



CONSTRUCTION EQUIPMENT

VOLVO EC35C 4231 - DIESEL ENGINE



Sample No: VCP298018
Oil Type: SHELL ROTELLA T4 15W40
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP298018 | VCP298017 | VCP243390 | VCP243375 |
| Sample Date | 08 Jul 2023 | 13 Apr 2022 | 22 Aug 2020 | 05 Nov 2019 |
| Machine Hours | 6000 | 5428 | 4513 | 4228 |
| Oil Hours | 290 | 310 | 293 | 318 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

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OIL CONDITION

| | | | | | |
|----------------|-----|-------------|------|------|------|
| Visc @ 100°C | cSt | 12.9 | 14.2 | 14.1 | 13.8 |
| Oxidation (PA) | % | 73 | 75 | 73 | 73 |



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|------|------|------|
| Soot % | % | 0.1 | 0 | 0.1 | 0 |
| Nitration (PA) | % | 68 | 73 | 69 | 78 |
| Sulfation (PA) | % | 62 | 65 | 60 | 66 |
| Glycol | % | NEG | NEG | 0.0 | 0.0 |
| Fuel | % | <1.0 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 4 | 3 | 2 | 2 |
| Sodium | ppm | 6 | 4 | 1 | 1 |
| Potassium | ppm | 4 | 7 | 7 | 7 |



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 5 | 6 | 6 | 7 |
| Copper | ppm | <1 | <1 | <1 | <1 |
| Lead | ppm | 0 | 0 | 0 | 0 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | 2 | 2 | 2 | 2 |
| Chromium | ppm | 0 | 0 | <1 | <1 |
| Molybdenum | ppm | 24 | <1 | <1 | <1 |
| Nickel | ppm | 0 | <1 | <1 | <1 |
| Titanium | ppm | 0 | 0 | <1 | <1 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | 0 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 3163 | 2721 | 2180 | 2283 |
| Magnesium | ppm | 166 | 14 | 13 | 14 |
| Zinc | ppm | 1647 | 1398 | 1159 | 1196 |
| Phosphorus | ppm | 1445 | 1175 | 980 | 999 |
| Barium | ppm | 0 | 0 | <1 | <1 |
| Boron | ppm | 131 | 157 | 168 | 154 |

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Les taux d'usure de tous les composants sont normaux. Il n'y a aucun indice de contamination dans l'huile. Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'état de l'huile est acceptable pour la durée de service.

Depot: VOLVO0230
Unique No: 5617299
Signed: Kevin Marson
Report Date: 26 Jul 2023



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VOLVO GRAPHS

