



CONSTRUCTION EQUIPMENT

701681 VOLVO L110H 631226 - HYDRAULIC SYSTEM



Sample No: VCP438521
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 701681



SAMPLE INFORMATION

Sample Number	VCP438521	VCP420271	VCP274709	---
Sample Date	20 May 2024	11 Apr 2023	13 Jul 2020	---
Machine Hours	13441	11460	5614	---
Oil Hours	1441	2000	0	---
Oil Changed	Not Chngd	Not Chngd	Changed	---
Sample Status	SEVERE	ABNORMAL	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	48.4	47.5	38.0	---
Acid Number (AN)	mg KOH/g	0.46	0.46	0.292	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Particles >4µm		81630	11848	4854	---
Particles >6µm		▲ 11394	● 2877	■ 1170	---
Particles >14µm		▲ 946	▲ 207	● 107	---
ISO 4406:1999 (c)		24/21/17	21/19/15	19/17/14	---
Silicon	ppm	6	5	▲ 26	---
Sodium	ppm	3	<1	2	---
Potassium	ppm	11	<1	<1	---

WEAR METALS

Iron	ppm	39	13	12	---
Copper	ppm	3	2	4	---
Lead	ppm	<1	<1	2	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	<1	0	<1	---
Chromium	ppm	2	<1	2	---
Molybdenum	ppm	4	2	1	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	0	0	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	67	103	90	---
Magnesium	ppm	6	9	5	---
Zinc	ppm	446	466	420	---
Phosphorus	ppm	369	351	334	---
Barium	ppm	0	0	0	---
Boron	ppm	0	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.

Depot: RIPTAM
Unique No: 11126537
Signed: Wes Davis
Report Date: 22 Jul 2024

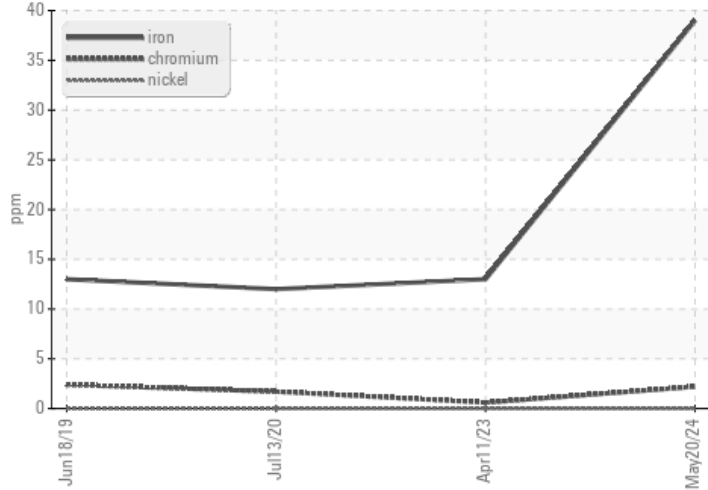


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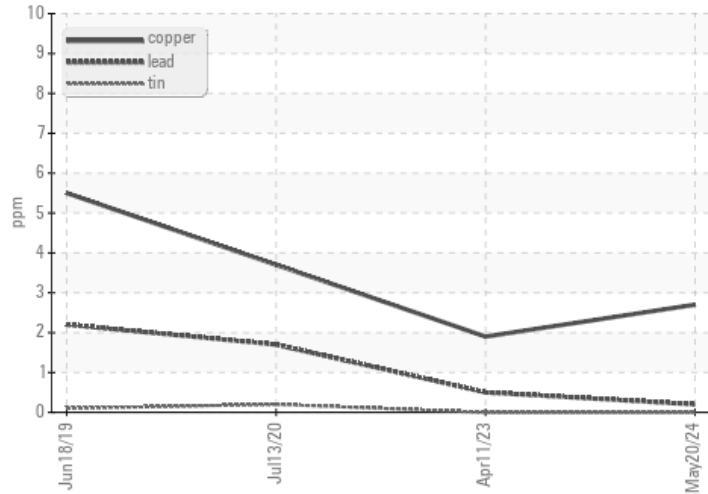


GRAPHS

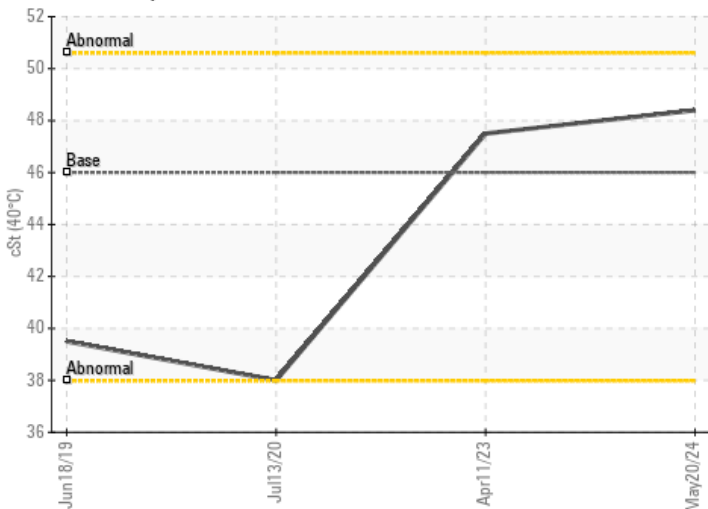
Ferrous Alloys



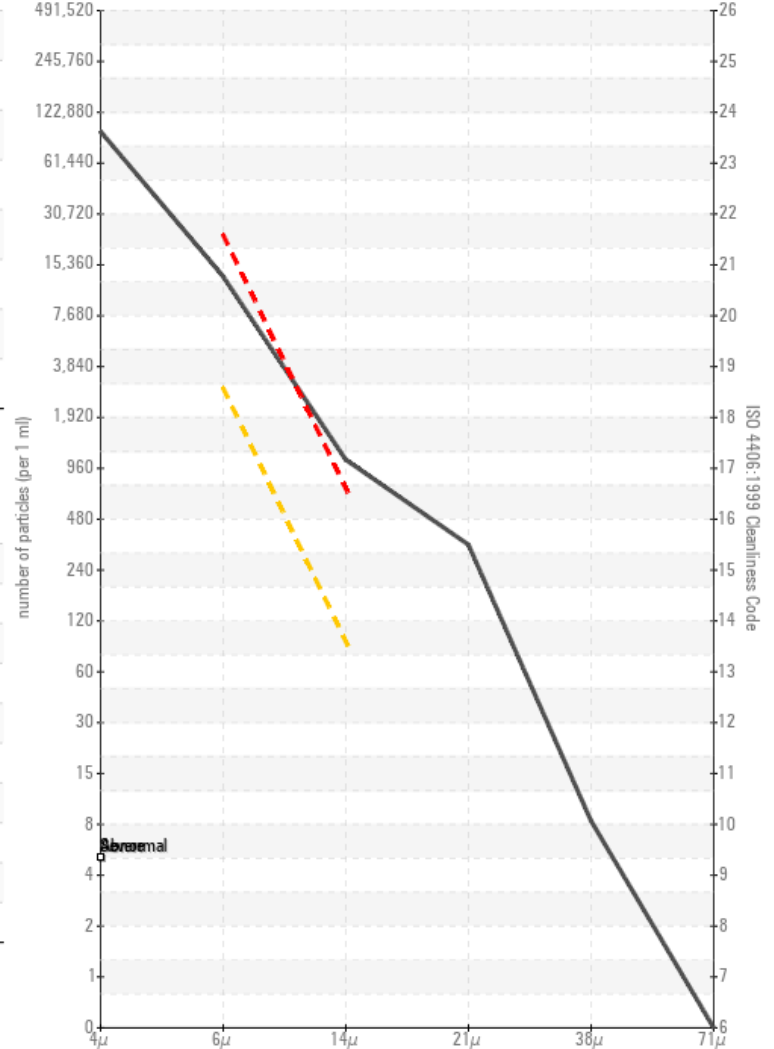
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

