



CONSTRUCTION EQUIPMENT

SPM619897 VOLVO L90H 624199 - HYDRAULIC SYSTEM



Sample No: VCP415334
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM619897



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP415334 | VCP354485 | VCP422183 | VCP396406 |
| Sample Date | 12 Oct 2023 | 22 Aug 2023 | 06 Jun 2023 | 28 Feb 2023 |
| Machine Hours | 9889 | 9032 | 9032 | 8356 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Not Chngd | Not Chngd | Not Chngd | Changed |
| Sample Status | ABNORMAL | NORMAL | ABNORMAL | NORMAL |

UNITED SCRAP

1545 S CICERO AVE
 CICERO, IL
 US 60804
 Contact: RON LUCHTENBURG
 rluchten@unitedscrap.com
 T:
 F:



OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 40°C | cSt | 43.5 | 43.3 | 43.5 | 43.1 |
| Acid Number (AN) | mg KOH/g | 0.46 | 0.42 | 0.50 | 0.44 |



CONTAMINATION

| | | | | | |
|-------------------|-----|-----------------|----------|----------|----------|
| Particles >4µm | | 10179 | 1463 | 12235 | 1390 |
| Particles >6µm | | 2803 | 252 | 2111 | 233 |
| Particles >14µm | | 232 | 14 | 65 | 18 |
| ISO 4406:1999 (c) | | 21/19/15 | 18/15/11 | 21/18/13 | 18/15/11 |
| Silicon | ppm | <1 | 1 | 2 | 2 |
| Sodium | ppm | 0 | 0 | 0 | 1 |
| Potassium | ppm | 0 | <1 | <1 | 0 |

Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 2 | 5 | 5 | 4 |
| Copper | ppm | 2 | 3 | 3 | 2 |
| Lead | ppm | <1 | 1 | 1 | <1 |
| Tin | ppm | 0 | 0 | <1 | 0 |
| Aluminum | ppm | <1 | 0 | 0 | <1 |
| Chromium | ppm | 5 | 5 | 4 | 4 |
| Molybdenum | ppm | 0 | <1 | 3 | <1 |
| Nickel | ppm | <1 | 0 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | 0 | 0 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------------|-----|-----|-----|
| Calcium | ppm | 126 | 123 | 130 | 121 |
| Magnesium | ppm | 60 | 53 | 53 | 53 |
| Zinc | ppm | 992 | 916 | 955 | 883 |
| Phosphorus | ppm | 762 | 713 | 729 | 669 |
| Barium | ppm | 0 | 2 | 1 | 0 |
| Boron | ppm | 0 | 0 | 0 | 0 |

Depot: UNICICIL
Unique No: 10712934
Signed: Don Baldrige
Report Date: 28 Oct 2023

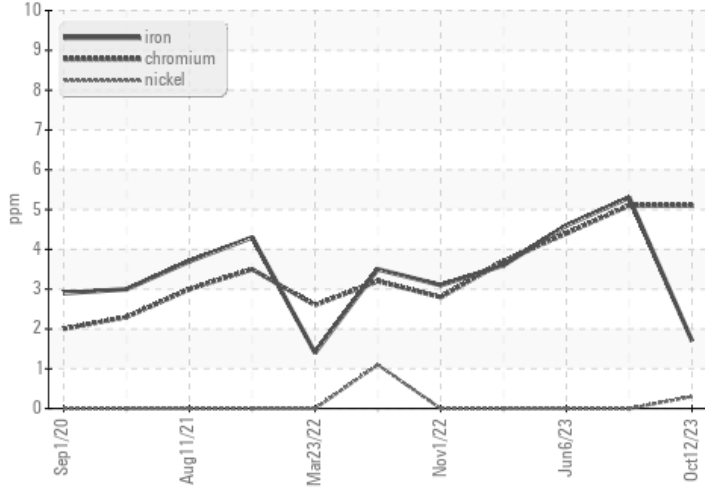


CONSTRUCTION EQUIPMENT

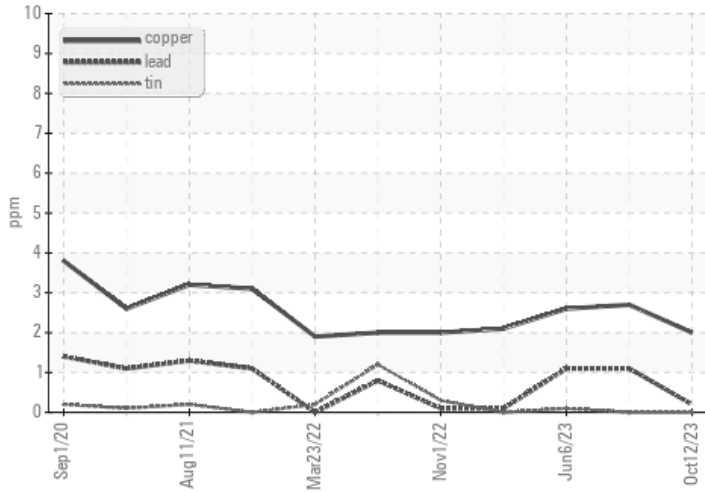


GRAPHS

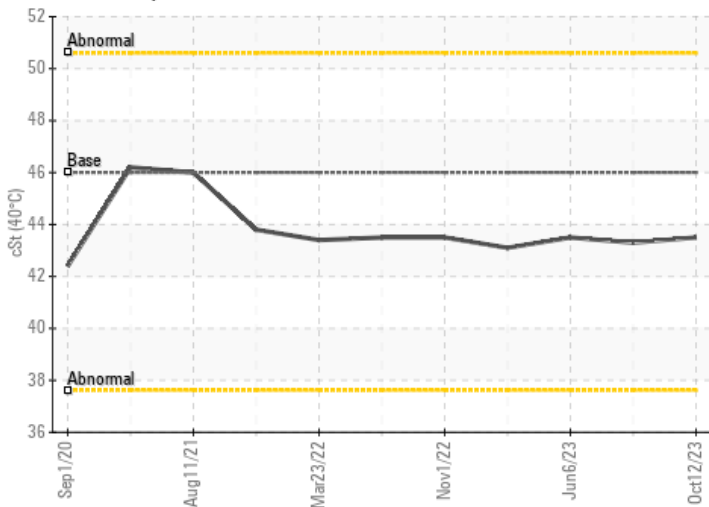
Ferrous Alloys



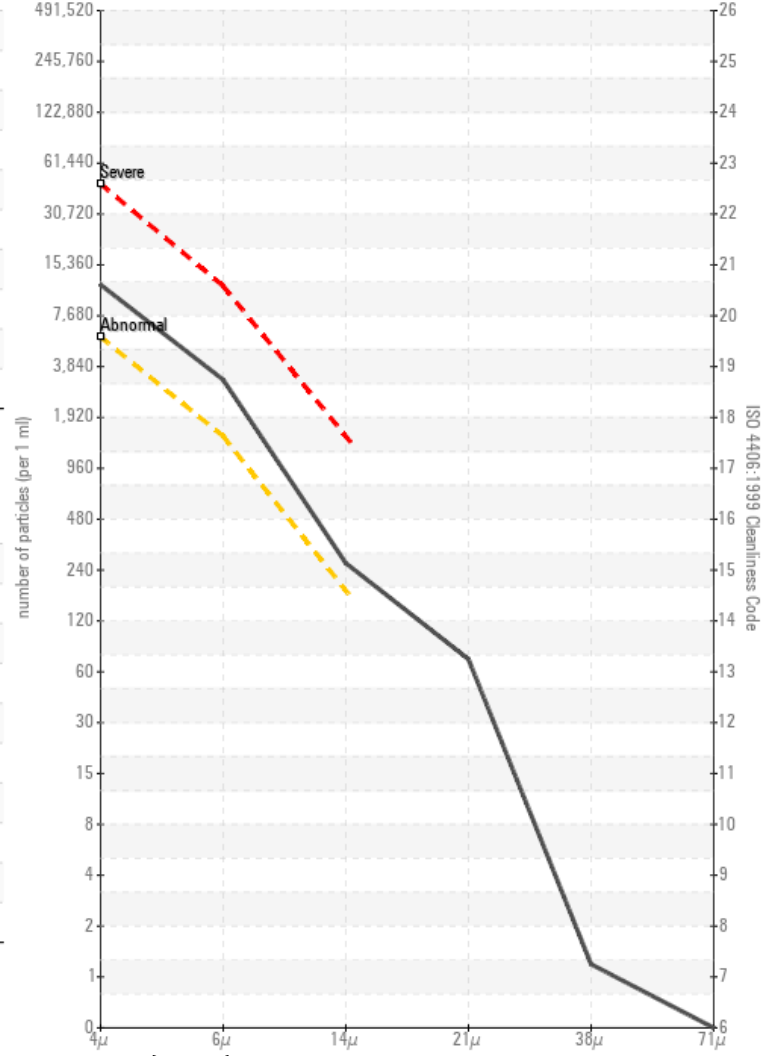
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

