



CONSTRUCTION EQUIPMENT

10008 VOLVO A30G 742134 - DIESEL ENGINE



Sample No: VCP388512
Oil Type: CHEVRON 15W40
Job No: 10008



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP388512 | VCP386408 | VCP341115 | VCP300231 |
| Sample Date | 04 Dec 2023 | 06 Feb 2023 | 15 Jun 2022 | 13 Jan 2021 |
| Machine Hours | 3535 | 2957 | 2535 | 1967 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | ATTENTION | ABNORMAL | ATTENTION | ATTENTION |

CLEAN EARTH - UPPER MARLBORO
 6250 DOWER HOUSE RD
 UPPER MARLBORO, MD
 US 20772
 Contact: TIMMY GOVER
 tgover@harsco.com
 T:
 F:

OIL CONDITION

| | | | | | |
|------------------|----------|---------------|--------|--------|--------|
| Visc @ 100°C | cSt | ▲ 11.7 | ▲ 11.5 | ▲ 11.2 | ▲ 12.0 |
| Base Number (BN) | mg KOH/g | ■ 7.1 | ■ 8.1 | ■ 7.6 | --- |
| Oxidation (PA) | % | 62 | 63 | 63 | 53 |

CONTAMINATION

| | | | | | |
|----------------|-----|----------------|-------|-------|-------|
| Water | % | NEG | NEG | NEG | NEG |
| Soot % | % | ■ 0.5 | ■ 0.4 | ■ 0.5 | ■ 0.4 |
| Nitration (PA) | % | 63 | 60 | 69 | 78 |
| Sulfation (PA) | % | 61 | 61 | 60 | 53 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | ▲ 3.4 | <1.0 | <1.0 |
| Silicon | ppm | ■ 6 | ■ 5 | ■ 6 | ■ 5 |
| Sodium | ppm | ■ 0 | ■ <1 | ■ <1 | ■ 2 |
| Potassium | ppm | ■ 2 | ■ 2 | ■ 1 | ■ 8 |

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. 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. Confirm oil type.

WEAR METALS

| | | | | | |
|------------|-----|----------------|-------|-------|------|
| Iron | ppm | ■ 12 | ■ 9 | ■ 14 | ■ 12 |
| Copper | ppm | ■ <1 | ■ <1 | ■ 1 | ■ 1 |
| Lead | ppm | ■ <1 | ■ 0 | ■ <1 | ■ 1 |
| Tin | ppm | ■ 1 | ■ <1 | ■ <1 | ■ 0 |
| Aluminum | ppm | ■ 2 | ■ 2 | ■ 4 | ■ 2 |
| Chromium | ppm | ■ <1 | ■ <1 | ■ <1 | ■ <1 |
| Molybdenum | ppm | ■ 93 | ■ 109 | ■ 114 | ■ 25 |
| Nickel | ppm | ■ <1 | ■ 0 | ■ 0 | ■ <1 |
| Titanium | ppm | 2 | <1 | 2 | ■ 15 |
| Silver | ppm | ■ 0 | ■ 0 | ■ 0 | ■ 0 |
| Manganese | ppm | ■ <1 | ■ <1 | ■ <1 | ■ <1 |
| Vanadium | ppm | 0 | 0 | <1 | 0 |

ADDITIVES

| | | | | | |
|------------|-----|---------------|--------|--------|--------|
| Calcium | ppm | ■ 1355 | ■ 1392 | ■ 1514 | ■ 1571 |
| Magnesium | ppm | ■ 439 | ■ 513 | ■ 667 | ■ 732 |
| Zinc | ppm | ■ 1067 | ■ 941 | ■ 900 | ■ 776 |
| Phosphorus | ppm | ■ 873 | ■ 768 | ■ 717 | ■ 693 |
| Barium | ppm | ■ 11 | ■ 0 | ■ 0 | ■ 0 |
| Boron | ppm | ■ 355 | ■ 332 | ■ 280 | ■ 64 |

Depot: CLEUPP
Unique No: 10782841
Signed: Jonathan Hester
Report Date: 15 Dec 2023

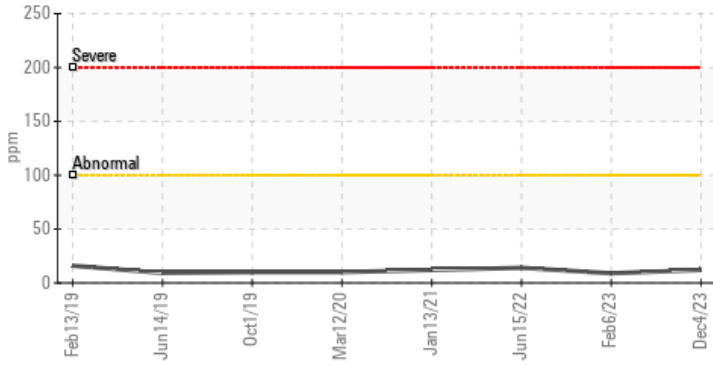


CONSTRUCTION EQUIPMENT

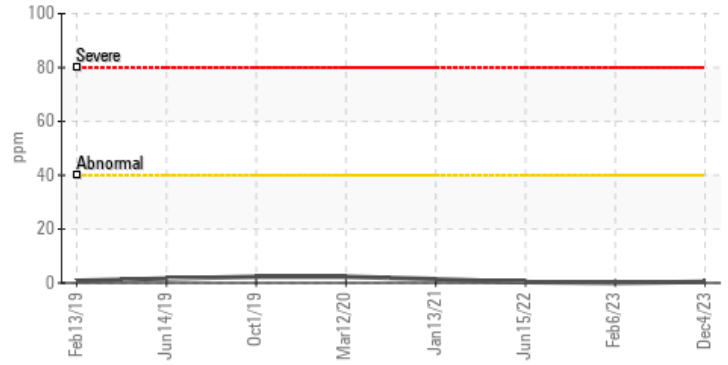


GRAPHS

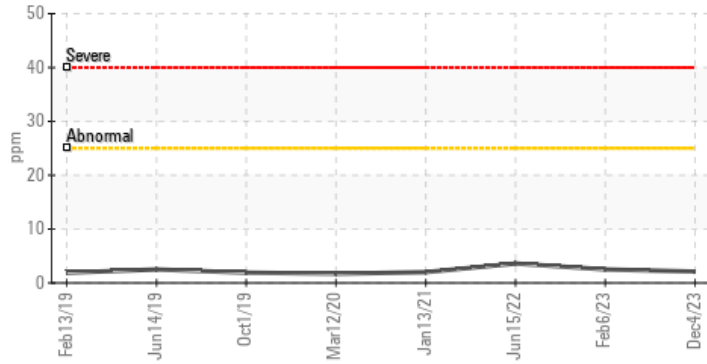
Iron (ppm)



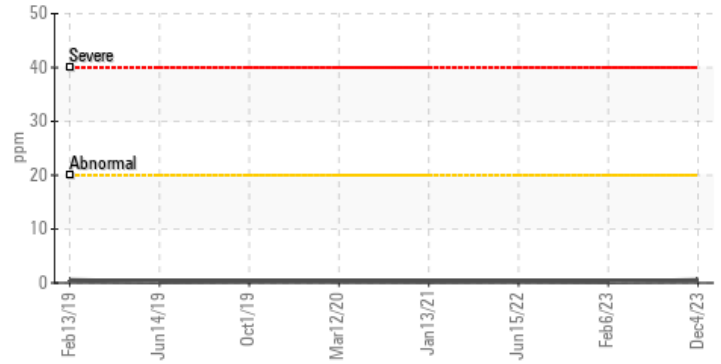
Lead (ppm)



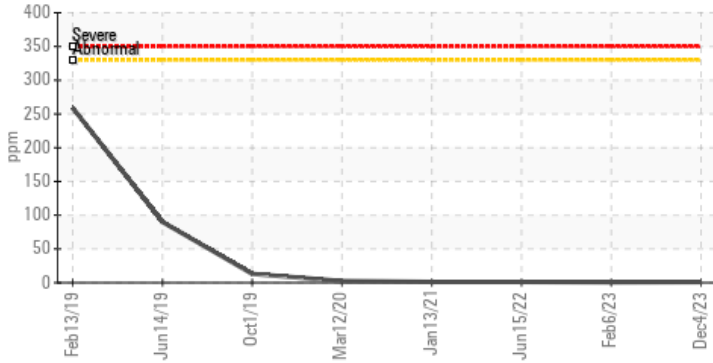
Aluminum (ppm)



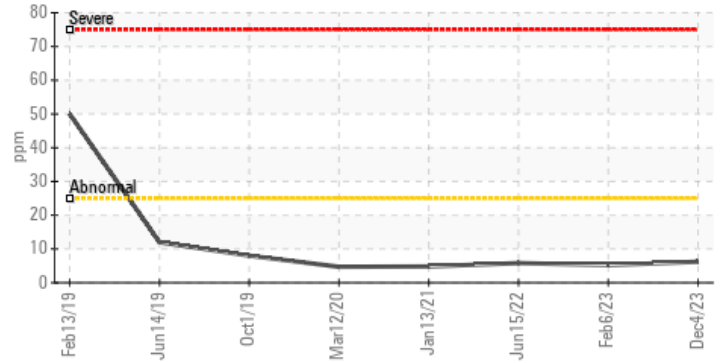
Chromium (ppm)



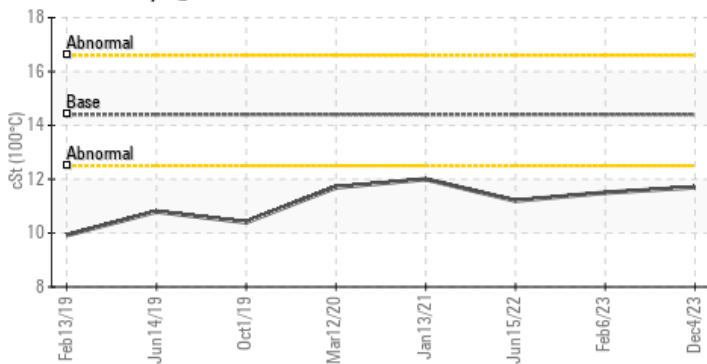
Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

