



CONSTRUCTION EQUIPMENT

VOLVO A30G 752813 - DIESEL ENGINE



Sample No: VCP432130D
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | VCP432130D | VCP393535 | --- | --- |
| Sample Date | 08 Nov 2023 | 03 Mar 2023 | --- | --- |
| Machine Hours | 1710 | 512 | --- | --- |
| Oil Hours | 0 | 512 | --- | --- |
| Oil Changed | Changed | Changed | --- | --- |
| Sample Status | ABNORMAL | ABNORMAL | --- | --- |

RIPA AND ASSOCIATES

10149 FISHER AVENUE
 TAMPA, FL
 US 33619
 Contact: PM Services
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 T:
 F:



OIL CONDITION

| | | | | | |
|------------------|----------|-------------|--------|-----|-----|
| Visc @ 100°C | cSt | 12.9 | ▲ 10.4 | --- | --- |
| Base Number (BN) | mg KOH/g | 8.4 | ■ 6.2 | --- | --- |
| Oxidation (PA) | % | 78 | 58 | --- | --- |

Diagnosis

Oil and filter 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 has decreased, but is still abnormal. All other 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 acceptable for the time in service.



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|-------|-----|-----|
| Water | % | NEG | NEG | --- | --- |
| Soot % | % | 0.5 | ■ 0.4 | --- | --- |
| Nitration (PA) | % | 77 | 87 | --- | --- |
| Sulfation (PA) | % | 62 | 56 | --- | --- |
| Glycol | % | NEG | ■ 0.0 | --- | --- |
| Fuel | % | <1.0 | ■ 0.5 | --- | --- |
| Silicon | ppm | 5 | ■ 29 | --- | --- |
| Sodium | ppm | 0 | ■ 3 | --- | --- |
| Potassium | ppm | 2 | ■ 2 | --- | --- |



WEAR METALS

| | | | | | |
|------------|-----|--------------|-------|-----|-----|
| Iron | ppm | 13 | ■ 28 | --- | --- |
| Copper | ppm | ▲ 50 | ▲ 338 | --- | --- |
| Lead | ppm | <1 | ■ 3 | --- | --- |
| Tin | ppm | 1 | ■ 3 | --- | --- |
| Aluminum | ppm | 1 | ■ 3 | --- | --- |
| Chromium | ppm | <1 | ■ <1 | --- | --- |
| Molybdenum | ppm | 45 | ■ 79 | --- | --- |
| Nickel | ppm | 4 | ■ <1 | --- | --- |
| Titanium | ppm | <1 | <1 | --- | --- |
| Silver | ppm | <1 | ■ <1 | --- | --- |
| Manganese | ppm | <1 | ■ 6 | --- | --- |
| Vanadium | ppm | 0 | <1 | --- | --- |



ADDITIVES

| | | | | | |
|------------|-----|--------------|--------|-----|-----|
| Calcium | ppm | 1623 | ■ 2054 | --- | --- |
| Magnesium | ppm | 453 | 92 | --- | --- |
| Zinc | ppm | 1105 | ■ 1128 | --- | --- |
| Phosphorus | ppm | 926 | ■ 931 | --- | --- |
| Barium | ppm | <1 | ■ 0 | --- | --- |
| Boron | ppm | 21 | ■ 22 | --- | --- |

Depot: RIPTAM
Unique No: 10870778
Signed: Don Baldrige
Report Date: 09 Feb 2024



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GRAPHS

