



# CONSTRUCTION EQUIPMENT

## W14863 VOLVO L110H 631654 - HYDRAULIC SYSTEM



**Sample No:** VCP441474  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** W14863



### SAMPLE INFORMATION

Sample Number	<b>VCP441474</b>	VCP398342	VCP295093	VCP333319
Sample Date	<b>25 Oct 2023</b>	12 Dec 2022	24 May 2022	11 Jan 2022
Machine Hours	<b>6983</b>	6493	6013	5519
Oil Hours	<b>0</b>	500	2000	500
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Not Chngd
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	NORMAL

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### OIL CONDITION

Visc @ 40°C	cSt	<b>42.2</b>	41.9	42.2	45.2
Acid Number (AN)	mg KOH/g	<b>0.34</b>	0.37	0.44	0.348



### CONTAMINATION

Particles >4µm		<b>1307</b>	2151	12629	1581
Particles >6µm		<b>361</b>	564	4324	312
Particles >14µm		<b>33</b>	40	560	28
ISO 4406:1999 (c)		<b>18/16/12</b>	18/16/12	21/19/16	18/15/12
Silicon	ppm	<b>2</b>	4	3	3
Sodium	ppm	<b>4</b>	2	2	<1
Potassium	ppm	<b>&lt;1</b>	0	0	0

### 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>5</b>	5	5	4
Copper	ppm	<b>2</b>	2	2	2
Lead	ppm	<b>&lt;1</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	0
Aluminum	ppm	<b>&lt;1</b>	<1	<1	<1
Chromium	ppm	<b>1</b>	1	1	1
Molybdenum	ppm	<b>&lt;1</b>	<1	<1	<1
Nickel	ppm	<b>0</b>	0	<1	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>74</b>	93	82	108
Magnesium	ppm	<b>13</b>	15	0	18
Zinc	ppm	<b>412</b>	441	410	437
Phosphorus	ppm	<b>353</b>	350	330	344
Barium	ppm	<b>20</b>	0	0	0
Boron	ppm	<b>&lt;1</b>	2	3	5

**Depot:** VOLVO0080  
**Unique No:** 10722628  
**Signed:** Don Baldrige  
**Report Date:** 01 Nov 2023

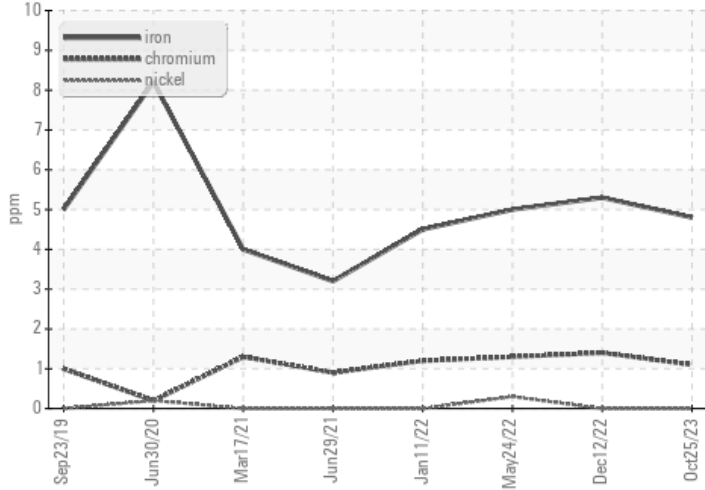


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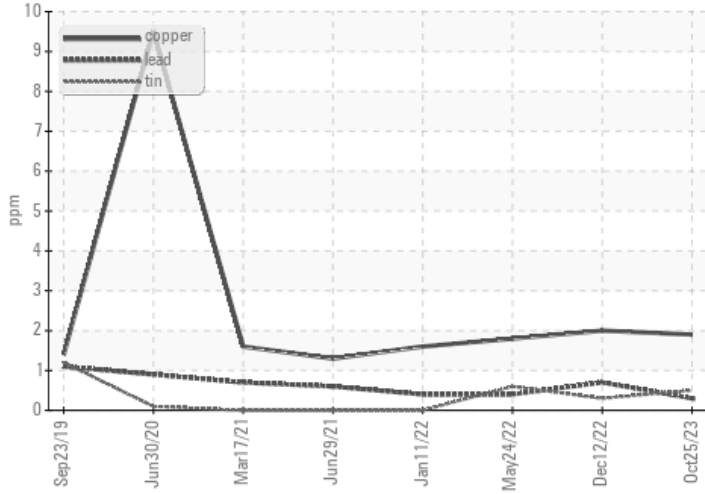


## GRAPHS

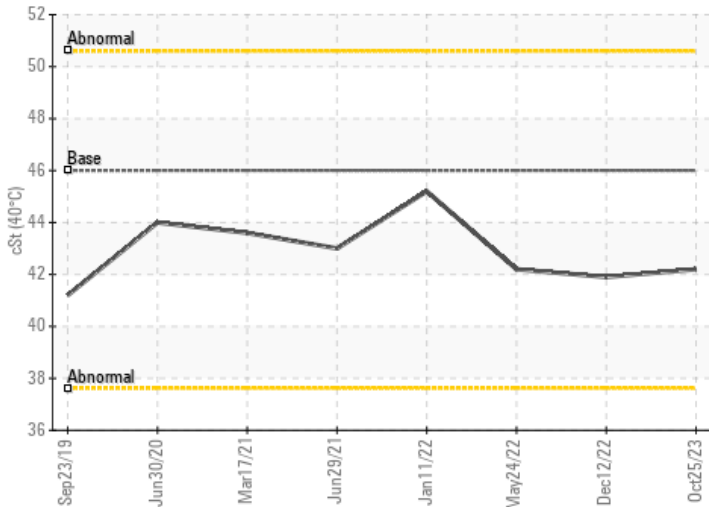
### Ferrous Alloys



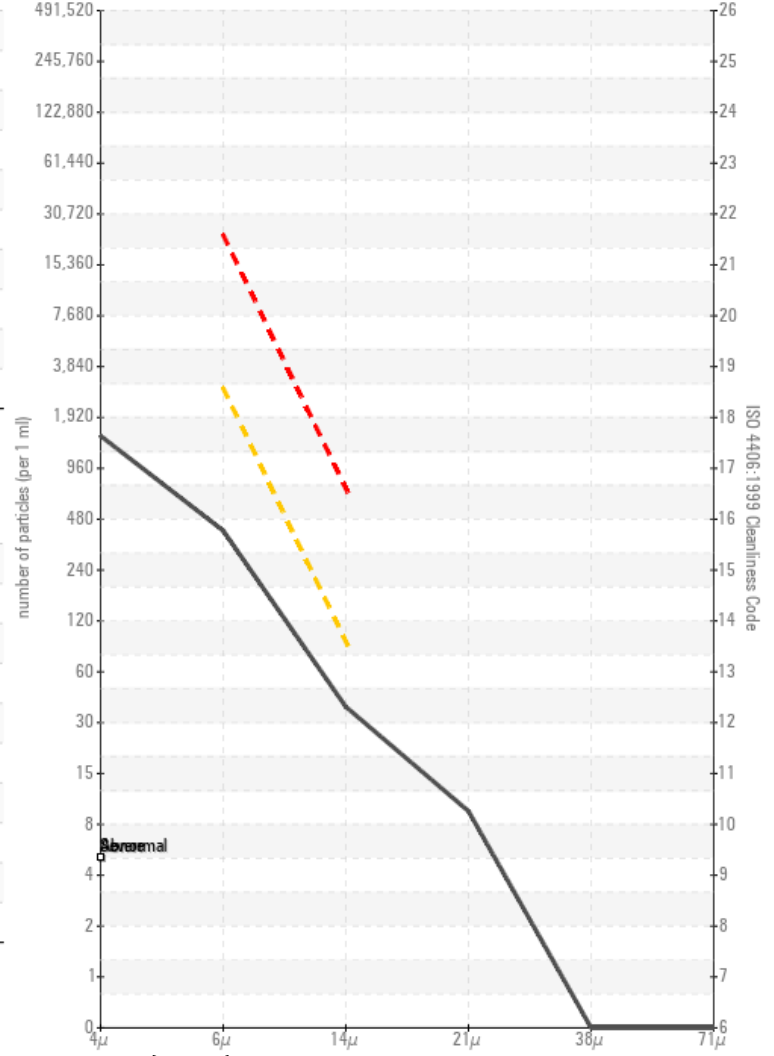
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

