



CONSTRUCTION EQUIPMENT

225257 WM VOLVO L220G 12593 - HYDRAULIC SYSTEM



Sample No: VCP371495
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 225257 WM



SAMPLE INFORMATION

Sample Number	VCP371495	VCP259061	VCP259188	VCP242101
Sample Date	07 Nov 2023	17 Aug 2020	14 Feb 2020	27 Feb 2019
Machine Hours	7898	6904	6528	5033
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	SEVERE	NORMAL	ATTENTION	NORMAL

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OIL CONDITION

Visc @ 40°C	cSt	42.7	40.5	40.4	39.6
Acid Number (AN)	mg KOH/g	0.32	0.397	0.362	0.376

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		96924	717	13620	9530
Particles >6µm		17378	75	2420	996
Particles >14µm		735	2	104	27
ISO 4406:1999 (c)		24/21/17	17/13/9	21/18/14	20/17/12
Silicon	ppm	4	8	10	7
Sodium	ppm	2	3	3	2
Potassium	ppm	0	<1	<1	<1

WEAR METALS

Iron	ppm	6	9	10	7
Copper	ppm	2	4	5	5
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	<1	0	3	2
Chromium	ppm	<1	1	1	<1
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	44	119	130	150
Magnesium	ppm	0	0	2	3
Zinc	ppm	380	386	437	420
Phosphorus	ppm	295	309	334	346
Barium	ppm	0	0	0	0
Boron	ppm	0	4	2	2

Diagnosis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high 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.

Depot: VOLVO1271
Unique No: 10751458
Signed: Wes Davis
Report Date: 21 Nov 2023

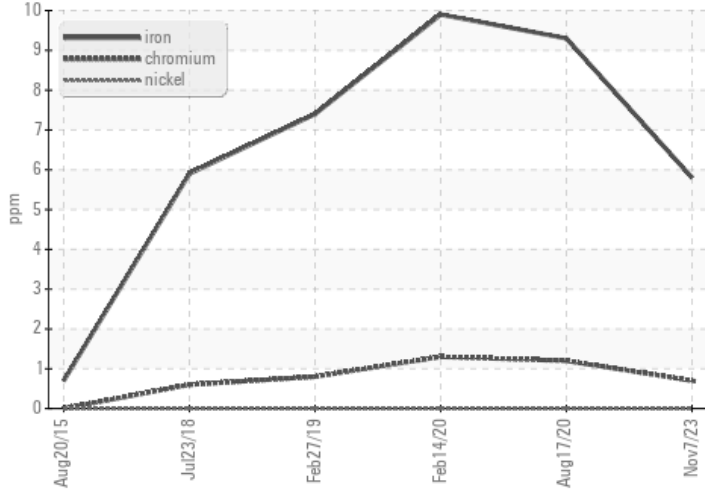


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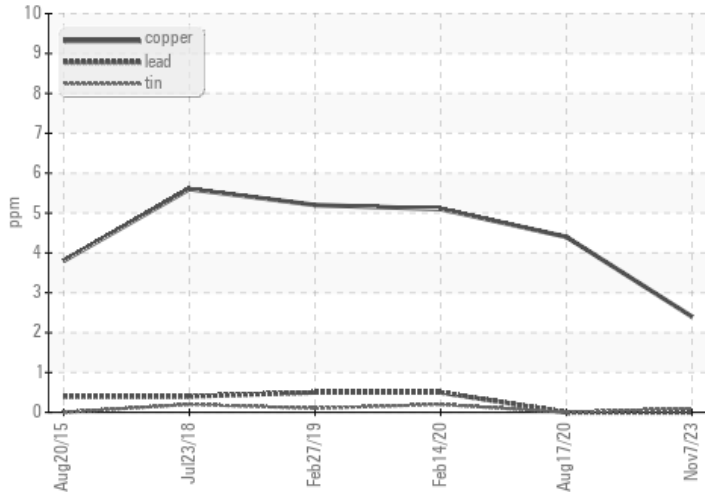


GRAPHS

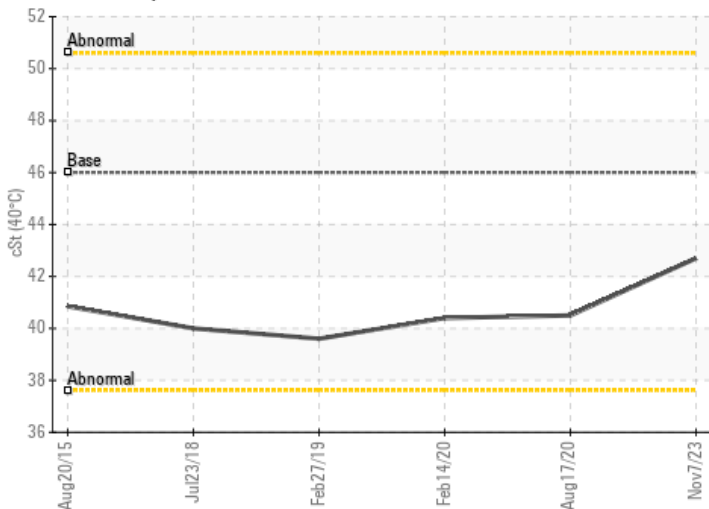
Ferrous Alloys



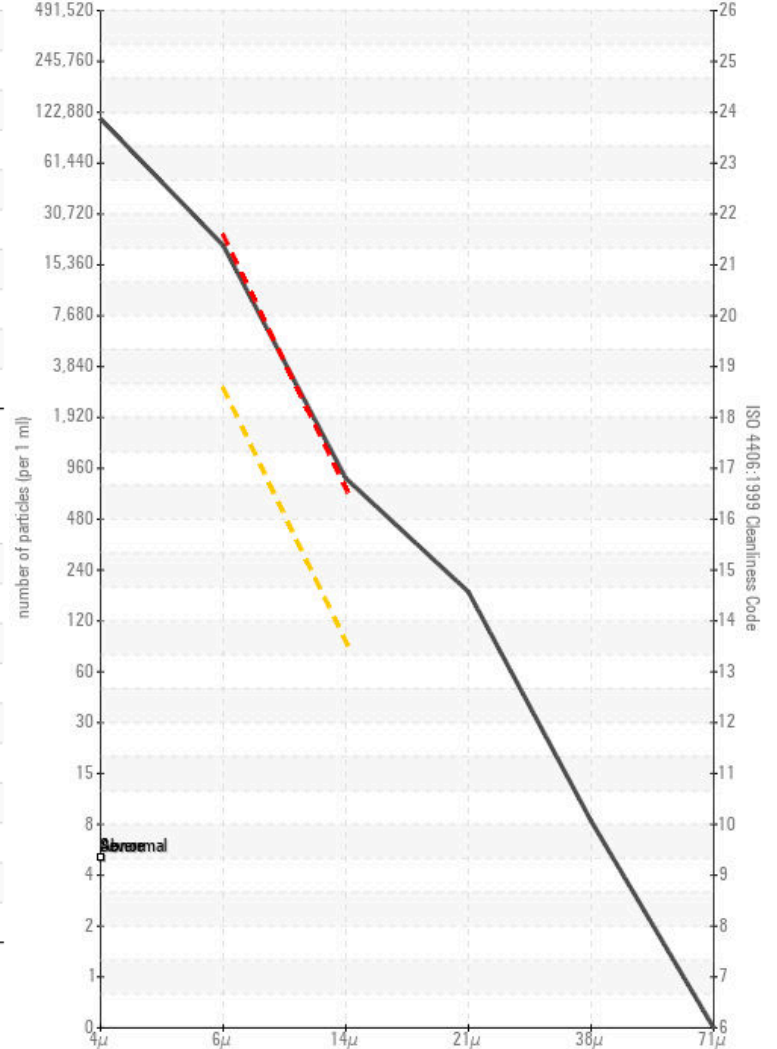
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

