



# CONSTRUCTION EQUIPMENT

## VOLVO A45G 352071 - HYDRAULIC SYSTEM



**Sample No:** VCP450923  
**Oil Type:** AW HYDRAULIC OIL ISO 46  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP450923</b>	VCP435586	VCP431037	VCP431891
Sample Date	<b>06 May 2024</b>	29 Jan 2024	20 Nov 2023	30 Oct 2023
Machine Hours	<b>8023</b>	7545	7276	7148
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 40°C	cSt	<b>41.4</b>	42.2	41.0	43.8
Acid Number (AN)	mg KOH/g	<b>1.14</b>	1.50	0.95	0.74



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>2109</b>	12593	4402	1179
Particles >6µm		<b>586</b>	4606	953	134
Particles >14µm		<b>45</b>	380	47	10
ISO 4406:1999 (c)		<b>18/16/13</b>	21/19/16	19/17/13	17/14/10
Silicon	ppm	<b>4</b>	4	4	3
Sodium	ppm	<b>&lt;1</b>	1	<1	0
Potassium	ppm	<b>0</b>	<1	0	1

**Diagnosis**  
 Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### WEAR METALS

Iron	ppm	<b>4</b>	1	2	6
Copper	ppm	<b>1</b>	1	1	2
Lead	ppm	<b>&lt;1</b>	1	<1	2
Tin	ppm	<b>0</b>	<1	0	0
Aluminum	ppm	<b>&lt;1</b>	<1	0	<1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>3</b>	3	3	1
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>110</b>	68	94	66
Magnesium	ppm	<b>425</b>	409	428	218
Zinc	ppm	<b>953</b>	967	954	682
Phosphorus	ppm	<b>814</b>	829	832	547
Barium	ppm	<b>0</b>	0	0	7
Boron	ppm	<b>&lt;1</b>	2	3	0

**Depot:** SAIBIR  
**Unique No:** 11035542  
**Signed:** Jonathan Hester  
**Report Date:** 22 May 2024

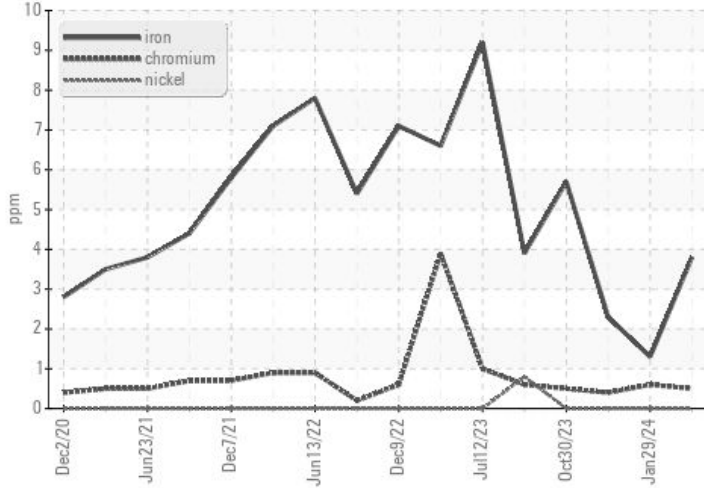


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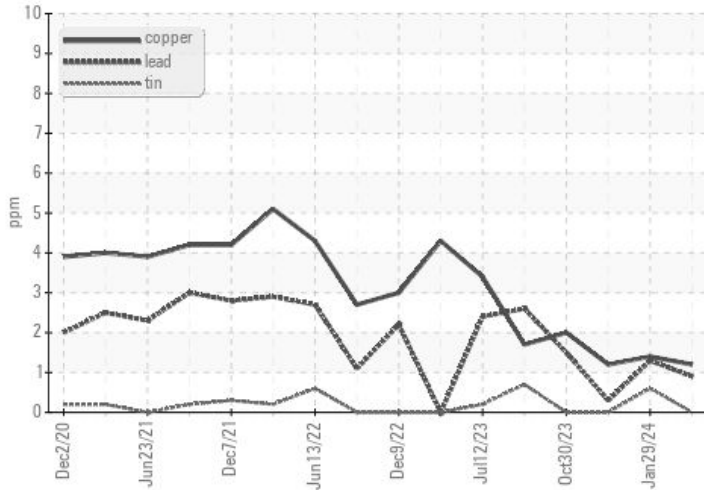


## GRAPHS

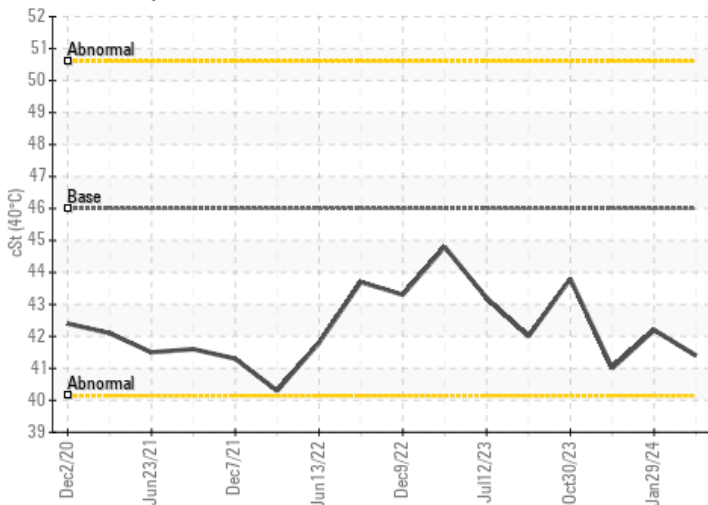
### Ferrous Alloys



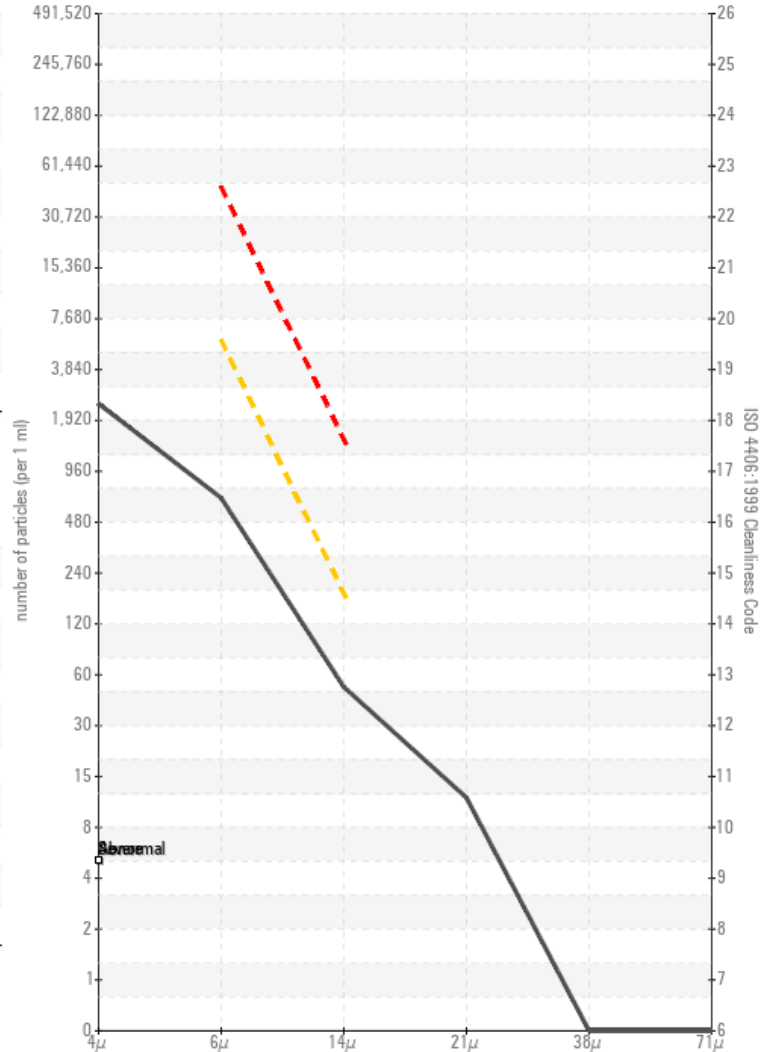
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

