



CONSTRUCTION EQUIPMENT

VOLVO L110H 631332 - HYDRAULIC SYSTEM



Sample No: VCP446089
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP446089	VCP414721	VCP400141	VCP376646
Sample Date	17 Apr 2024	06 Sep 2023	01 Dec 2022	26 Jul 2022
Machine Hours	10389	9270	8127	7686
Oil Hours	0	3270	4000	3680
Oil Changed	N/A	N/A	Changed	Not Changd
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

RIPA AND ASSOCIATES

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



OIL CONDITION

Visc @ 40°C	cSt	43.5	43.8	43.1	43.1
Acid Number (AN)	mg KOH/g	0.32	0.33	0.38	0.36



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		7446	---	1663	3191
Particles >6µm		1963	---	274	673
Particles >14µm		169	---	22	80
ISO 4406:1999 (c)		20/18/15	---	18/15/12	19/17/13
Silicon	ppm	5	4	5	4
Sodium	ppm	3	1	3	<1
Potassium	ppm	2	0	0	1



WEAR METALS

Iron	ppm	9	7	13	13
Copper	ppm	2	2	4	4
Lead	ppm	2	0	2	2
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	2	<1	2	2
Chromium	ppm	3	2	4	3
Molybdenum	ppm	<1	0	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	77	69	94	100
Magnesium	ppm	6	8	21	20
Zinc	ppm	430	426	424	450
Phosphorus	ppm	342	338	332	340
Barium	ppm	0	0	0	0
Boron	ppm	0	0	2	4

Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate 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: 11056051
Signed: Wes Davis
Report Date: 30 May 2024

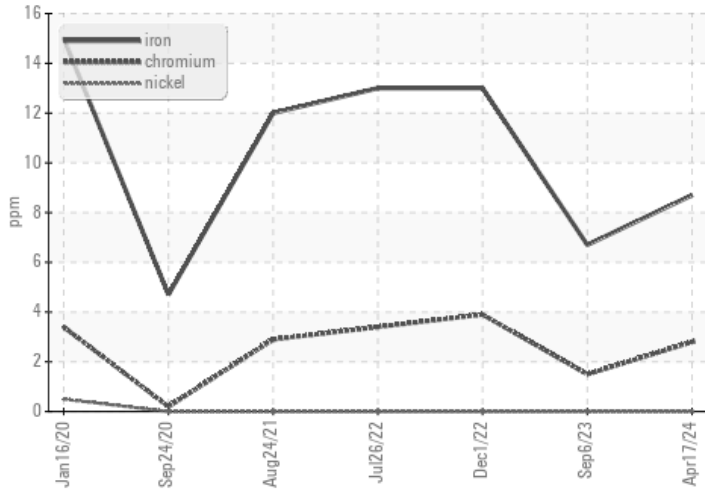


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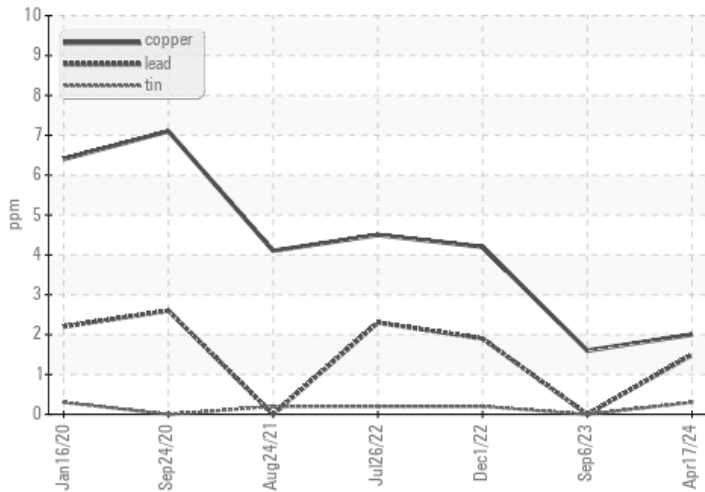


GRAPHS

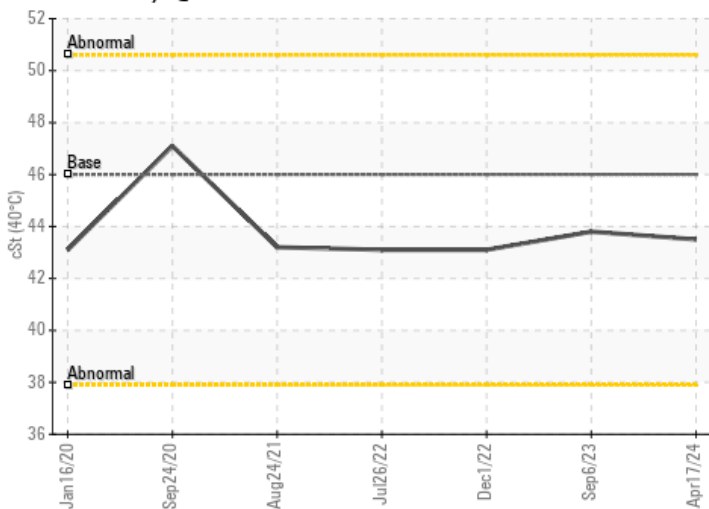
Ferrous Alloys



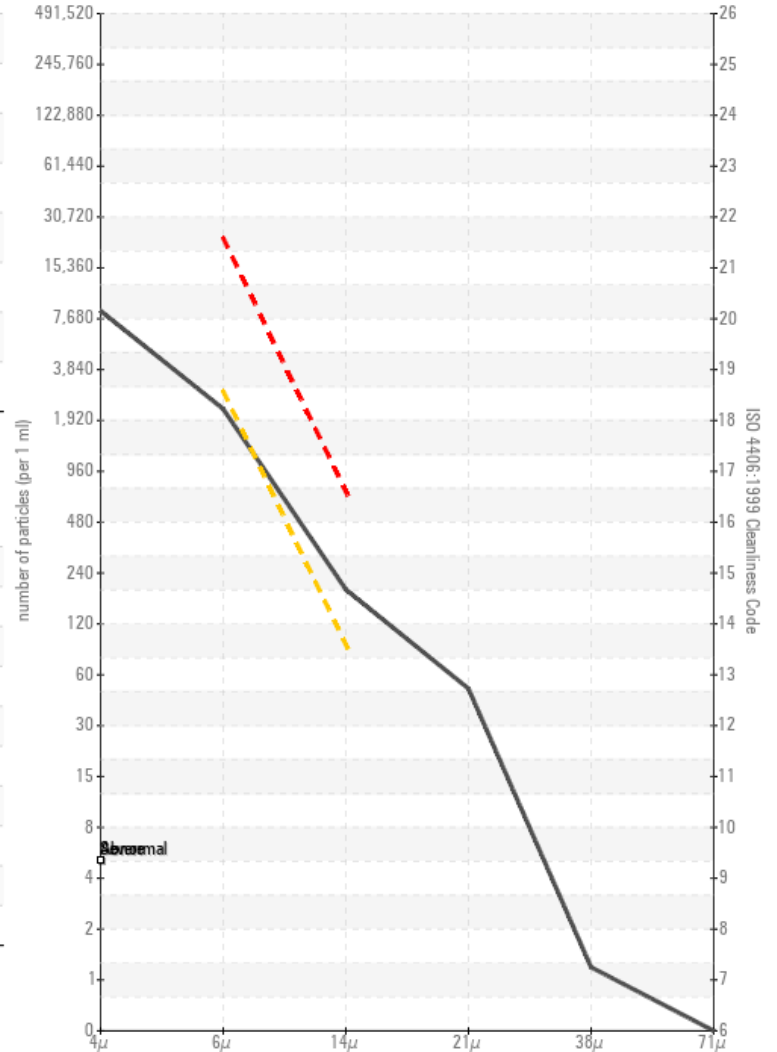
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

