



CONSTRUCTION EQUIPMENT

SWO-072401 - HYDRAULIC SYSTEM



Sample No: VCP443925
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SWO-072401



SAMPLE INFORMATION

| Sample Number | VCP443925 | VCP452431 | VCP431022 | VCP412976 |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Date | 31 May 2024 | 04 Mar 2024 | 03 Nov 2023 | 11 Jul 2023 |
| Machine Hours | 10125 | 9648 | 9145 | 8645 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Not Chngd | Changed | Not Chngd | Not Chngd |
| Sample Status | NORMAL | NORMAL | ABNORMAL | NORMAL |

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OIL CONDITION

| Visc @ 40°C | cSt | 43.1 | 41.3 | 42.0 | 42.2 |
|------------------|----------|-------------|------|------|------|
| Acid Number (AN) | mg KOH/g | 0.45 | 0.43 | 0.39 | 0.36 |



CONTAMINATION

| Water | % | NEG | NEG | NEG | NEG |
|-------------------|-----|-----------------|----------|----------|----------|
| Particles >4µm | | 3496 | 1599 | 6639 | 3225 |
| Particles >6µm | | 1092 | 426 | 2646 | 734 |
| Particles >14µm | | 94 | 32 | 321 | 40 |
| ISO 4406:1999 (c) | | 19/17/14 | 18/16/12 | 20/19/16 | 19/17/12 |
| Silicon | ppm | 4 | 5 | 7 | 6 |
| Sodium | ppm | 0 | 0 | 0 | 2 |
| Potassium | ppm | <1 | 0 | 2 | <1 |

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 amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 6 | 11 | 14 | 13 |
| Copper | ppm | 2 | 3 | 4 | 3 |
| Lead | ppm | <1 | 0 | 1 | <1 |
| Tin | ppm | <1 | 0 | 0 | 0 |
| Aluminum | ppm | 2 | 1 | 2 | <1 |
| Chromium | ppm | <1 | 1 | 1 | 2 |
| Molybdenum | ppm | 2 | 0 | <1 | 1 |
| Nickel | ppm | 0 | 0 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 | <1 | 0 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | <1 |



ADDITIVES

| | | | | | |
|------------|-----|--------------|-----|-----|-----|
| Calcium | ppm | 131 | 94 | 98 | 100 |
| Magnesium | ppm | 33 | 46 | 9 | 9 |
| Zinc | ppm | 504 | 471 | 440 | 441 |
| Phosphorus | ppm | 416 | 375 | 326 | 359 |
| Barium | ppm | <1 | <1 | 3 | 0 |
| Boron | ppm | 0 | 0 | 0 | 0 |

Depot: SAIBIR
Unique No: 11070795
Signed: Angela Borella
Report Date: 11 Jun 2024

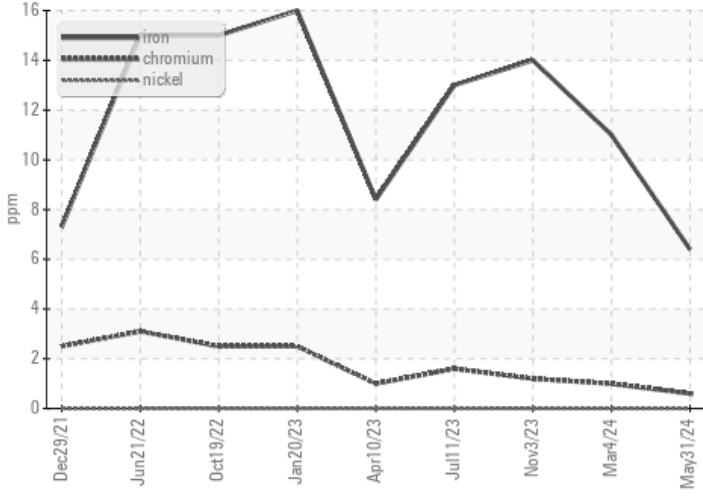


CONSTRUCTION EQUIPMENT

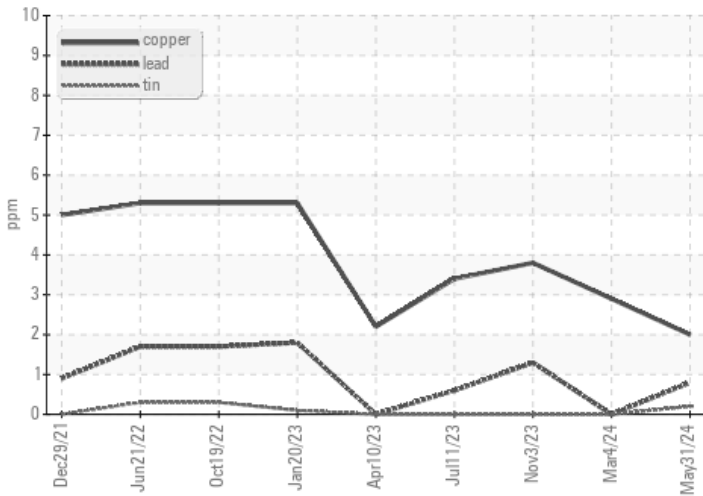


GRAPHS

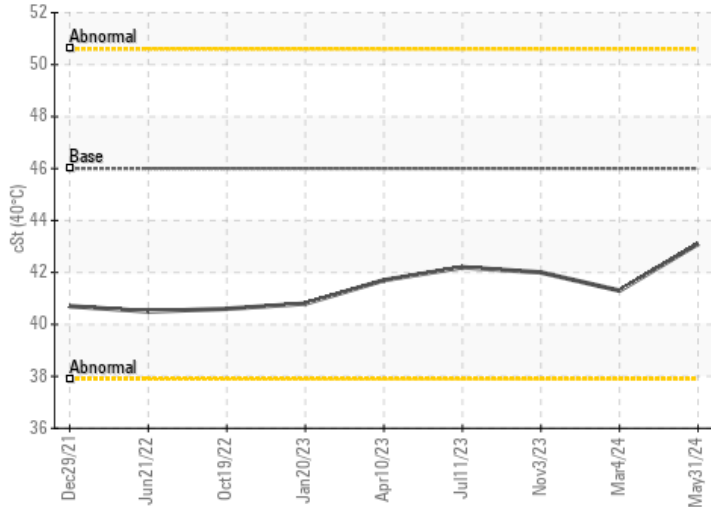
Ferrous Alloys



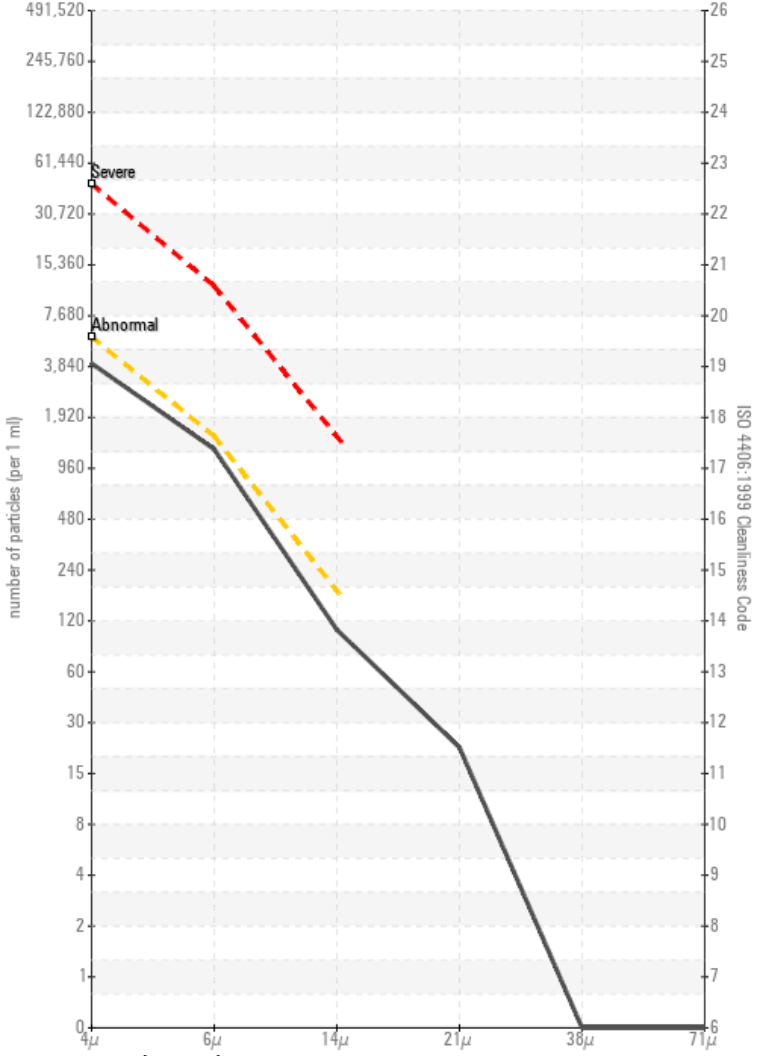
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

