



CONSTRUCTION EQUIPMENT

580404 VOLVO L110H 631298 - HYDRAULIC SYSTEM



Sample No: VCP393729
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 580404



SAMPLE INFORMATION

Sample Number	VCP393729	VCP398712	VCP334736	VCP310135
Sample Date	18 Jul 2023	16 Dec 2022	02 Jun 2022	13 Jul 2021
Machine Hours	8405	7287	6331	5404
Oil Hours	4000	3000	2000	1400
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	ABNORMAL	NORMAL	ATTENTION

RIPA AND ASSOCIATES

10149 FISHER AVENUE
TAMPA, FL
US 33619
Contact: ROBERT TURNER
rturner@ripatampa.com
T:
F:



OIL CONDITION

Visc @ 40°C	cSt	44.0	43.0	43.2	42.9
Acid Number (AN)	mg KOH/g	0.34	0.38	0.34	0.369



CONTAMINATION

Particles >4µm		12333	48952	10390	8516
Particles >6µm		869	▲ 8788	442	1200
Particles >14µm		43	▲ 631	19	114
ISO 4406:1999 (c)		21/17/13	23/20/16	21/16/11	20/17/14
Silicon	ppm	4	6	5	4
Sodium	ppm	3	2	0	2
Potassium	ppm	0	0	1	4

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	19	16	13	8
Copper	ppm	6	6	5	3
Lead	ppm	2	2	2	0
Tin	ppm	0	0	<1	0
Aluminum	ppm	3	2	2	<1
Chromium	ppm	5	4	3	1
Molybdenum	ppm	2	2	2	1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	0
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	83	89	85	87
Magnesium	ppm	4	4	6	4
Zinc	ppm	427	461	436	429
Phosphorus	ppm	345	354	328	355
Barium	ppm	0	0	2	0
Boron	ppm	0	0	3	4

Depot: RIPTAM
Unique No: 10602077
Signed: Wes Davis
Report Date: 14 Aug 2023

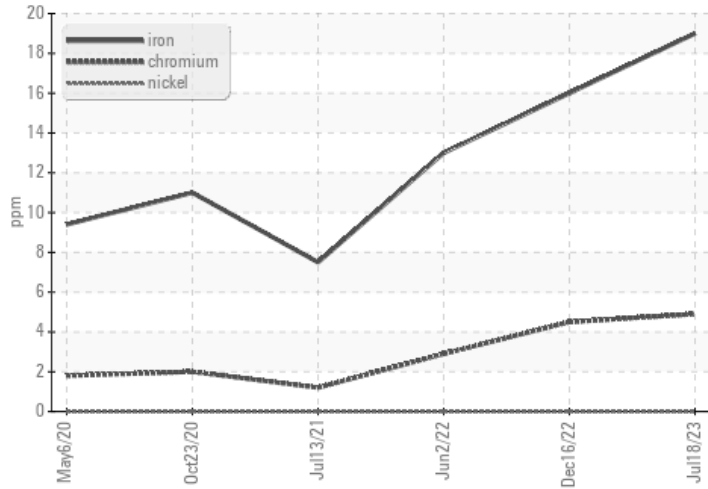


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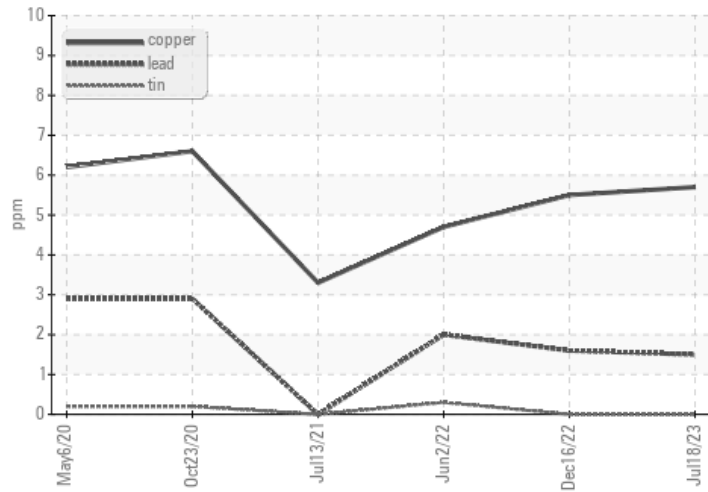


VOLVO GRAPHS

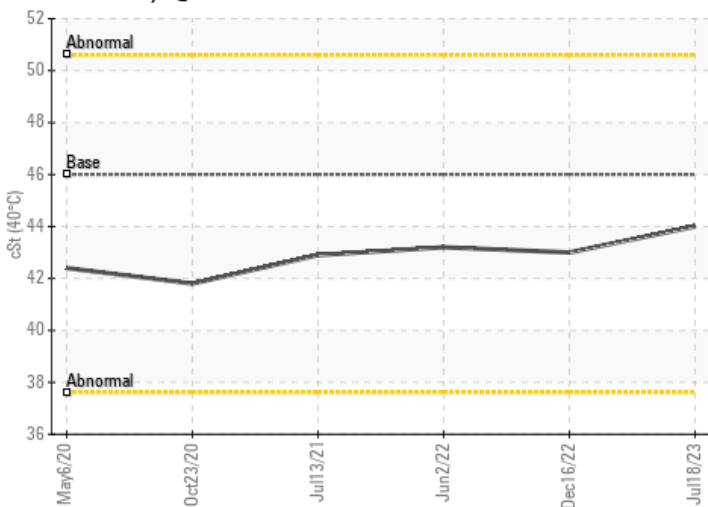
Ferrous Alloys



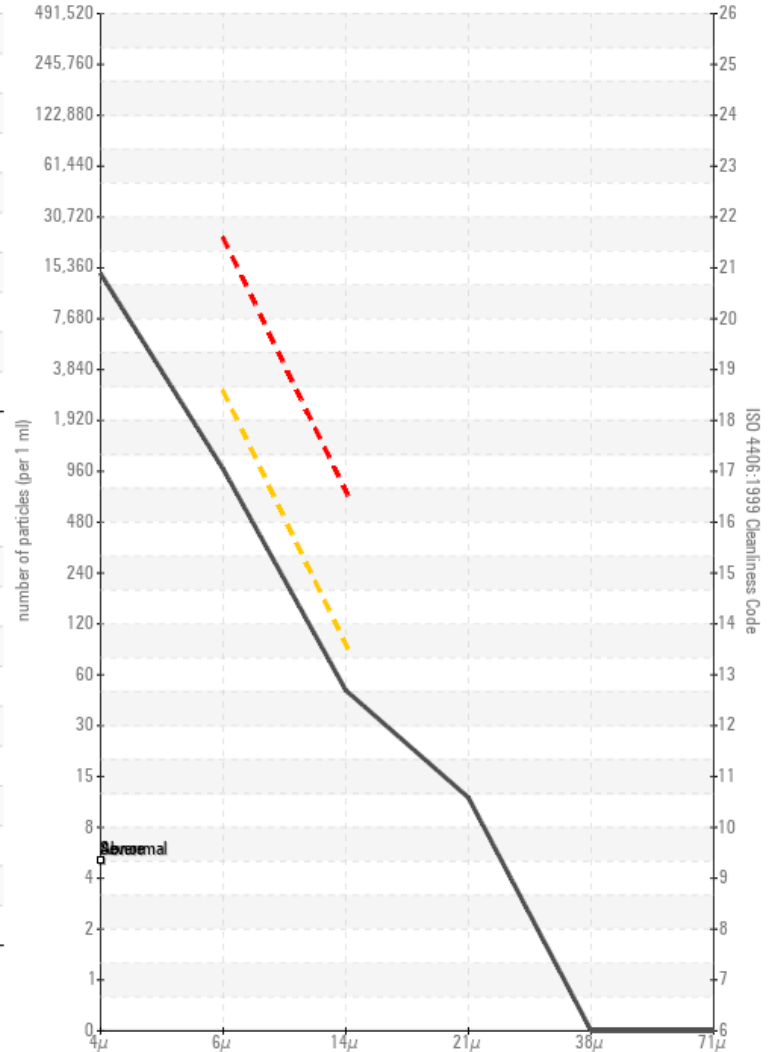
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

