



CONSTRUCTION EQUIPMENT

1204 VOLVO EC350E 314678 - DIESEL ENGINE



Sample No: VCP442615
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 1204



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP442615 | --- | --- | --- |
| Sample Date | 20 Oct 2023 | --- | --- | --- |
| Machine Hours | 548 | --- | --- | --- |
| Oil Hours | 0 | --- | --- | --- |
| Oil Changed | Changed | --- | --- | --- |
| Sample Status | ABNORMAL | --- | --- | --- |

VCES- VOLVO CONSTRUCTION EQUIPMENT
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 T:
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OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | ▲ 10.8 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | ■ 5.5 | --- | --- | --- |
| Oxidation (PA) | % | ■ 66 | --- | --- | --- |



CONTAMINATION

| | | | | | |
|----------------|-----|-------|-----|-----|-----|
| Soot % | % | ■ 0.1 | --- | --- | --- |
| Nitration (PA) | % | ■ 82 | --- | --- | --- |
| Sulfation (PA) | % | ■ 55 | --- | --- | --- |
| Glycol | % | ■ NEG | --- | --- | --- |
| Fuel | % | ■ 1.1 | --- | --- | --- |
| Silicon | ppm | ■ 25 | --- | --- | --- |
| Sodium | ppm | ■ 3 | --- | --- | --- |
| Potassium | ppm | ■ 2 | --- | --- | --- |



WEAR METALS

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | ■ 9 | --- | --- | --- |
| Copper | ppm | ▲ 330 | --- | --- | --- |
| Lead | ppm | ■ 4 | --- | --- | --- |
| Tin | ppm | ■ 2 | --- | --- | --- |
| Aluminum | ppm | ■ 2 | --- | --- | --- |
| Chromium | ppm | ■ 0 | --- | --- | --- |
| Molybdenum | ppm | ■ 75 | --- | --- | --- |
| Nickel | ppm | ■ <1 | --- | --- | --- |
| Titanium | ppm | ■ 0 | --- | --- | --- |
| Silver | ppm | ■ 0 | --- | --- | --- |
| Manganese | ppm | ■ 2 | --- | --- | --- |
| Vanadium | ppm | ■ 0 | --- | --- | --- |



ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | ■ 2017 | --- | --- | --- |
| Magnesium | ppm | ■ 88 | --- | --- | --- |
| Zinc | ppm | ■ 1179 | --- | --- | --- |
| Phosphorus | ppm | ■ 954 | --- | --- | --- |
| Barium | ppm | ■ 0 | --- | --- | --- |
| Boron | ppm | ■ 37 | --- | --- | --- |

Diagnosis

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. 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 acceptable for the time in service.

Depot: VOLVO4485
Unique No: 10736463
Signed: Don Baldrige
Report Date: 13 Nov 2023



CONSTRUCTION EQUIPMENT



GRAPHS

Iron (ppm)



Lead (ppm)



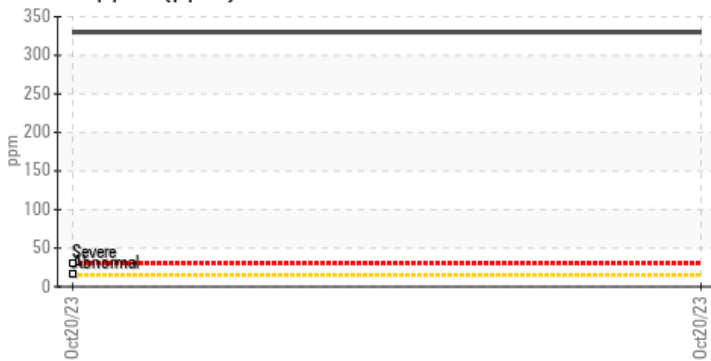
Aluminum (ppm)



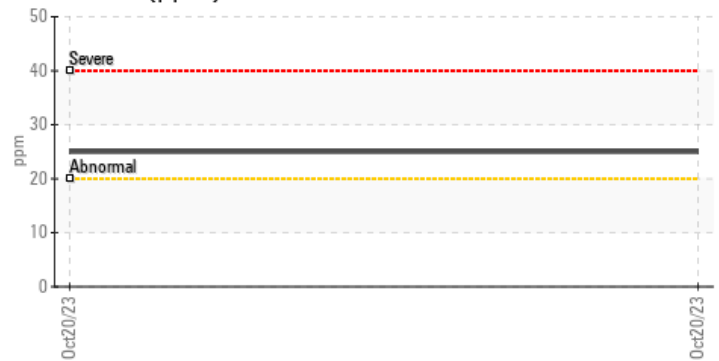
Chromium (ppm)



Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

