



CONSTRUCTION EQUIPMENT

19245 VOLVO L120H 633323 - DIESEL ENGINE



Sample No: VCP412186
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 19245



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP412186 | --- | --- | --- |
| Sample Date | 23 Jul 2023 | --- | --- | --- |
| Machine Hours | 1560 | --- | --- | --- |
| Oil Hours | 1560 | --- | --- | --- |
| Oil Changed | Changed | --- | --- | --- |
| Sample Status | SEVERE | --- | --- | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | █ 12.9 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 7.5 | --- | --- | --- |
| Oxidation (PA) | % | 82 | --- | --- | --- |

Diagnosis
 Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The aluminum level is abnormal. The copper level is abnormal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

CONTAMINATION

| | | | | | |
|----------------|-----|-------|-----|-----|-----|
| Soot % | % | █ 0.6 | --- | --- | --- |
| Nitration (PA) | % | 83 | --- | --- | --- |
| Sulfation (PA) | % | 62 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | <1.0 | --- | --- | --- |
| Silicon | ppm | ▲ 22 | --- | --- | --- |
| Sodium | ppm | █ 4 | --- | --- | --- |
| Potassium | ppm | █ 2 | --- | --- | --- |

WEAR METALS

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | █ 62 | --- | --- | --- |
| Copper | ppm | ▲ 38 | --- | --- | --- |
| Lead | ppm | █ 6 | --- | --- | --- |
| Tin | ppm | █ 6 | --- | --- | --- |
| Aluminum | ppm | ● 110 | --- | --- | --- |
| Chromium | ppm | █ 6 | --- | --- | --- |
| Molybdenum | ppm | █ 38 | --- | --- | --- |
| Nickel | ppm | █ <1 | --- | --- | --- |
| Titanium | ppm | █ 16 | --- | --- | --- |
| Silver | ppm | █ 1 | --- | --- | --- |
| Manganese | ppm | █ 4 | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |

ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | █ 1704 | --- | --- | --- |
| Magnesium | ppm | █ 661 | --- | --- | --- |
| Zinc | ppm | █ 1256 | --- | --- | --- |
| Phosphorus | ppm | █ 1013 | --- | --- | --- |
| Barium | ppm | █ 10 | --- | --- | --- |
| Boron | ppm | █ 35 | --- | --- | --- |

Depot: HILGREVC
Unique No: 10586919
Signed: Don Baldrige
Report Date: 05 Aug 2023



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GRAPHS

