



CONSTRUCTION EQUIPMENT

5 VOLVO L110H 631239 - HYDRAULIC SYSTEM



Sample No: VCP438544
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 5



SAMPLE INFORMATION

Sample Number	VCP438544	VCP415941	VCP390712	VCP343075
Sample Date	04 Jul 2024	22 Jun 2023	25 Oct 2022	18 Nov 2021
Machine Hours	10281	9267	8302	7089
Oil Hours	0	0	4000	1500
Oil Changed	N/A	Not Changd	Changed	Not Changd
Sample Status	NORMAL	SEVERE	NORMAL	ABNORMAL

RIPA AND ASSOCIATES

10149 FISHER AVENUE
TAMPA, FL
US 33619
Contact: PM Services
PMServices@ripaconstruction.com
T:
F:



OIL CONDITION

Visc @ 40°C	cSt	47.1	45.4	44.0	44.1
Acid Number (AN)	mg KOH/g	0.41	0.35	0.33	0.435



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		2057	21423	1271	21710
Particles >6µm		230	7315	73	6516
Particles >14µm		10	916	9	723
ISO 4406:1999 (c)		18/15/10	22/20/17	17/13/10	22/20/17
Silicon	ppm	2	2	2	3
Sodium	ppm	2	2	<1	1
Potassium	ppm	0	0	0	<1

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	1	3	4	2
Copper	ppm	0	1	1	4
Lead	ppm	0	0	<1	2
Tin	ppm	0	0	0	0
Aluminum	ppm	0	<1	<1	<1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	10	18	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	0	0	0	0
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	123	98	36	101
Magnesium	ppm	19	16	0	2
Zinc	ppm	495	444	384	429
Phosphorus	ppm	384	364	319	316
Barium	ppm	0	0	0	0
Boron	ppm	5	3	0	0

Depot: RIPTAM
Unique No: 11116698
Signed: Wes Davis
Report Date: 12 Jul 2024

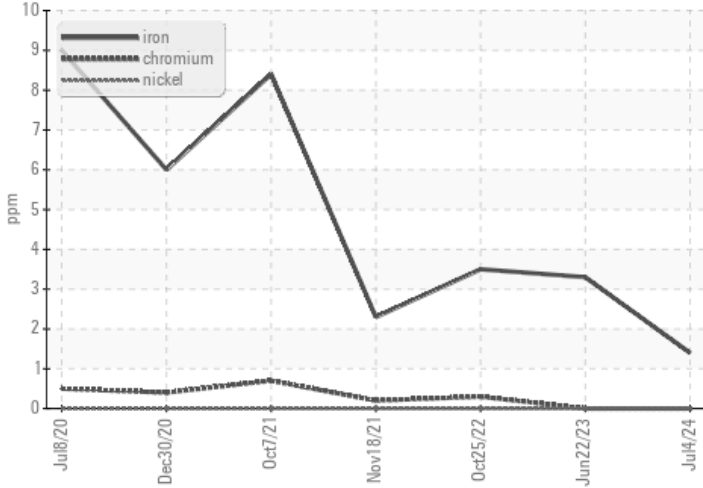


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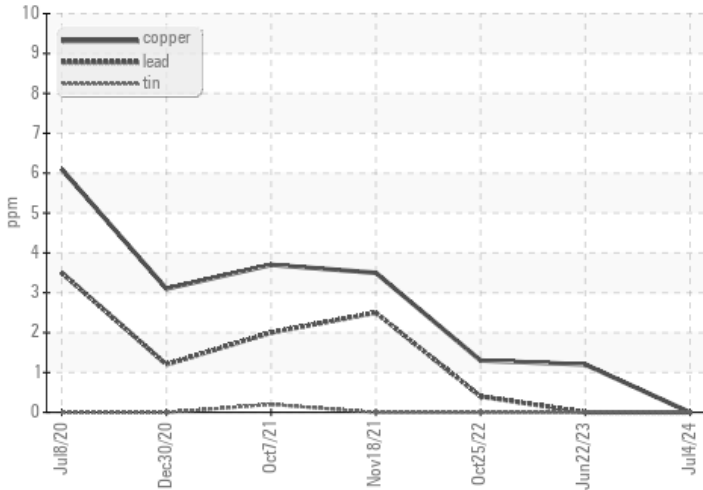


GRAPHS

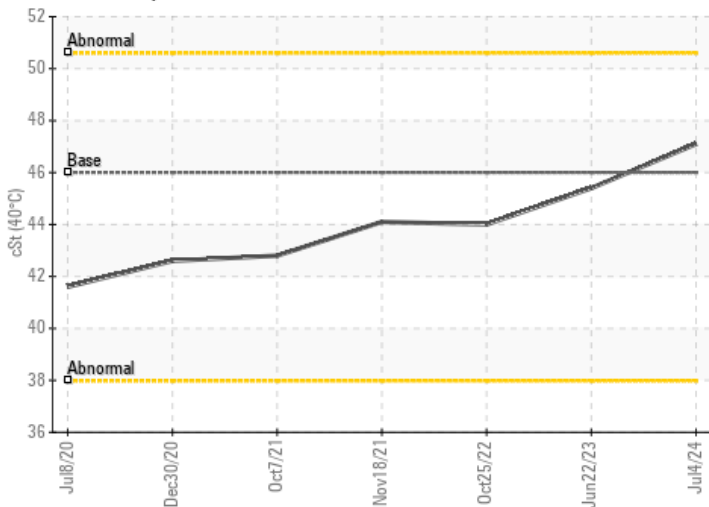
Ferrous Alloys



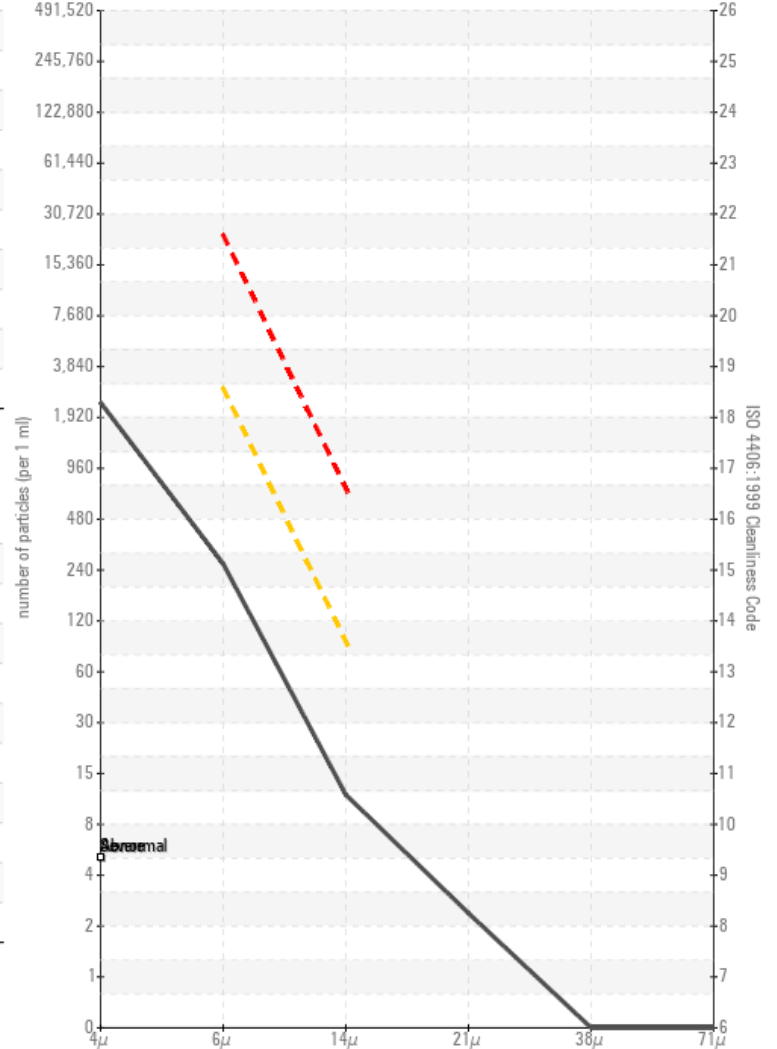
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

