



CONSTRUCTION EQUIPMENT

D13107 WM A1 VOLVO L70H 624717 - HYDRAULIC SYSTEM



Sample No: VCP193617
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: D13107 WM A1



SAMPLE INFORMATION

Sample Number	VCP193617	VCP429532	VCP418993	VCP418969
Sample Date	11 Dec 2023	19 Oct 2023	08 Sep 2023	04 Aug 2023
Machine Hours	3591	3224	2966	2770
Oil Hours	625	258	2966	2770
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	SEVERE	ABNORMAL	NORMAL	SEVERE

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OIL CONDITION

Visc @ 40°C	cSt	42.9	43.4	41.8	41.5
Acid Number (AN)	mg KOH/g	0.33	0.42	0.40	0.47



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		132917	11663	1577	35268
Particles >6µm		40714	3526	449	11707
Particles >14µm		3205	266	45	941
ISO 4406:1999 (c)		24/23/19	21/19/15	18/16/13	22/21/17
Silicon	ppm	3	1	4	4
Sodium	ppm	2	0	2	0
Potassium	ppm	2	1	0	<1

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.



WEAR METALS

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



ADDITIVES

Calcium	ppm	84	81	96	105
Magnesium	ppm	10	9	2	5
Zinc	ppm	467	454	459	455
Phosphorus	ppm	352	341	372	346
Barium	ppm	0	9	0	0
Boron	ppm	0	0	0	0

Depot: VOLVO0069
Unique No: 10791212
Signed: Wes Davis
Report Date: 18 Dec 2023

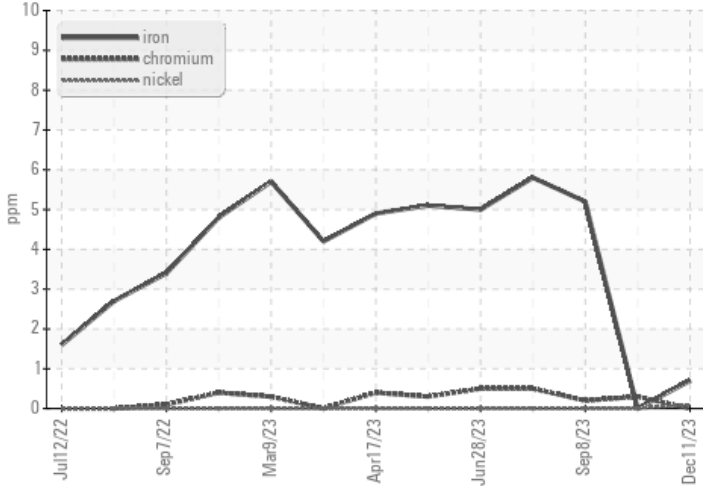


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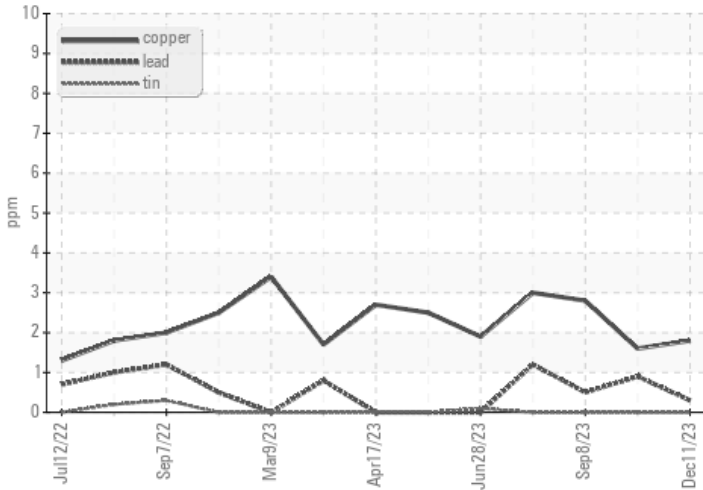


GRAPHS

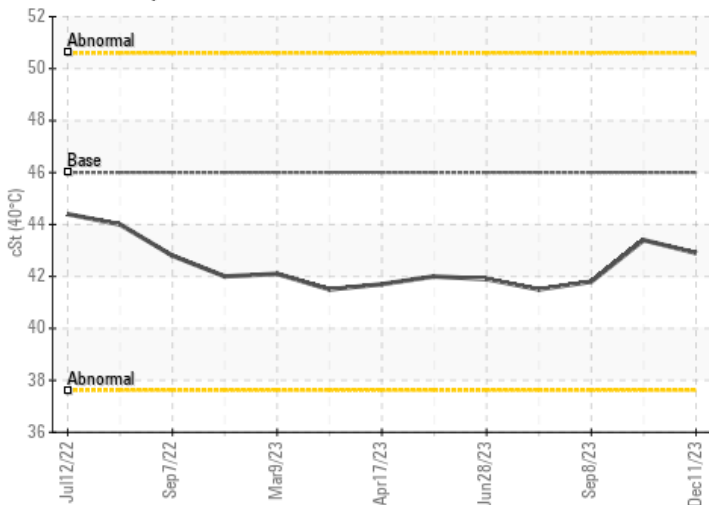
Ferrous Alloys



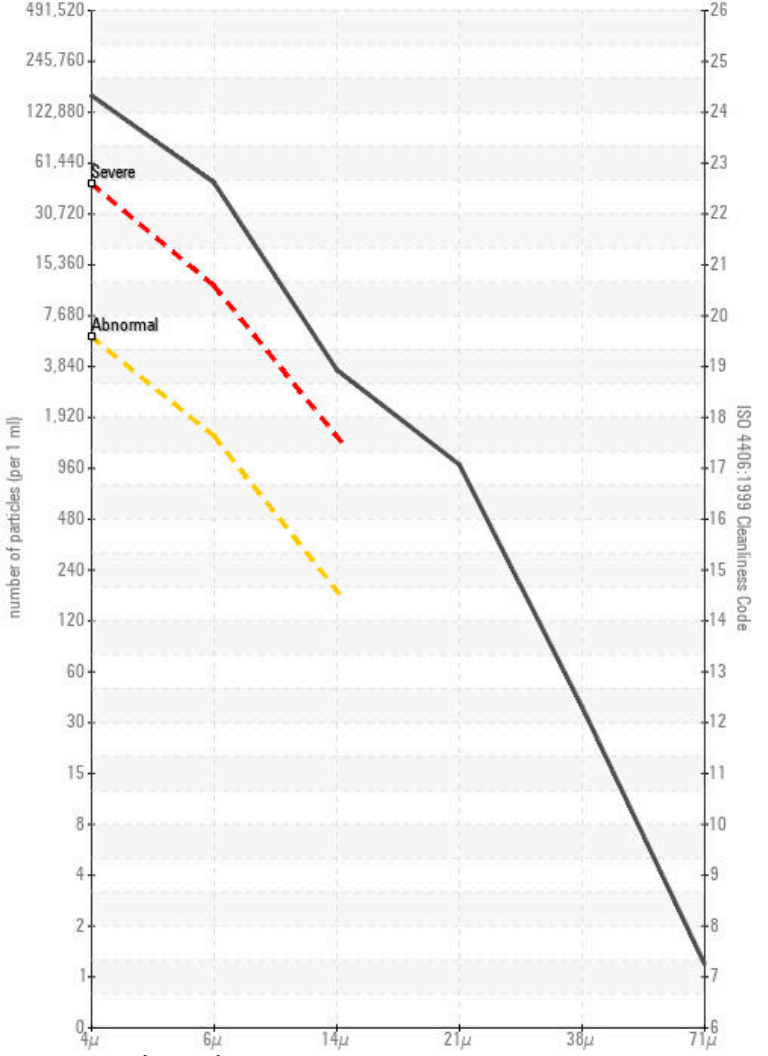
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

