



CONSTRUCTION EQUIPMENT

TMR-OKEECHOBEE 4098 434166 VOLVO L180H 4821 - HYDRAULIC SYSTEM



Sample No: VCP445666
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 4098



SAMPLE INFORMATION

Sample Number	VCP445666	VCP435343	VCP408044	VCP337755
Sample Date	12 Feb 2024	23 Jan 2024	01 May 2023	09 Dec 2022
Machine Hours	15531	15313	13007	11568
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	ABNORMAL	ATTENTION	NORMAL	ABNORMAL

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



OIL CONDITION

Visc @ 40°C	cSt	▲ 61.7	▲ 59.54	■ 49.7	■ 44.6
Acid Number (AN)	mg KOH/g	---	■ 0.597	■ 0.35	■ 0.32

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



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 34407	▲ 8292	■ 4533	■ 17527
Particles >6µm		▲ 5003	■ 1067	■ 731	■ 4271
Particles >14µm		■ 130	■ 20	■ 22	▲ 197
ISO 4406:1999 (c)		22/20/14	20/17/11	19/17/12	21/19/15
Silicon	ppm	■ <1	■ <1	■ 1	■ 1
Sodium	ppm	■ 1	■ 1	■ 5	■ 0
Potassium	ppm	■ 0	■ <1	■ 2	■ <1

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Insufficient sample was received to conduct all the routine laboratory tests. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is higher than normal. The condition of the oil is acceptable for the time in service.



WEAR METALS

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



ADDITIVES

Calcium	ppm	■ 93	■ 112	■ 91	■ 88
Magnesium	ppm	■ 11	■ 16	■ 24	■ 10
Zinc	ppm	■ 409	■ 406	■ 470	■ 425
Phosphorus	ppm	■ 348	■ 375	■ 380	■ 324
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 2	■ 3	■ 3	■ 2

Depot: TRAOKE
Unique No: 10882935
Signed: Jonathan Hester
Report Date: 19 Feb 2024

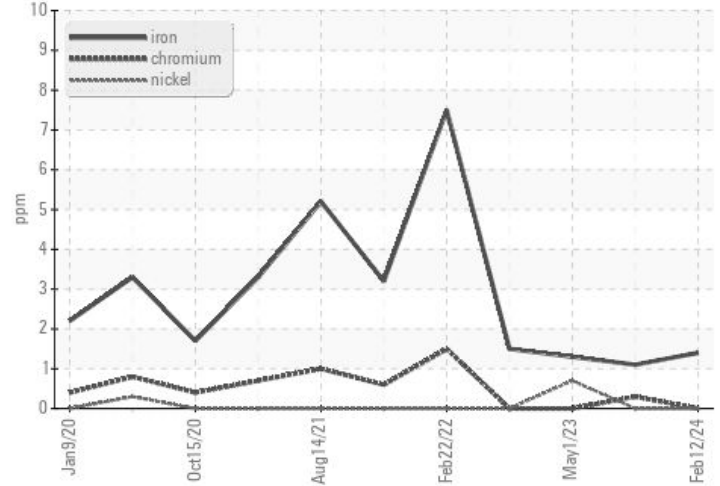


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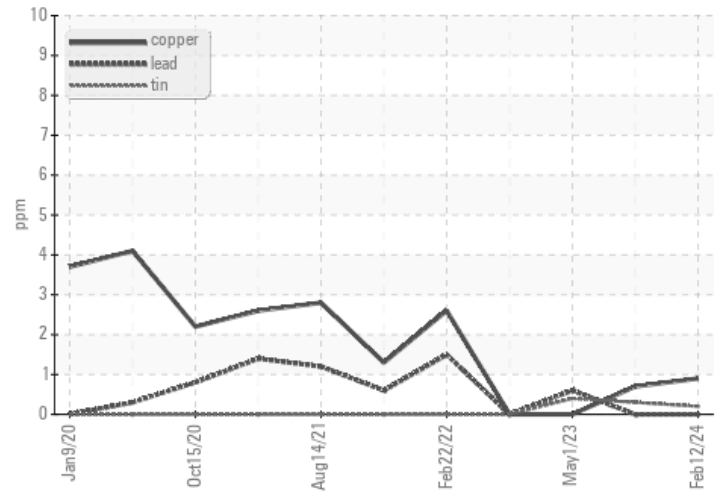


GRAPHS

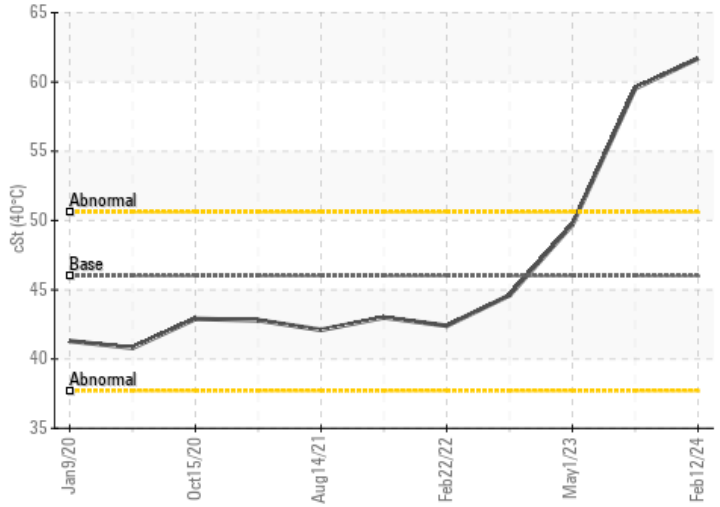
Ferrous Alloys



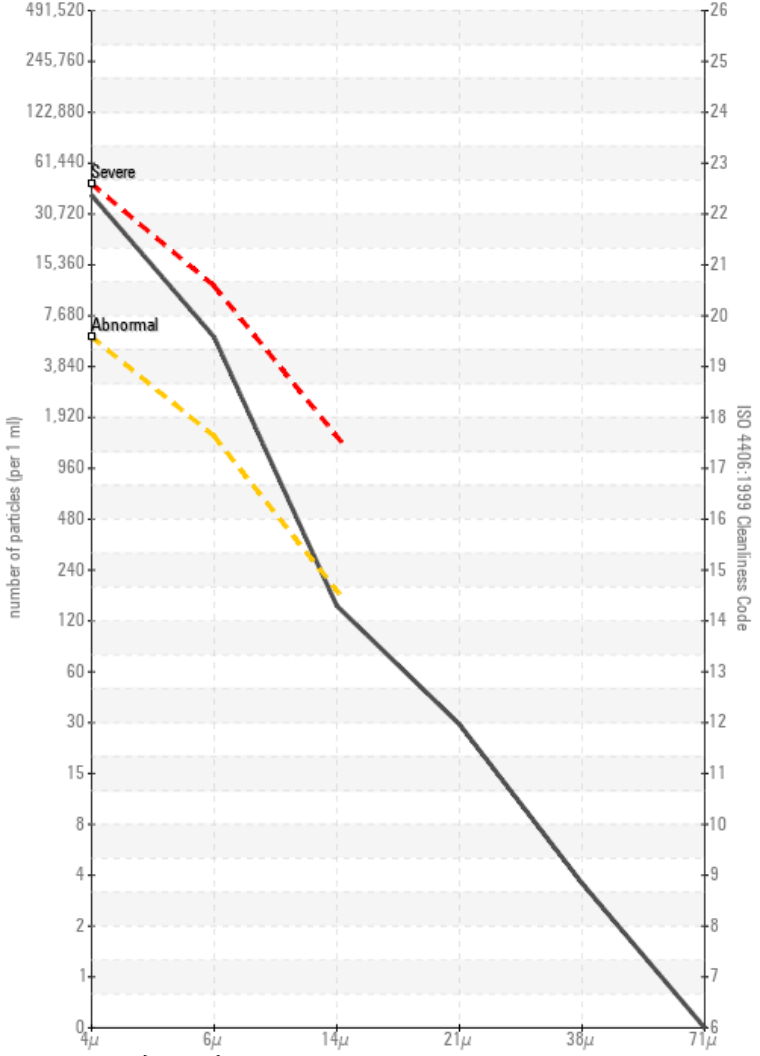
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

