



# CONSTRUCTION EQUIPMENT

## 2523-1 VOLVO L90G 3199 - HYDRAULIC SYSTEM



**Sample No:** VCP407669  
**Oil Type:** CHEVRON HYDRAULIC OIL AW ISO 46  
**Job No:** 2523-1



### SAMPLE INFORMATION

Sample Number	<b>VCP407669</b>	VCP390158	VCP380618	VCP346621
Sample Date	<b>28 Jun 2023</b>	28 Mar 2023	13 Dec 2022	17 Feb 2022
Machine Hours	<b>16948</b>	16484	15806	13800
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Not Chngd</b>	Not Chngd	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	NORMAL

### MCCLUNG LOGAN

17941 SUSSEX HIGHWAY  
 BRIDGEVILLE, DE  
 US 19933

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### OIL CONDITION

Visc @ 40°C	cSt	<b>42.7</b>	43.2	42.9	43.4
Acid Number (AN)	mg KOH/g	<b>0.34</b>	0.31	0.40	0.37



### CONTAMINATION

Particles >4µm	<b>851</b>	1301	▲ 19265	1656	
Particles >6µm	<b>266</b>	386	▲ 4415	360	
Particles >14µm	<b>27</b>	51	▲ 163	19	
ISO 4406:1999 (c)	<b>17/15/12</b>	18/16/13	21/19/15	18/16/11	
Silicon	ppm	<b>2</b>	2	5	8
Sodium	ppm	<b>2</b>	<1	4	4
Potassium	ppm	<b>&lt;1</b>	<1	0	0

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### WEAR METALS

Iron	ppm	<b>2</b>	2	3	5
Copper	ppm	<b>&lt;1</b>	<1	1	2
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>0</b>	0	0	<1
Aluminum	ppm	<b>0</b>	<1	<1	<1
Chromium	ppm	<b>&lt;1</b>	<1	1	2
Molybdenum	ppm	<b>1</b>	1	<1	<1
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	<1	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>0</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>128</b>	134	79	99
Magnesium	ppm	<b>4</b>	6	4	<1
Zinc	ppm	<b>448</b>	443	420	467
Phosphorus	ppm	<b>342</b>	336	335	373
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>&lt;1</b>	2	<1	3

**Depot:** VOLVO1023  
**Unique No:** 10548654  
**Signed:** Wes Davis  
**Report Date:** 10 Jul 2023

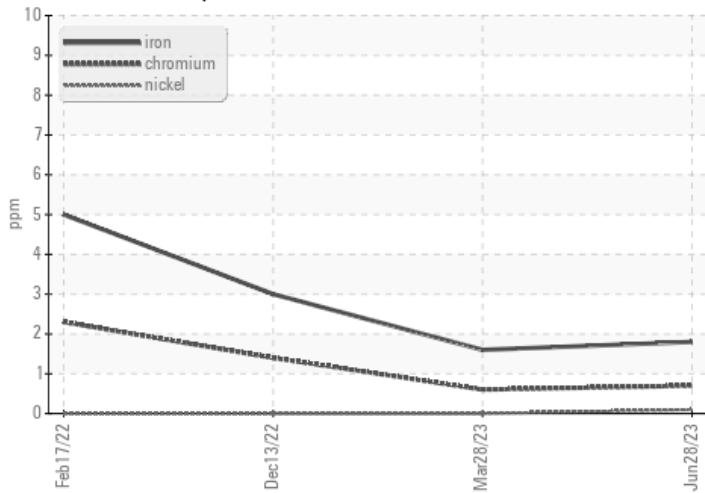


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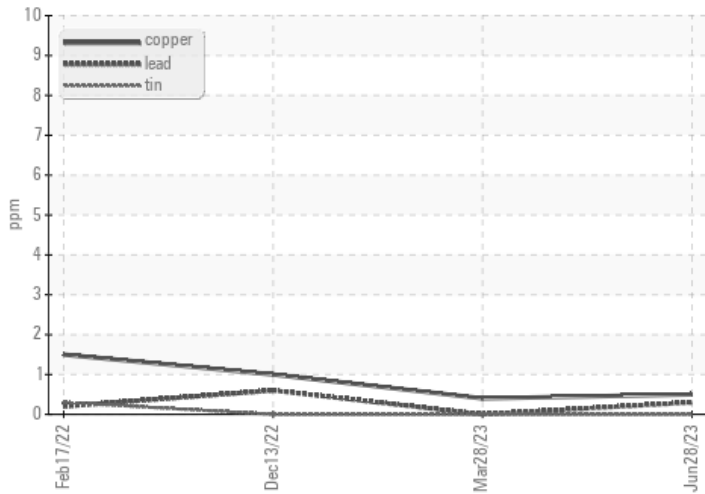


## GRAPHS

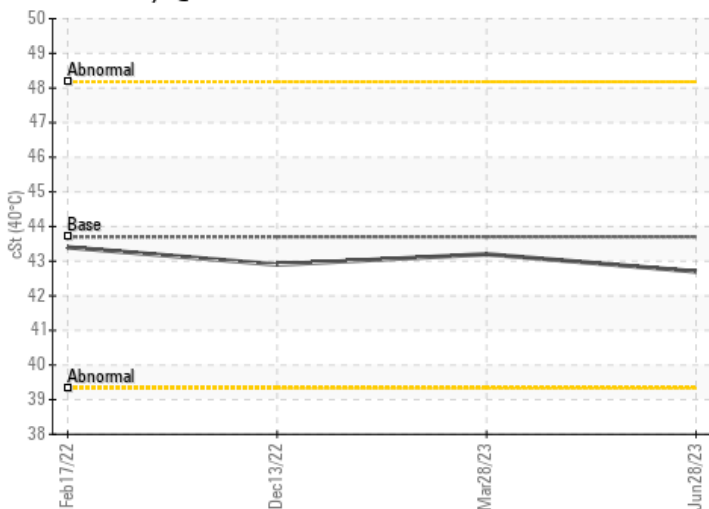
### Ferrous Alloys



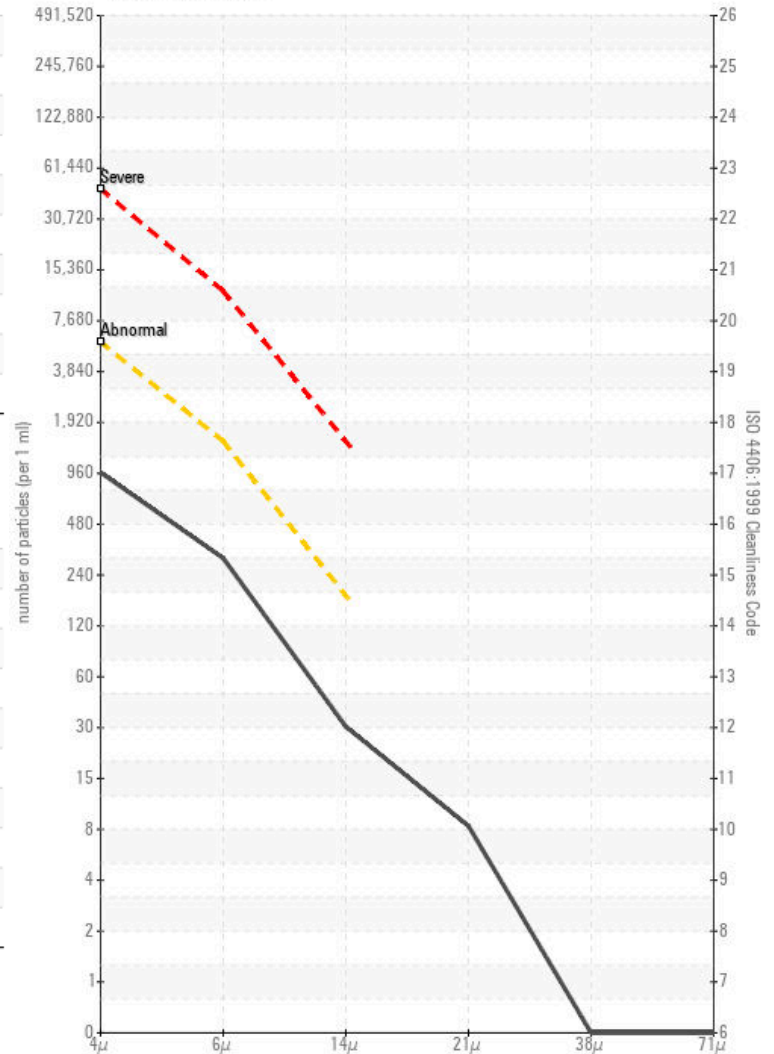
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

