 | ▲ 18.4 | 14.0 |
| Base Number (BN) | mg KOH/g | 9.7 | 9.3 | 6.9 | --- |
| Oxidation (PA) | % | 83 | 86 | 173 | 69 |

T: (239)872-1856
 F:

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 | NEG | NEG |
| Soot % | % | 0.3 | 0.5 | 1.5 | 0.8 |
| Nitration (PA) | % | 72 | 91 | 157 | 86 |
| Sulfation (PA) | % | 61 | 63 | 107 | 63 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 6 | 7 | 15 | 6 |
| Sodium | ppm | 4 | 4 | 5 | 2 |
| Potassium | ppm | 3 | 3 | 1 | <1 |



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 16 | 24 | 79 | 23 |
| Copper | ppm | 2 | 3 | 6 | 2 |
| Lead | ppm | <1 | 3 | 13 | 2 |
| Tin | ppm | 0 | 1 | 4 | 1 |
| Aluminum | ppm | 6 | 7 | 12 | 10 |
| Chromium | ppm | <1 | <1 | 2 | 1 |
| Molybdenum | ppm | 53 | 71 | 87 | 90 |
| Nickel | ppm | 0 | <1 | <1 | <1 |
| Titanium | ppm | 0 | <1 | <1 | <1 |
| Silver | ppm | 0 | 0 | 0 | <1 |
| Manganese | ppm | <1 | <1 | 1 | <1 |
| Vanadium | ppm | 0 | <1 | 0 | <1 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1695 | 1990 | 2374 | 2024 |
| Magnesium | ppm | 542 | 642 | 915 | 373 |
| Zinc | ppm | 1184 | 1374 | 1682 | 1299 |
| Phosphorus | ppm | 974 | 1073 | 1375 | 1126 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 29 | 25 | 9 | 18 |

Depot: FORFOTFL
Unique No: 10780113
Signed: Wes Davis
Report Date: 12 Dec 2023



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GRAPHS

