



CONSTRUCTION EQUIPMENT

2007 IAA RANCHO CORD VOLVO L90H 623813 - DIESEL ENGINE



Sample No: VCP439154
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 2007 IAA RANCHO CORD



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP439154 | VCP441712 | VCP424070 | VCP375083 |
| Sample Date | 01 Apr 2024 | 17 Nov 2023 | 27 Jun 2023 | 20 Oct 2022 |
| Machine Hours | 11400 | 10894 | 10281 | 9430 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Not Changd |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

VCES- VOLVO CONSTRUCTION EQUIPMENT
 8594 FRUITRIDGE ROAD
 SACRAMENTO, CA
 US 95826
 Contact: RAY KRANZUSCH
 ray.kranzusch@vcesvolvo.com
 T:
 F:



OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 100°C | cSt | 13.4 | 13.9 | 14.6 | 14.1 |
| Base Number (BN) | mg KOH/g | 10.0 | 9.6 | 7.6 | 5.7 |
| Oxidation (PA) | % | 87 | 90 | 110 | 85 |

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|------|------|------|
| Water | % | NEG | NEG | NEG | NEG |
| Soot % | % | 1.3 | 1.6 | 2.3 | 0.5 |
| Nitration (PA) | % | 81 | 89 | 121 | 104 |
| Sulfation (PA) | % | 65 | 68 | 77 | 69 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 7 | 6 | 15 | 8 |
| Sodium | ppm | 2 | 3 | 4 | <1 |
| Potassium | ppm | 2 | <1 | <1 | 2 |



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 13 | 14 | 52 | 21 |
| Copper | ppm | 1 | <1 | 3 | 1 |
| Lead | ppm | <1 | 0 | 0 | <1 |
| Tin | ppm | <1 | <1 | 2 | <1 |
| Aluminum | ppm | 6 | 5 | 13 | 6 |
| Chromium | ppm | <1 | <1 | 3 | 1 |
| Molybdenum | ppm | 43 | 38 | 44 | 44 |
| Nickel | ppm | <1 | 0 | <1 | 0 |
| Titanium | ppm | <1 | 0 | <1 | <1 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | 1 | <1 |
| Vanadium | ppm | <1 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1760 | 1637 | 1907 | 1818 |
| Magnesium | ppm | 524 | 503 | 562 | 504 |
| Zinc | ppm | 1141 | 1124 | 1323 | 1206 |
| Phosphorus | ppm | 958 | 931 | 1043 | 999 |
| Barium | ppm | 1 | 0 | 0 | 0 |
| Boron | ppm | 27 | 19 | 20 | 19 |

Depot: VOLVO4485
Unique No: 10979836
Signed: Wes Davis
Report Date: 17 Apr 2024

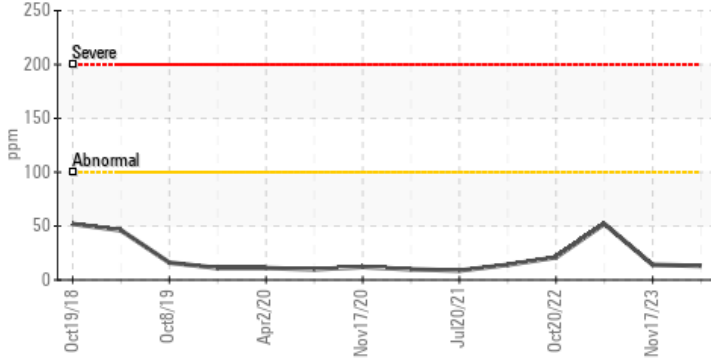


CONSTRUCTION EQUIPMENT

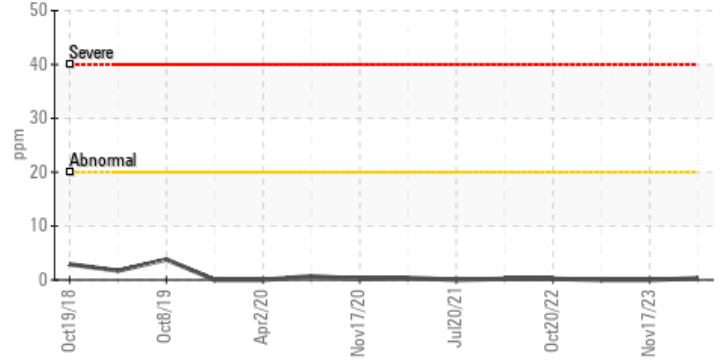


GRAPHS

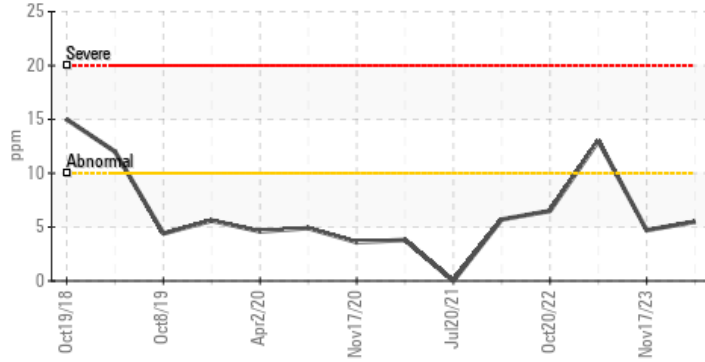
Iron (ppm)



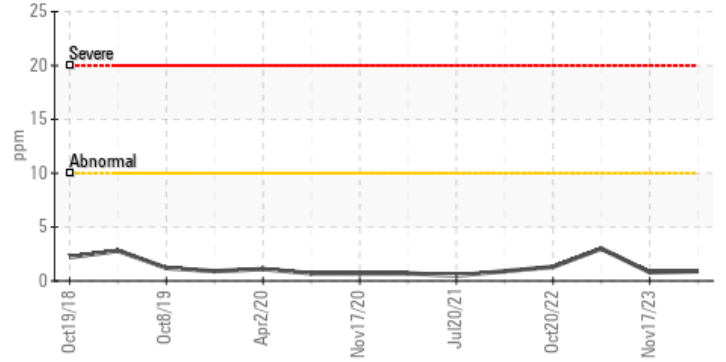
Lead (ppm)



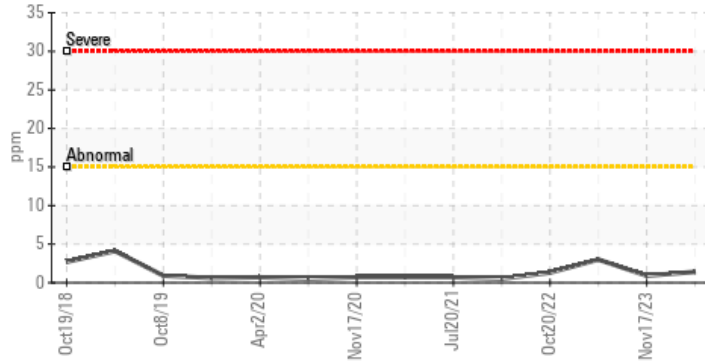
Aluminum (ppm)



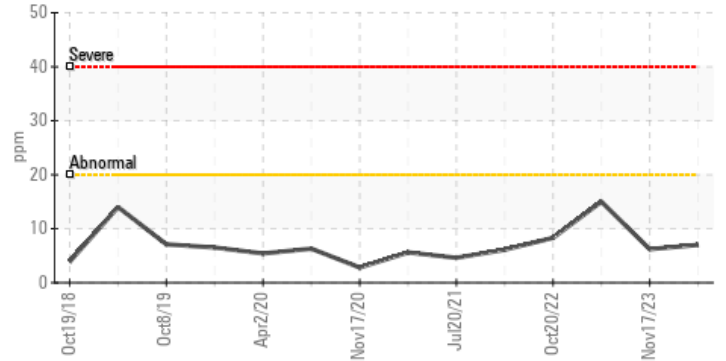
Chromium (ppm)



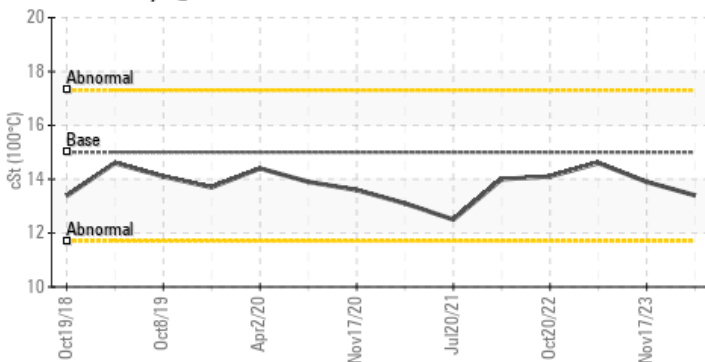
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

