



CONSTRUCTION EQUIPMENT

TMR-OKEECHOBEE 60849 434166 VOLVO L180H 4821 - HYDRAULIC SYSTEM



Sample No: VCP435343
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 60849



SAMPLE INFORMATION

Sample Number	VCP435343	VCP408044	VCP337755	VCP346510
Sample Date	23 Jan 2024	01 May 2023	09 Dec 2022	22 Feb 2022
Machine Hours	15313	13007	11568	9688
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ATTENTION	NORMAL	ABNORMAL	NORMAL

TRADEMARK METALS RECYCLING - OKEECHOBEE
9800 NE 128TH AVE
OKEECHOBEE, FL
US 34972
Contact: RYAN BOWDEN



OIL CONDITION

Visc @ 40°C	cSt	▲ 59.54	■ 49.7	■ 44.6	■ 42.4
Acid Number (AN)	mg KOH/g	■ 0.597	■ 0.35	■ 0.32	■ 0.46

T: (863)467-9810
F: (863)467-9814



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 8292	■ 4533	■ 17527	■ 41232
Particles >6µm		■ 1067	■ 731	■ 4271	■ 810
Particles >14µm		■ 20	■ 22	▲ 197	■ 27
ISO 4406:1999 (c)		20/17/11	19/17/12	21/19/15	23/17/12
Silicon	ppm	■ <1	■ 1	■ 1	■ 2
Sodium	ppm	■ 1	■ 5	■ 0	■ 3
Potassium	ppm	■ <1	■ 2	■ <1	■ <1

Diagnosis

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.



WEAR METALS

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



ADDITIVES

Calcium	ppm	■ 112	■ 91	■ 88	■ 108
Magnesium	ppm	■ 16	■ 24	■ 10	■ 15
Zinc	ppm	■ 406	■ 470	■ 425	■ 481
Phosphorus	ppm	■ 375	■ 380	■ 324	■ 352
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 3	■ 3	■ 2	■ 3

Depot: TRAOKE
Unique No: 10857751
Signed: Jonathan Hester
Report Date: 06 Feb 2024

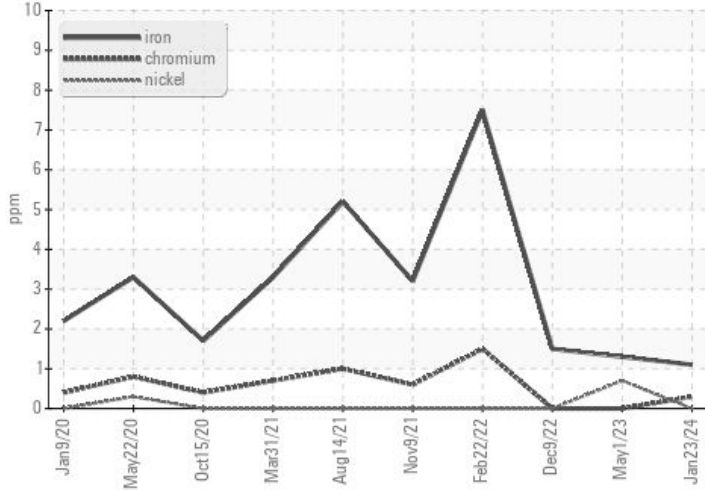


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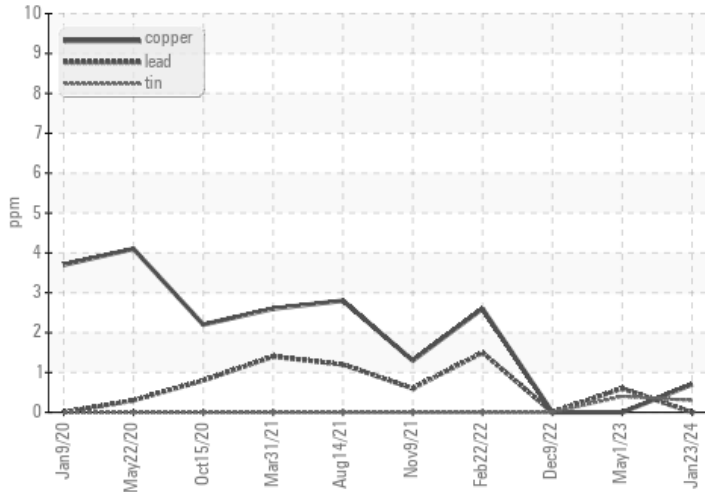


GRAPHS

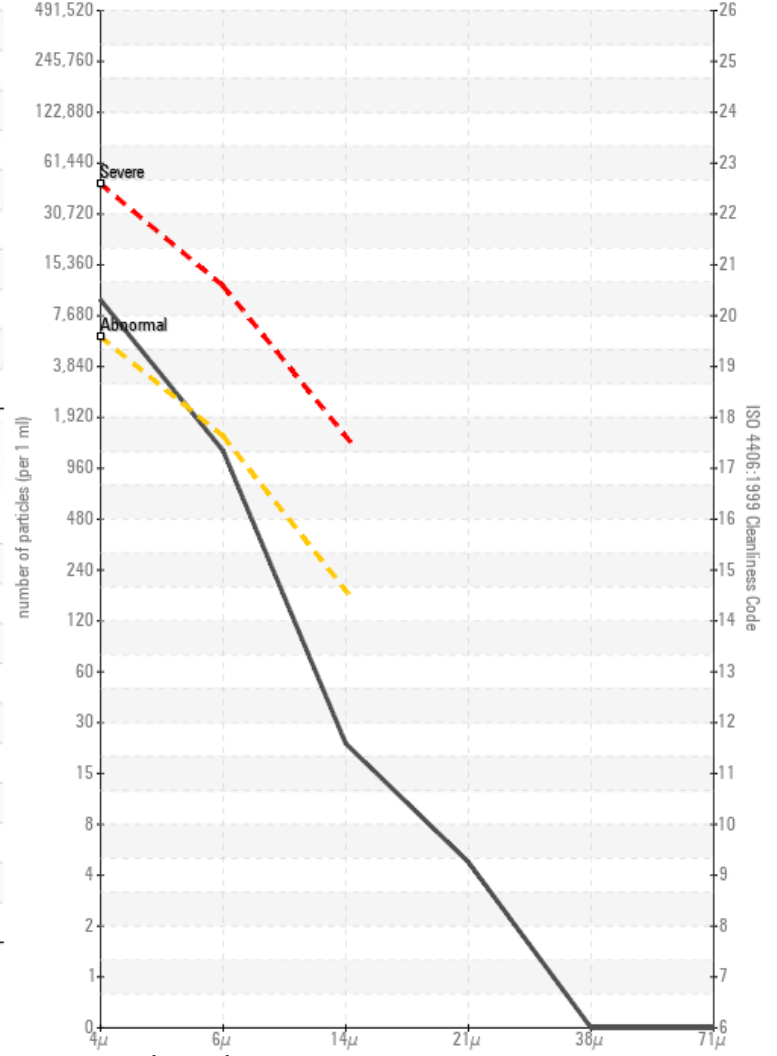
Ferrous Alloys



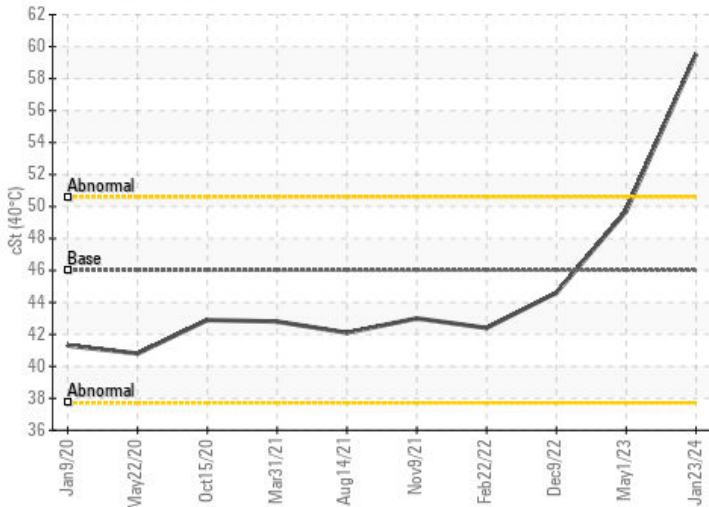
Non-ferrous Metals



Particle Count



Viscosity @ 40°C



Acid Number

