



CONSTRUCTION EQUIPMENT

SPM619899 VOLVO EC380E 310775 - HYDRAULIC SYSTEM



Sample No: VCP415059
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM619899



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP415059 | VCP421925 | VCP383208 | VCP387430 |
| Sample Date | 12 Oct 2023 | 26 Apr 2023 | 22 Feb 2023 | 16 Nov 2022 |
| Machine Hours | 22964 | 21313 | 20570 | 19763 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Not Changd | Changed | Not Changd | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

UNITED SCRAP

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 US 60804
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 T:
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OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 40°C | cSt | 42.3 | 42.4 | 41.2 | 42.3 |
| Acid Number (AN) | mg KOH/g | 0.44 | 0.50 | 0.48 | 0.47 |



CONTAMINATION

| | | | | | |
|-------------------|-----------------|--------------|----------|----------|---|
| Particles >4µm | 4338 | 33238 | 12231 | 9881 | |
| Particles >6µm | 848 | 9965 | 3307 | 2703 | |
| Particles >14µm | 51 | 886 | 202 | 221 | |
| ISO 4406:1999 (c) | 19/17/13 | 22/20/17 | 21/19/15 | 20/19/15 | |
| Silicon | ppm | <1 | <1 | 1 | 2 |
| Sodium | ppm | 0 | 0 | <1 | 1 |
| Potassium | ppm | 0 | 0 | 0 | 0 |

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 0 | 3 | 3 | 4 |
| Copper | ppm | 1 | 2 | 3 | 8 |
| Lead | ppm | 0 | 0 | 0 | 0 |
| Tin | ppm | 0 | 0 | 0 | <1 |
| Aluminum | ppm | 0 | <1 | 0 | <1 |
| Chromium | ppm | 1 | 2 | 1 | 1 |
| Molybdenum | ppm | 0 | 1 | <1 | <1 |
| Nickel | ppm | <1 | 0 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | <1 | 0 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------------|-----|-----|-----|
| Calcium | ppm | 63 | 85 | 65 | 62 |
| Magnesium | ppm | 6 | 3 | <1 | <1 |
| Zinc | ppm | 499 | 461 | 363 | 451 |
| Phosphorus | ppm | 378 | 379 | 321 | 363 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 0 | 0 | 0 | 0 |

Depot: UNICICIL
Unique No: 10712951
Signed: Wes Davis
Report Date: 27 Oct 2023

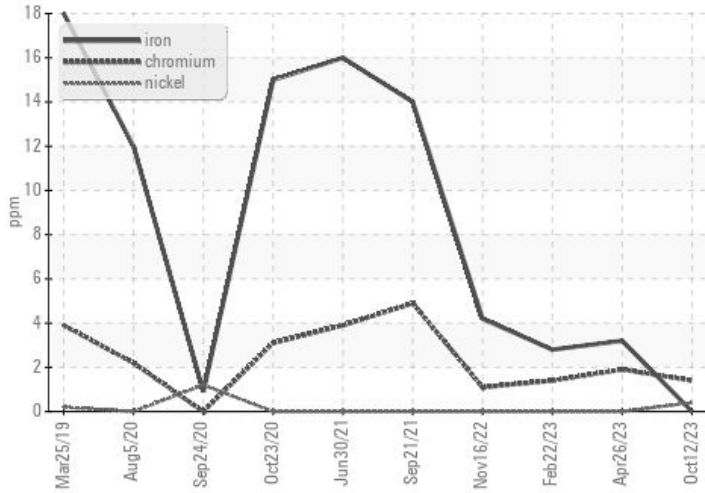


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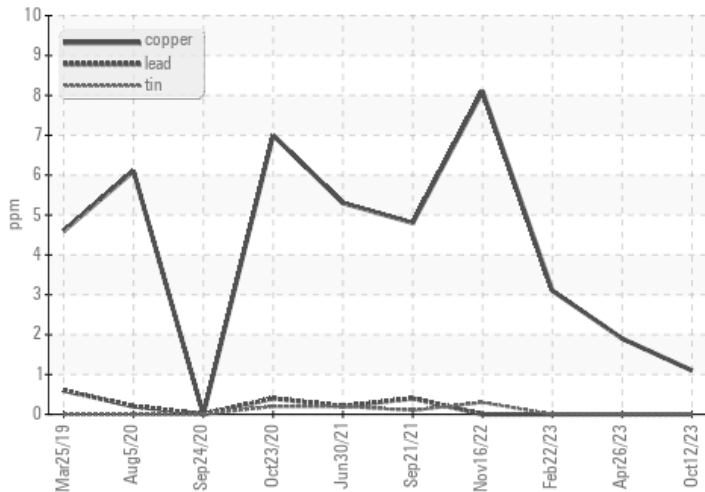


GRAPHS

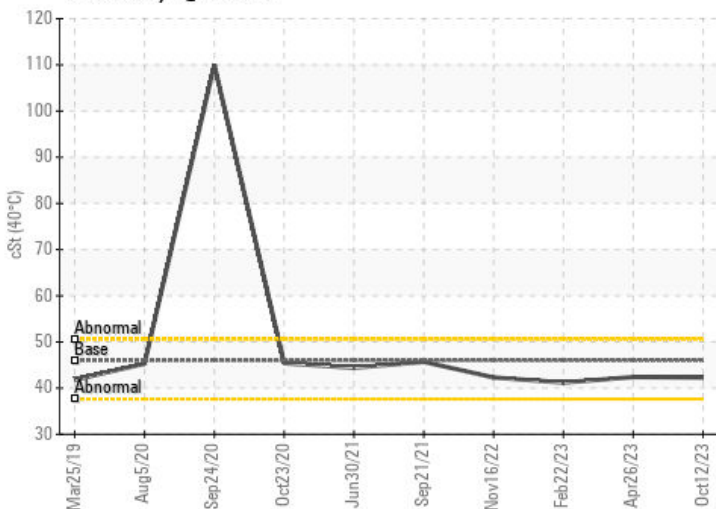
Ferrous Alloys



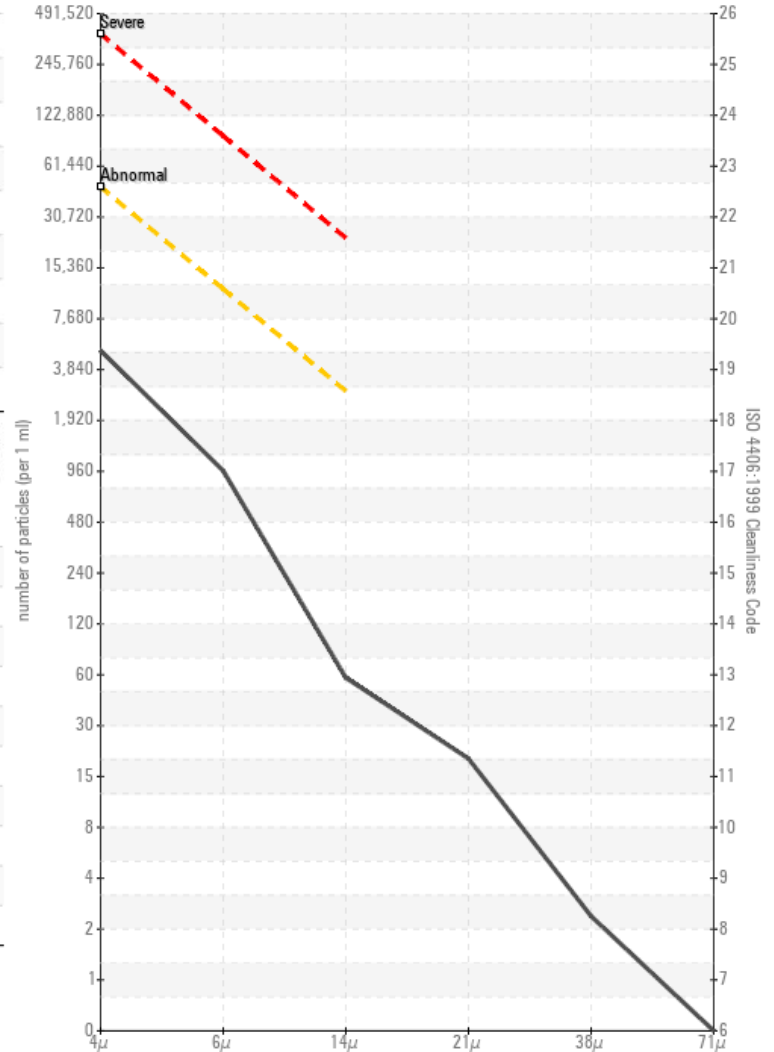
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

