



CONSTRUCTION EQUIPMENT

SPM619831 VOLVO EC380E 315082 - HYDRAULIC SYSTEM



Sample No: VCP414538
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM619831



SAMPLE INFORMATION

Sample Number	VCP414538	VCP420646	VCP403582	VCP366246
Sample Date	11 Oct 2023	13 Jul 2023	16 Mar 2023	26 Aug 2022
Machine Hours	3862	3213	2412	540
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ATTENTION	NORMAL	ATTENTION	ABNORMAL

UNITED SCRAP

1545 S CICERO AVE
 CICERO, IL
 US 60804
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 T:
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OIL CONDITION

Visc @ 40°C	cSt	▲ 95.8	■ 41.7	■ 42.0	■ 43.0
Acid Number (AN)	mg KOH/g	■ 2.46	■ 0.51	■ 0.81	■ 0.49



CONTAMINATION

Particles >4µm		■ 2472	■ 5612	▲ 74898	▲ 120386
Particles >6µm		■ 608	■ 1498	■ 8370	▲ 47558
Particles >14µm		■ 76	■ 98	■ 39	▲ 3743
ISO 4406:1999 (c)		18/16/13	20/18/14	23/20/12	24/23/19
Silicon	ppm	■ <1	■ 2	■ 7	■ 1
Sodium	ppm	■ 0	■ 0	■ 0	■ 0
Potassium	ppm	■ <1	■ 2	■ <1	■ 2



WEAR METALS

Iron	ppm	■ 0	■ 4	■ 7	■ 4
Copper	ppm	■ 0	■ 8	■ 19	■ 7
Lead	ppm	■ 0	■ <1	■ <1	■ <1
Tin	ppm	■ 0	■ <1	■ <1	■ <1
Aluminum	ppm	■ 0	■ 0	■ 0	■ <1
Chromium	ppm	■ 0	■ <1	■ 1	■ 0
Molybdenum	ppm	■ 0	■ 1	■ 2	■ <1
Nickel	ppm	■ <1	■ 0	■ 0	■ 0
Titanium	ppm	0	0	<1	0
Silver	ppm	<1	0	0	0
Manganese	ppm	■ <1	■ 0	■ <1	■ 0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	▲ 8	■ 110	■ 1167	■ 125
Magnesium	ppm	■ 8	■ 12	■ 30	■ 6
Zinc	ppm	▲ 1	■ 509	■ 834	■ 545
Phosphorus	ppm	■ 922	■ 390	■ 629	■ 408
Barium	ppm	■ 0	■ 2	■ 0	■ 0
Boron	ppm	▲ 138	■ 0	■ 35	■ 0

Diagnosis

No corrective action is recommended at this time. 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 oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

Depot: UNICICIL
Unique No: 10712935
Signed: Jonathan Hester
Report Date: 01 Nov 2023

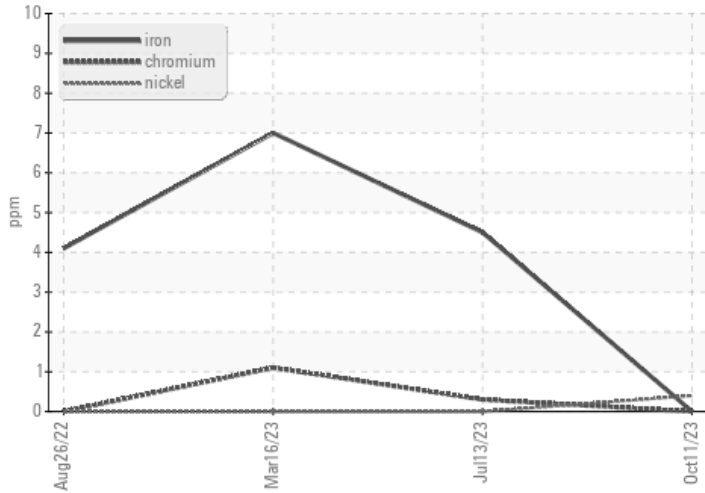


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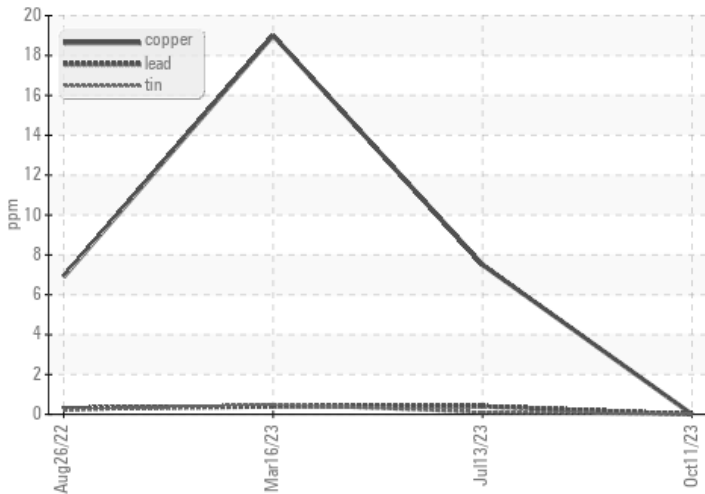


GRAPHS

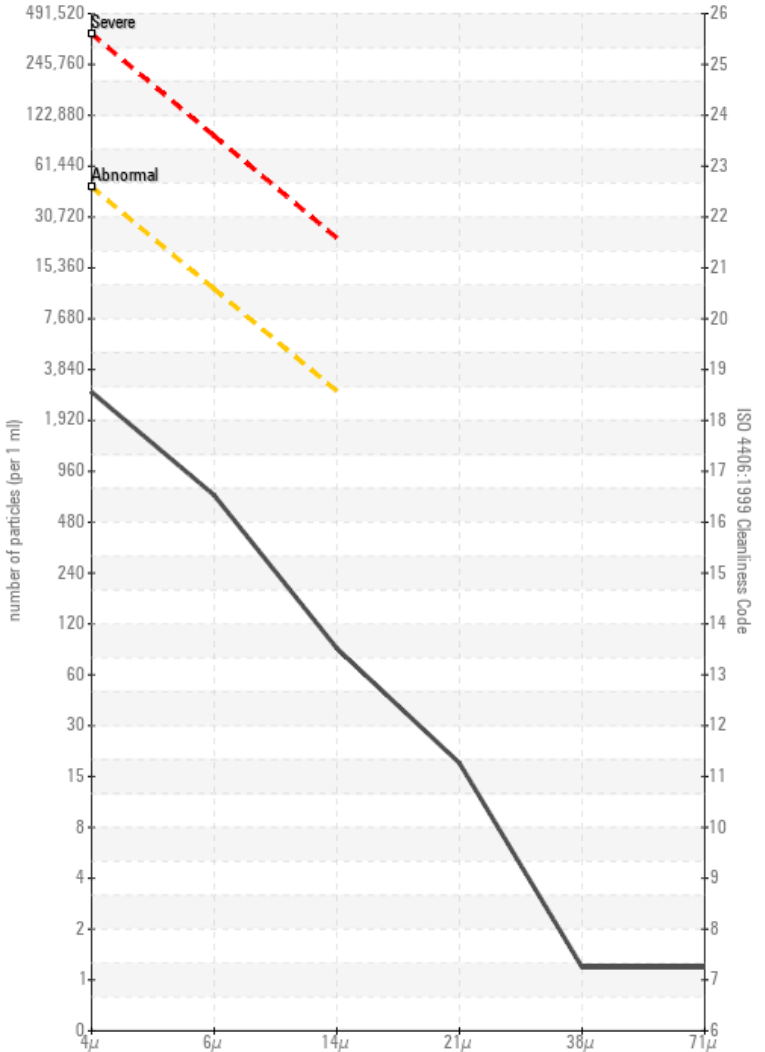
Ferrous Alloys



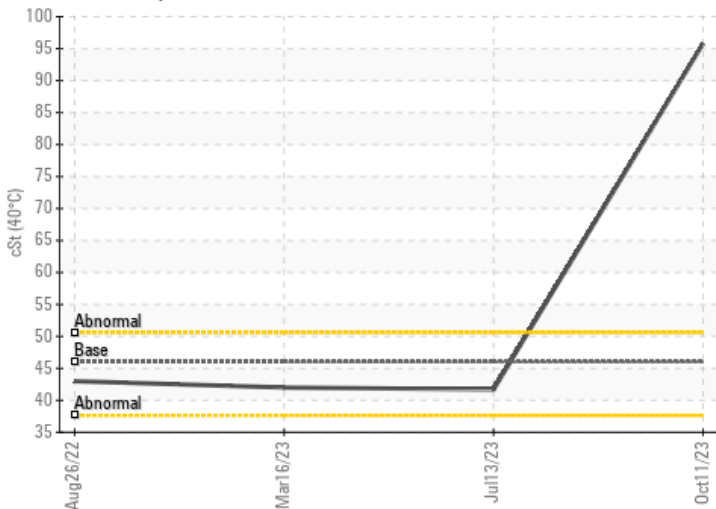
Non-ferrous Metals



Particle Count



Viscosity @ 40°C



Acid Number

