



CONSTRUCTION EQUIPMENT

VOLVO L110H 05632247 - HYDRAULIC SYSTEM



Sample No: VCP436460
Oil Type: VALVOLINE ALLFLEET 10W
Job No:



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP436460 | VCP438672 | VCP407159 | VCP407934 |
| Sample Date | 09 Apr 2024 | 12 Feb 2024 | 16 Oct 2023 | 09 Aug 2023 |
| Machine Hours | 6919 | 0 | 5396 | 4793 |
| Oil Hours | 1523 | 0 | 0 | 0 |
| Oil Changed | Not Chngd | Changed | Changed | Not Chngd |
| Sample Status | ABNORMAL | ABNORMAL | NORMAL | NORMAL |

CITY CARTING
 221 OLD GATE LN
 MILFORD, CT
 US 06460
 Contact: TAVINS BANKS
 tavins@citycart.net
 T: (203)223-3885
 F:

OIL CONDITION

| | | | | | |
|------------------|----------|-------------|------|------|------|
| Visc @ 40°C | cSt | 40.9 | 41.1 | 42.3 | 41.0 |
| Acid Number (AN) | mg KOH/g | 0.97 | 1.00 | 0.24 | 0.42 |

CONTAMINATION

| | | | | | |
|-------------------|-----|-----------------|----------|----------|----------|
| Water | % | NEG | NEG | NEG | NEG |
| Particles >4µm | | 6189 | 27122 | 1181 | 2040 |
| Particles >6µm | | 2049 | 8524 | 165 | 432 |
| Particles >14µm | | 172 | 543 | 11 | 48 |
| ISO 4406:1999 (c) | | 20/18/15 | 22/20/16 | 17/15/11 | 18/16/13 |
| Silicon | ppm | 3 | 6 | 4 | 3 |
| Sodium | ppm | 4 | 3 | 0 | 0 |
| Potassium | ppm | <1 | 3 | 2 | <1 |

Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 4 | 3 | 8 | 7 |
| Copper | ppm | 4 | 4 | 3 | 2 |
| Lead | ppm | <1 | 2 | 2 | 2 |
| Tin | ppm | <1 | <1 | 0 | 0 |
| Aluminum | ppm | 0 | 1 | 2 | <1 |
| Chromium | ppm | 2 | 2 | 3 | 2 |
| Molybdenum | ppm | 37 | 44 | 18 | 17 |
| Nickel | ppm | 0 | <1 | 0 | 0 |
| Titanium | ppm | 0 | 0 | <1 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 | <1 | 0 | 0 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |

ADDITIVES

| | | | | | |
|------------|-----|--------------|------|-----|-----|
| Calcium | ppm | 1353 | 1393 | 811 | 800 |
| Magnesium | ppm | 118 | 137 | 58 | 58 |
| Zinc | ppm | 627 | 812 | 633 | 615 |
| Phosphorus | ppm | 593 | 688 | 508 | 505 |
| Barium | ppm | <1 | 0 | 3 | 0 |
| Boron | ppm | 32 | 38 | 16 | 15 |

Depot: CITMILCON
Unique No: 10980326
Signed: Wes Davis
Report Date: 17 Apr 2024

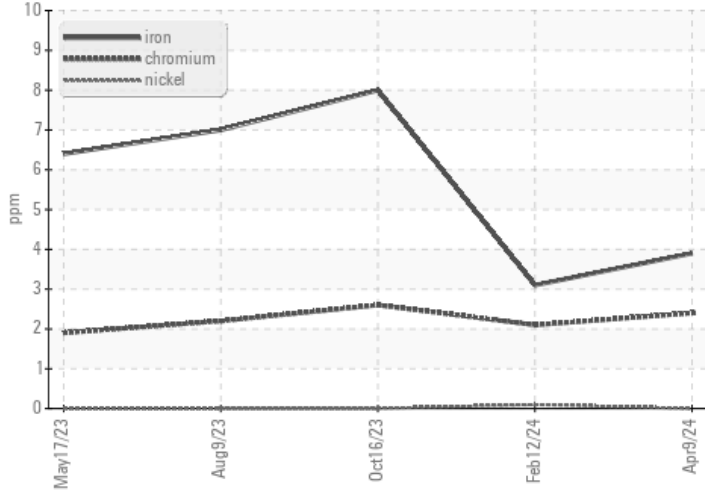


CONSTRUCTION EQUIPMENT

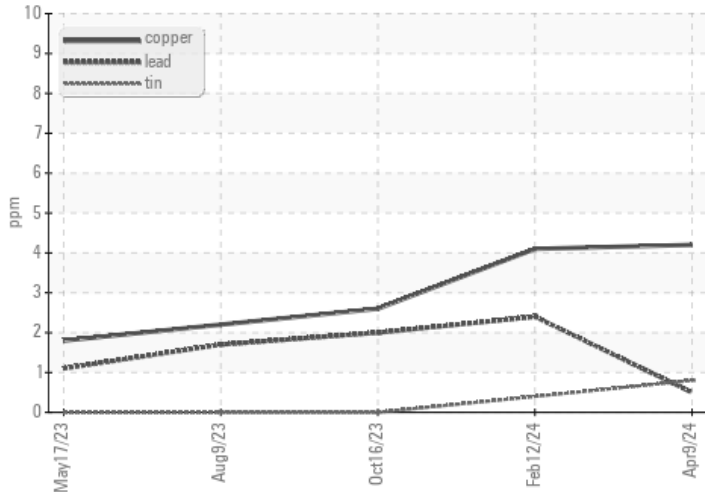


GRAPHS

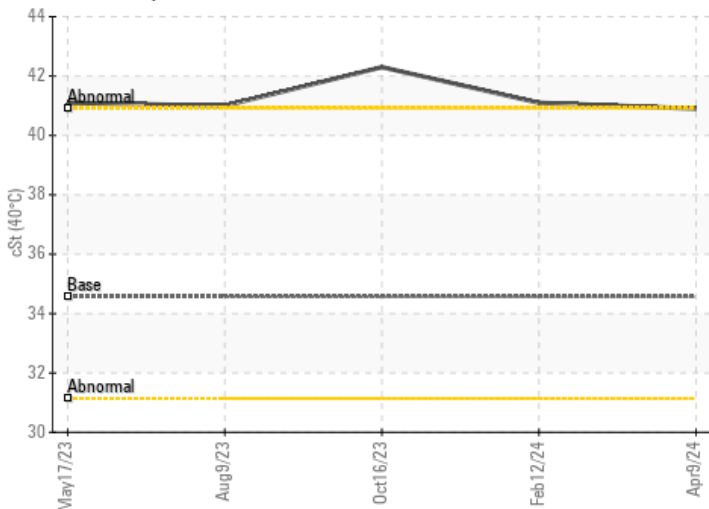
Ferrous Alloys



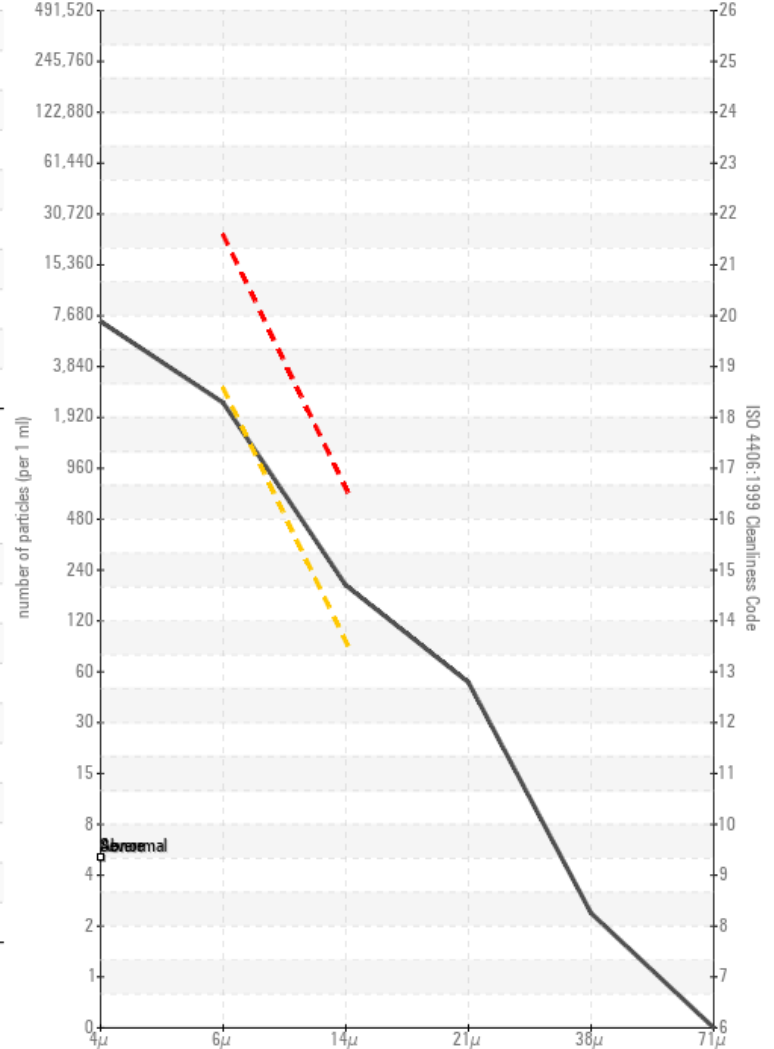
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

