



CONSTRUCTION EQUIPMENT

S50403378 VOLVO EC350EL 3 14508 - DIESEL ENGINE



Sample No: VCP440877
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: S50403378



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP440877 | --- | --- | --- |
| Sample Date | 18 Apr 2024 | --- | --- | --- |
| Machine Hours | 1070 | --- | --- | --- |
| Oil Hours | 0 | --- | --- | --- |
| Oil Changed | Changed | --- | --- | --- |
| Sample Status | SEVERE | --- | --- | --- |

VCES- VOLVO CONSTRUCTION EQUIPMENT
 22099 KNABE ROAD
 CORONA, CA
 US 92883
 Contact: OSCAR DEL CAMPO
 oscar.delcampo@vcesvolvo.com
 T: (951)277-7620
 F: (951)277-4550



OIL CONDITION

| | | | | | |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C | cSt | ▲ 12.3 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | ■ 6.8 | --- | --- | --- |
| Oxidation (PA) | % | 44 | --- | --- | --- |

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 severe. Piston wear is indicated. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.



CONTAMINATION

| | | | | | |
|----------------|-----|-------|-----|-----|-----|
| Water | % | NEG | --- | --- | --- |
| Soot % | % | ■ 0.1 | --- | --- | --- |
| Nitration (PA) | % | 56 | --- | --- | --- |
| Sulfation (PA) | % | 46 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | ■ 2.3 | --- | --- | --- |
| Silicon | ppm | ■ 22 | --- | --- | --- |
| Sodium | ppm | ■ 3 | --- | --- | --- |
| Potassium | ppm | ■ 2 | --- | --- | --- |



WEAR METALS

| | | | | | |
|------------|-----|-------|-----|-----|-----|
| Iron | ppm | ■ 54 | --- | --- | --- |
| Copper | ppm | ■ 10 | --- | --- | --- |
| Lead | ppm | ■ 2 | --- | --- | --- |
| Tin | ppm | ■ 4 | --- | --- | --- |
| Aluminum | ppm | ▲ 100 | --- | --- | --- |
| Chromium | ppm | ■ 13 | --- | --- | --- |
| Molybdenum | ppm | ■ 11 | --- | --- | --- |
| Nickel | ppm | ■ <1 | --- | --- | --- |
| Titanium | ppm | ■ <1 | --- | --- | --- |
| Silver | ppm | ■ <1 | --- | --- | --- |
| Manganese | ppm | ■ 4 | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |



ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | ■ 2223 | --- | --- | --- |
| Magnesium | ppm | ■ 131 | --- | --- | --- |
| Zinc | ppm | ■ 986 | --- | --- | --- |
| Phosphorus | ppm | ■ 905 | --- | --- | --- |
| Barium | ppm | ■ <1 | --- | --- | --- |
| Boron | ppm | ■ 2 | --- | --- | --- |

Depot: VOLVO4486
Unique No: 11056871
Signed: Jonathan Hester
Report Date: 03 Jun 2024

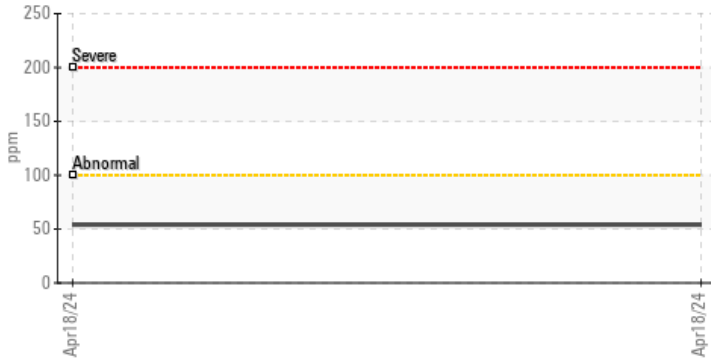


CONSTRUCTION EQUIPMENT



GRAPHS

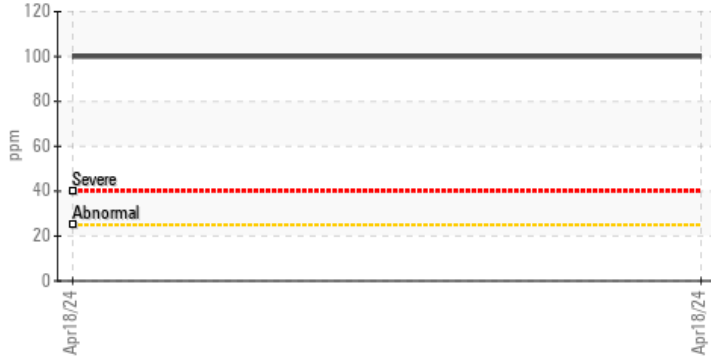
Iron (ppm)



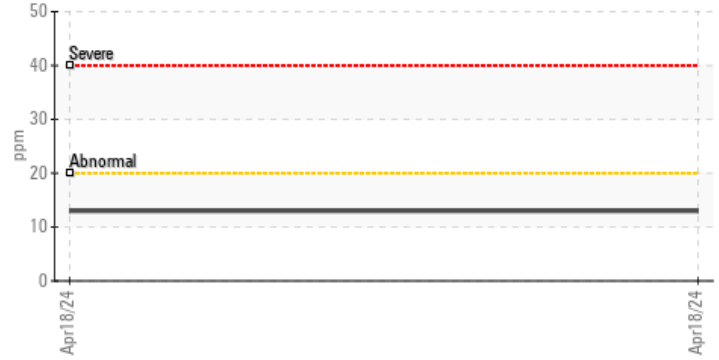
Lead (ppm)



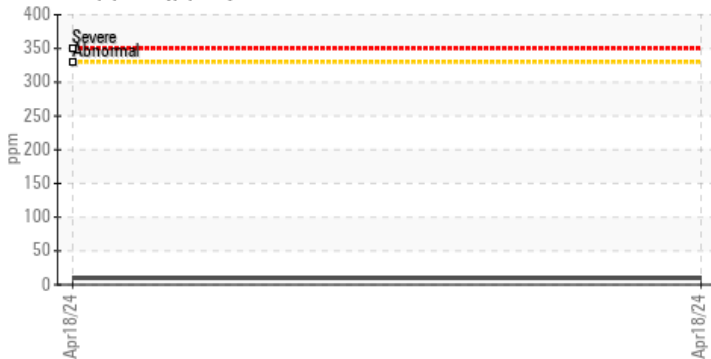
Aluminum (ppm)



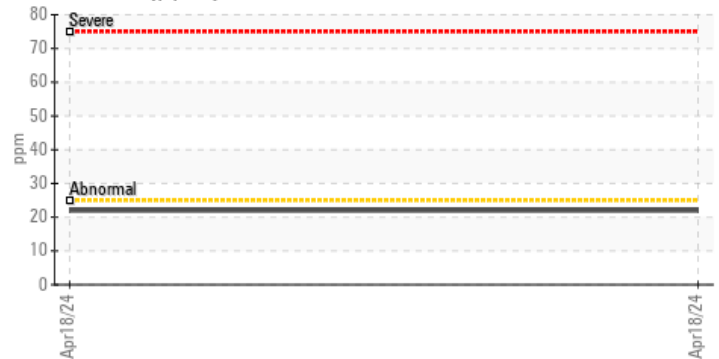
Chromium (ppm)



Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

