



CONSTRUCTION EQUIPMENT

SWA395451-10 VOLVO L90G 617213 - HYDRAULIC SYSTEM



Sample No: VCP441765
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SWA395451-10



SAMPLE INFORMATION

Sample Number	VCP441765	VCP326779	VCP303749	VCP223358
Sample Date	27 Oct 2023	18 Oct 2021	14 Jun 2021	10 Aug 2020
Machine Hours	12029	11096	10532	10005
Oil Hours	0	0	3000	2000
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

IAA - INSURANCE AUTO AUCTIONS - ROCK TAVERN
 39 STONE CASTLE RD
 ROCK TAVERN, NY
 US 12575
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 40°C	cSt	42.2	42.2	43.0	43.0
Acid Number (AN)	mg KOH/g	0.24	0.320	0.293	0.336

T:
F:



CONTAMINATION

Particles >4µm		67951	12601	3825	589
Particles >6µm		12268	3384	896	136
Particles >14µm		432	199	60	23
ISO 4406:1999 (c)		23/21/16	21/19/15	19/17/13	16/14/12
Silicon	ppm	9	6	6	7
Sodium	ppm	0	1	0	1
Potassium	ppm	2	<1	<1	1

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.



WEAR METALS

Iron	ppm	7	5	5	4
Copper	ppm	6	4	4	4
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	<1	2	0	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	<1	<1	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	81	70	75	68
Magnesium	ppm	5	3	4	4
Zinc	ppm	430	406	429	417
Phosphorus	ppm	296	336	338	302
Barium	ppm	0	0	0	0
Boron	ppm	<1	4	2	5

Depot: INSROC
Unique No: 10725697
Signed: Wes Davis
Report Date: 03 Nov 2023

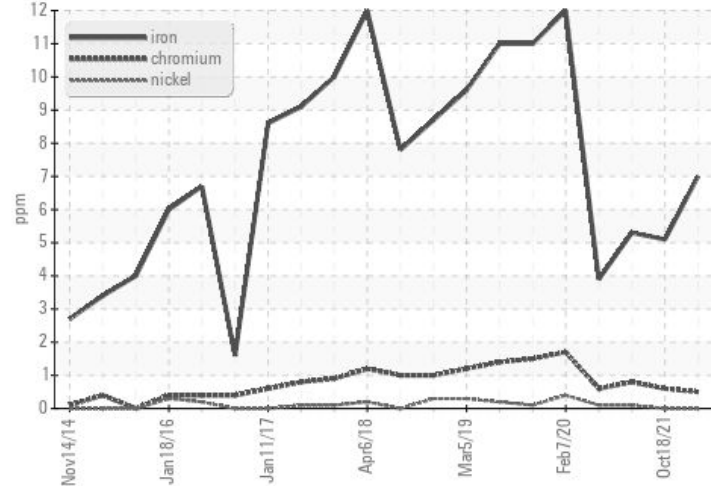


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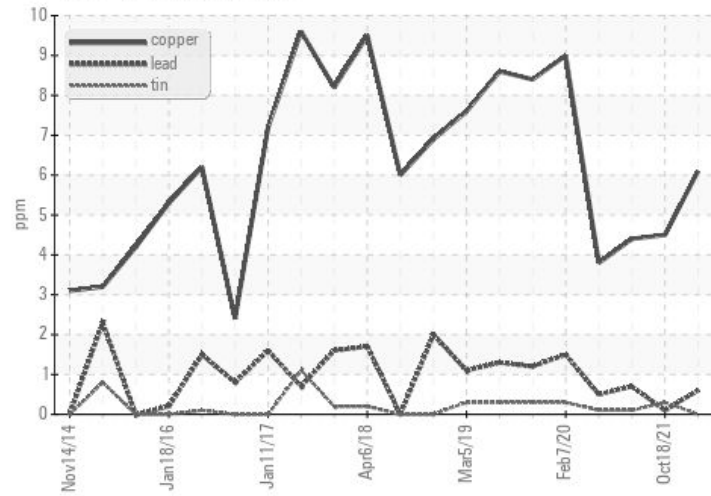


GRAPHS

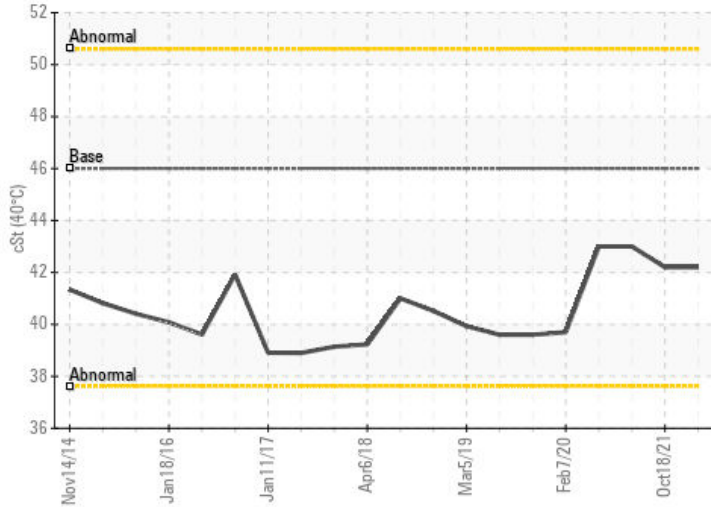
Ferrous Alloys



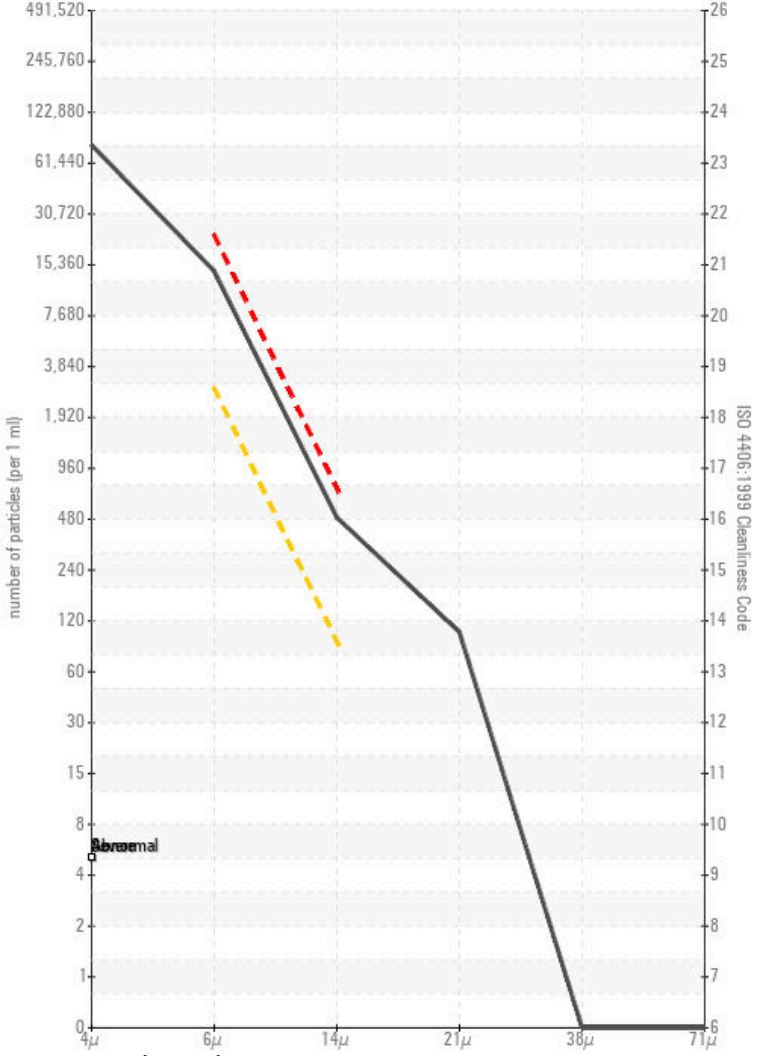
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

