



CONSTRUCTION EQUIPMENT

SPM620968 LKQ VOLVO L90H 623772 - HYDRAULIC SYSTEM



Sample No: VCP423230
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM620968 LKQ



SAMPLE INFORMATION

Sample Number	VCP423230	VCP418588	VCP396418	VCP366838
Sample Date	10 Nov 2023	01 May 2023	22 Feb 2023	20 Aug 2022
Machine Hours	10065	9026	8604	6336
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	ATTENTION	ATTENTION	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	▲ 37.0	▲ 37.7	■ 34.5	■ 35.2
Acid Number (AN)	mg KOH/g	■ 0.36	■ 0.41	■ 0.36	■ 0.42



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		■ 1592	■ 1595	▲ 10921	▲ 11343
Particles >6µm		■ 265	■ 193	■ 614	▲ 2292
Particles >14µm		■ 22	■ 13	■ 28	■ 89
ISO 4406:1999 (c)		18/15/12	18/15/11	21/16/12	21/18/14
Silicon	ppm	■ 2	■ 1	■ 4	■ 3
Sodium	ppm	■ 2	■ 0	■ <1	■ 3
Potassium	ppm	■ 0	■ 0	■ 0	■ 0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	■ 14	■ 13	■ 21	■ 17
Copper	ppm	■ 5	■ 2	■ 5	■ 6
Lead	ppm	■ 0	■ 0	■ 0	■ 0
Tin	ppm	■ 0	■ 0	■ 0	■ <1
Aluminum	ppm	■ <1	■ 0	■ 1	■ <1
Chromium	ppm	■ 2	■ <1	■ 2	■ 1
Molybdenum	ppm	■ 0	■ 0	■ 0	■ 0
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	■ 0	■ <1	■ <1	■ <1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	■ 64	■ 71	■ 69	■ 76
Magnesium	ppm	■ 0	■ <1	■ 0	■ 0
Zinc	ppm	■ 340	■ 370	■ 340	■ 348
Phosphorus	ppm	■ 283	■ 307	■ 303	■ 328
Barium	ppm	■ <1	■ 0	■ 0	■ 0
Boron	ppm	■ 1	■ 0	■ 4	■ 8

Depot: VOLVO8885
Unique No: 10766932
Signed: Don Baldrige
Report Date: 05 Dec 2023

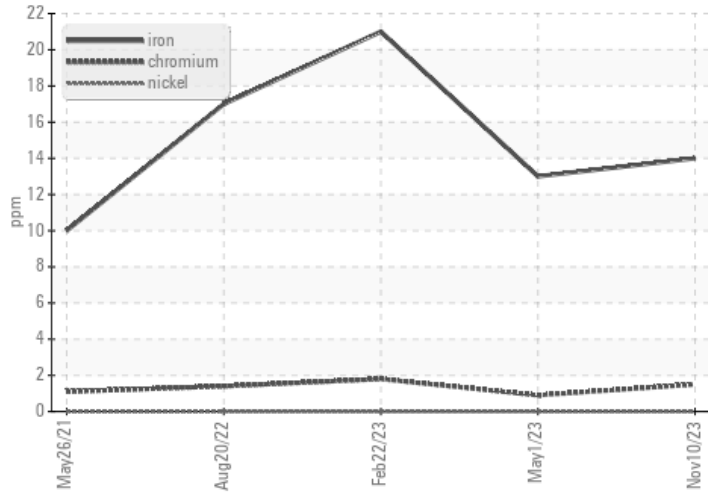


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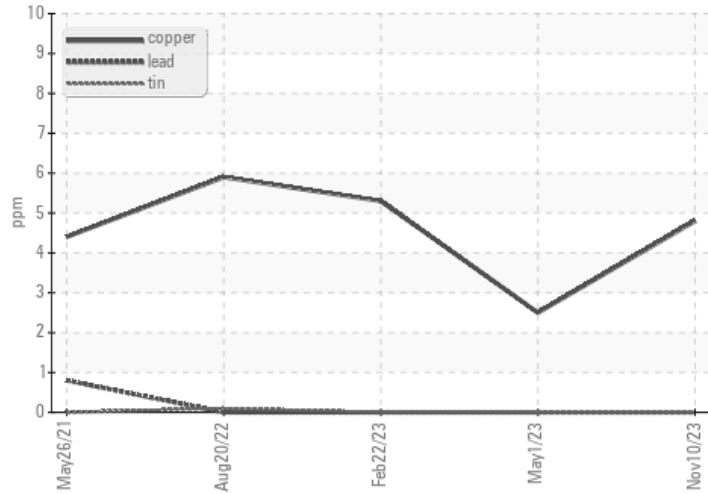


VOLVO GRAPHS

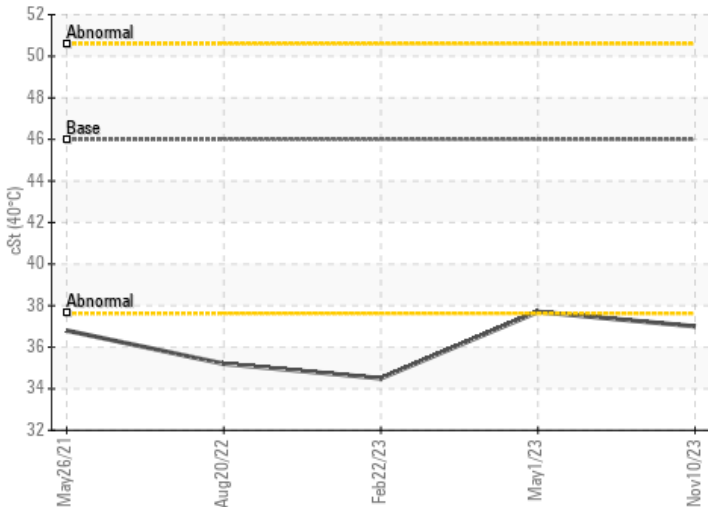
Ferrous Alloys



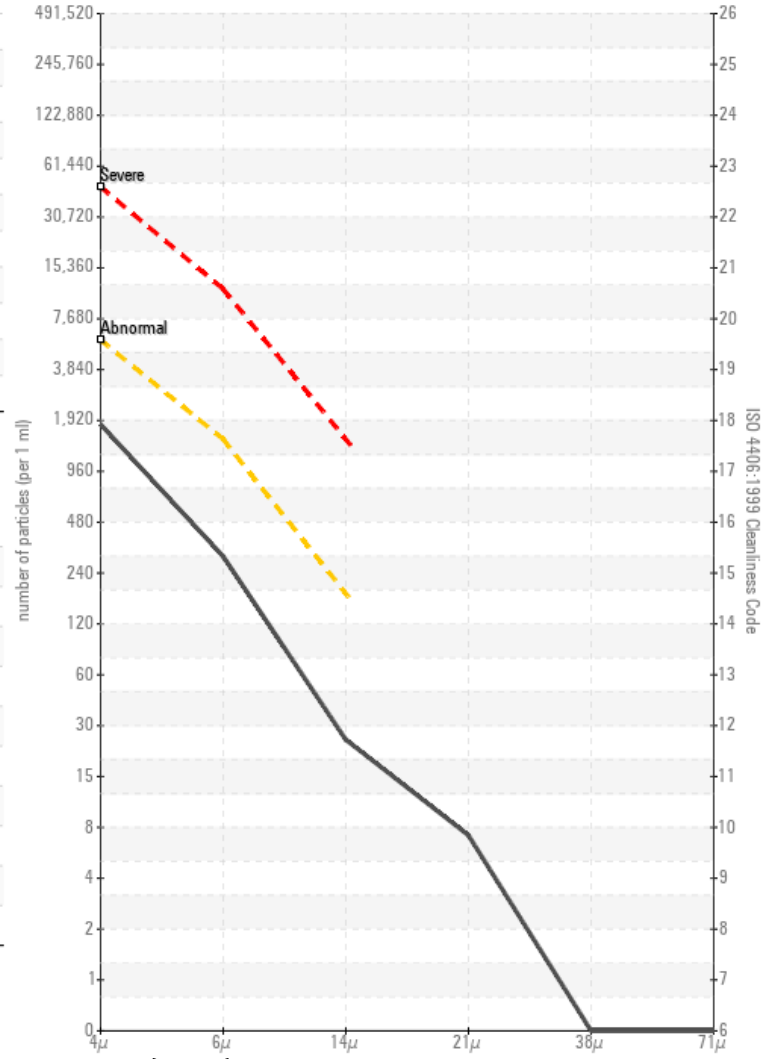
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

