



CONSTRUCTION EQUIPMENT

11097 VOLVO ECR235D 2 10351 - HYDRAULIC SYSTEM



Sample No: VCP440551
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 11097



SAMPLE INFORMATION

Sample Number	VCP440551	VCP399881	VCP358745	VCP348598
Sample Date	13 Sep 2023	13 Jan 2023	31 May 2022	21 Jan 2022
Machine Hours	8650	7920	7494	7230
Oil Hours	0	0	0	500
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 40°C	cSt	42.5	42.8	42.3	42.5
Acid Number (AN)	mg KOH/g	0.50	0.55	0.56	0.50



CONTAMINATION

Particles >4µm		2885	2428	8304	11186
Particles >6µm		976	355	1318	1534
Particles >14µm		109	22	36	91
ISO 4406:1999 (c)		19/17/14	18/16/12	20/18/12	21/18/14
Silicon	ppm	7	6	6	6
Sodium	ppm	3	2	0	3
Potassium	ppm	0	0	2	0

Diagnosis

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



WEAR METALS

Iron	ppm	13	12	12	11
Copper	ppm	6	7	7	7
Lead	ppm	0	0	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	0	<1	2	<1
Chromium	ppm	2	2	2	2
Molybdenum	ppm	2	4	4	4
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1260	1246	1121	1110
Magnesium	ppm	34	29	30	31
Zinc	ppm	806	751	802	774
Phosphorus	ppm	551	542	627	605
Barium	ppm	0	0	0	0
Boron	ppm	41	36	40	48

Depot: JAAPHI
Unique No: 10655148
Signed: Jonathan Hester
Report Date: 20 Sep 2023

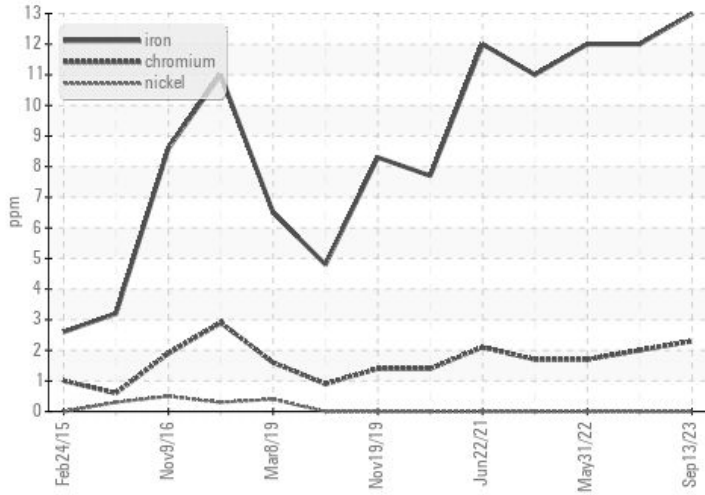


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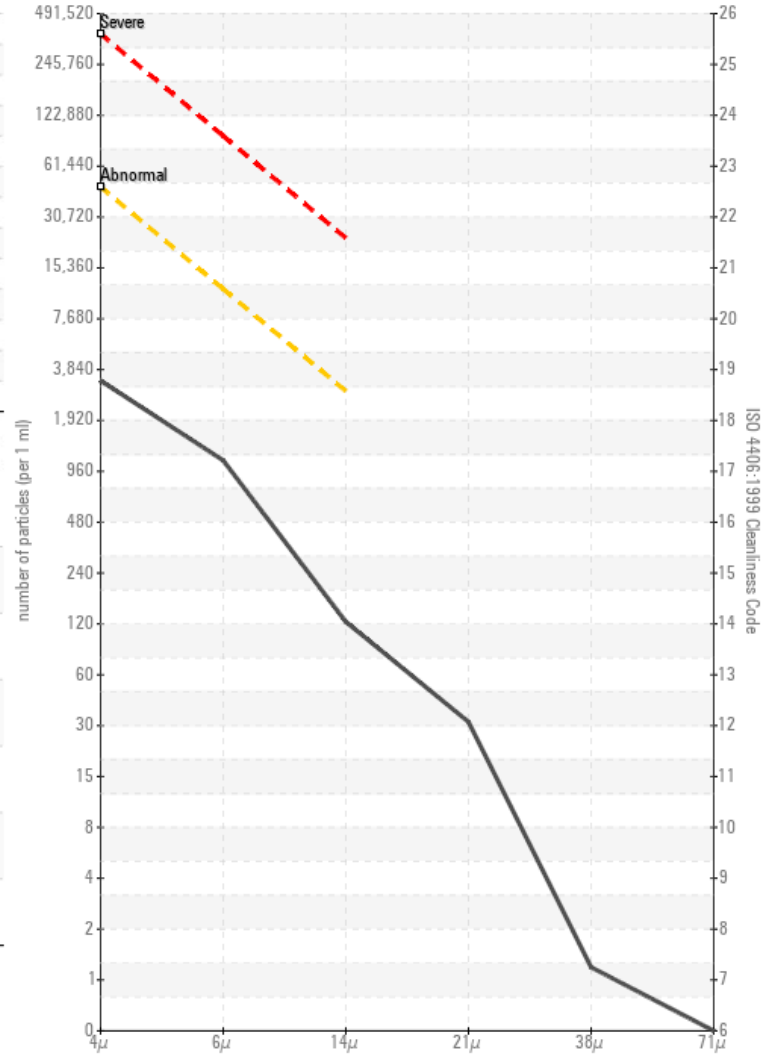


GRAPHS

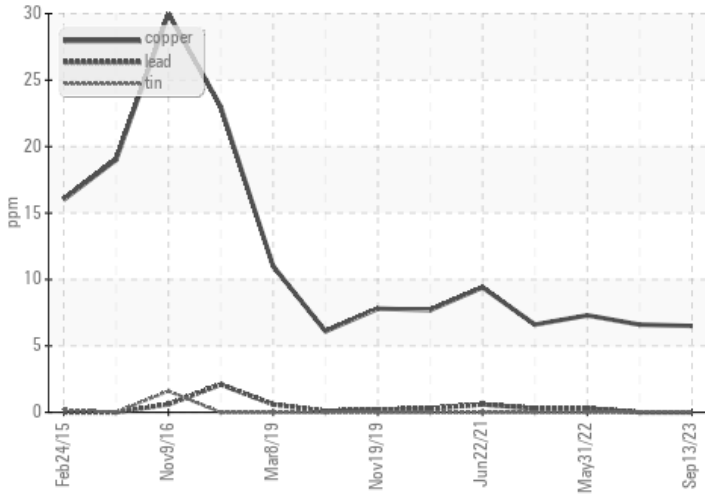
Ferrous Alloys



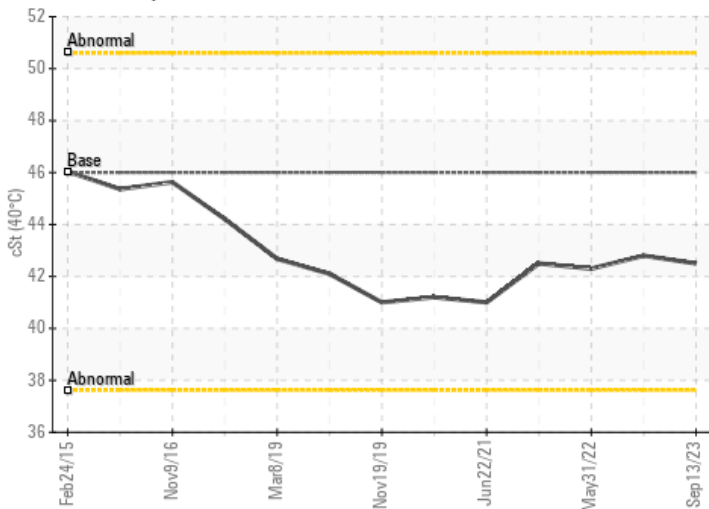
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

