



CONSTRUCTION EQUIPMENT

W14409 VOLVO L110H 631888 - HYDRAULIC SYSTEM



Sample No: VCP424374
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: W14409



SAMPLE INFORMATION

Sample Number	VCP424374	VCP380810	VCP382343	VCP362556
Sample Date	10 Jul 2023	27 Feb 2023	06 Dec 2022	25 Jul 2022
Machine Hours	6567	6011	5509	5005
Oil Hours	500	2000	500	1000
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	ABNORMAL	NORMAL	NORMAL	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	42.0	41.5	41.7	41.9
Acid Number (AN)	mg KOH/g	0.37	0.39	0.36	0.43



CONTAMINATION

Particles >4µm		6554	2578	3338	11547
Particles >6µm		2397	711	769	2930
Particles >14µm		230	38	38	223
ISO 4406:1999 (c)		20/18/15	19/17/12	19/17/12	21/19/15
Silicon	ppm	12	3	3	2
Sodium	ppm	2	0	2	2
Potassium	ppm	0	1	0	0

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	27	6	7	6
Copper	ppm	4	3	2	2
Lead	ppm	0	1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	<1	0	0
Chromium	ppm	1	2	2	2
Molybdenum	ppm	1	2	2	2
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	114	125	136	130
Magnesium	ppm	6	12	11	11
Zinc	ppm	462	461	455	437
Phosphorus	ppm	369	341	359	344
Barium	ppm	0	<1	0	<1
Boron	ppm	0	<1	<1	0

Depot: VOLVO0080
Unique No: 10562576
Signed: Wes Davis
Report Date: 19 Jul 2023

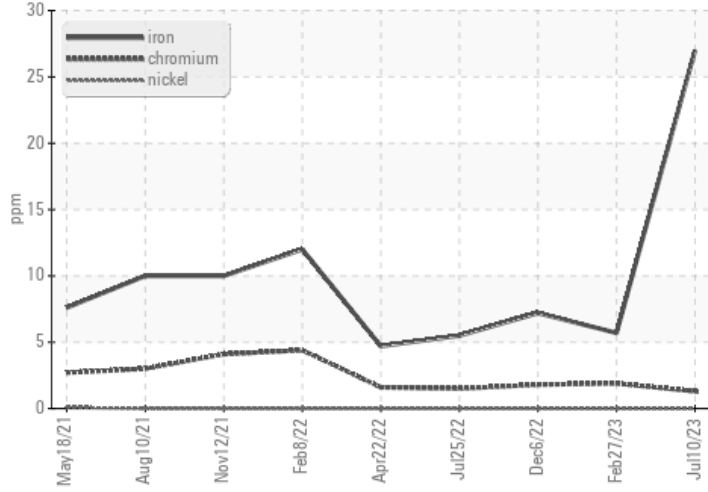


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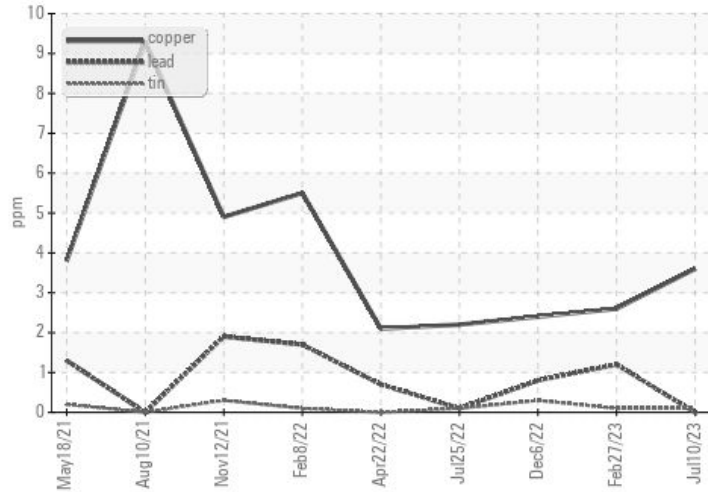


GRAPHS

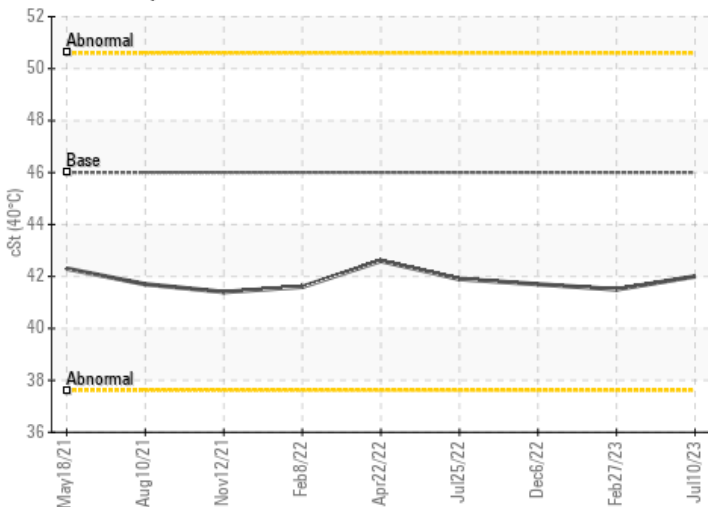
Ferrous Alloys



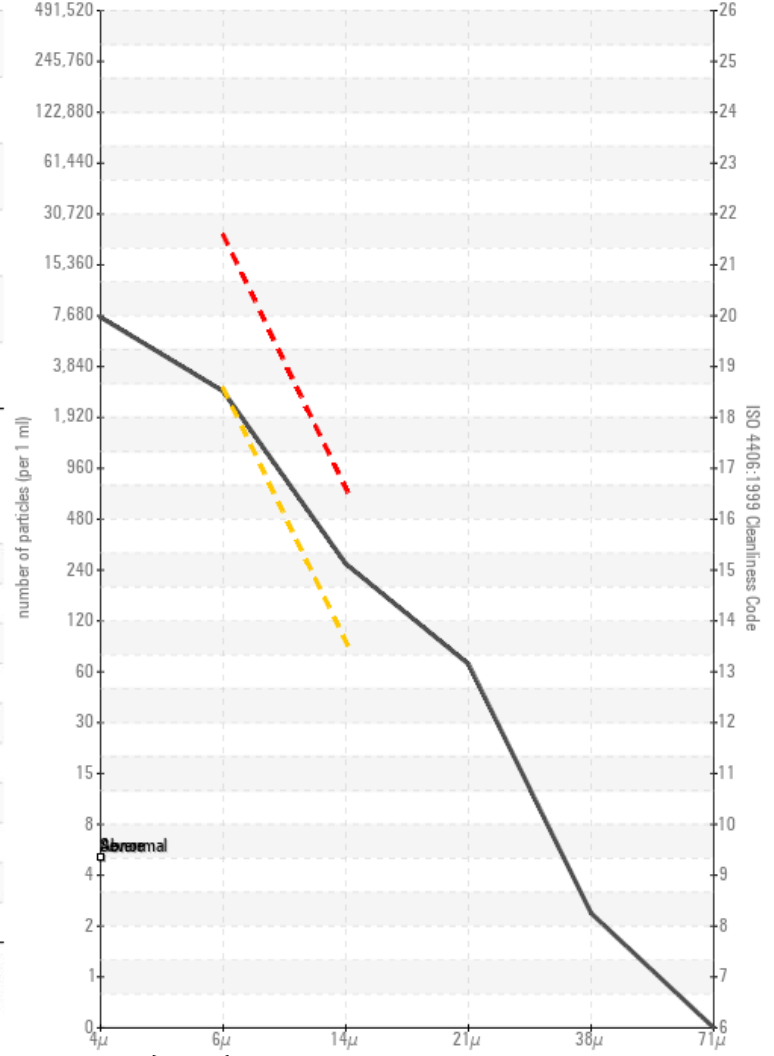
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

