



# CONSTRUCTION EQUIPMENT

## SWA560078-10 VOLVO L180H 5412 - HYDRAULIC SYSTEM



**Sample No:** VCP430313  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA560078-10



### SAMPLE INFORMATION

Sample Number	<b>VCP430313</b>	VCP442820	VCP396101	VCP374135
Sample Date	<b>16 May 2024</b>	07 Feb 2024	01 Feb 2023	18 Jun 2022
Machine Hours	<b>9182</b>	7046	6657	4250
Oil Hours	<b>2000</b>	0	6657	0
Oil Changed	<b>Not Chngd</b>	N/A	Changed	Not Chngd
Sample Status	<b>ABNORMAL</b>	ABNORMAL	ABNORMAL	ABNORMAL

**CALLANAN**  
 RT 32 677 FLATBUSH RD  
 EAST KINGSTON, NY  
 US 12401  
 Contact:

### OIL CONDITION

Visc @ 40°C	cSt	<b>43.0</b>	40.0	39.6	39.8
Acid Number (AN)	mg KOH/g	<b>0.29</b>	0.44	0.34	0.327

T:  
F:

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>▲ 18590</b>	▲ 10944	▲ 12359	▲ 14058
Particles >6µm		<b>▲ 4101</b>	● 2482	● 2153	▲ 2606
Particles >14µm		<b>● 198</b>	■ 114	■ 37	■ 89
ISO 4406:1999 (c)		<b>21/19/15</b>	21/18/14	21/18/12	21/19/14
Silicon	ppm	<b>■ 5</b>	■ 4	■ 4	■ 2
Sodium	ppm	<b>■ 2</b>	■ 0	■ 3	■ 2
Potassium	ppm	<b>■ &lt;1</b>	■ 2	■ 0	■ <1

### Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 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	<b>■ 5</b>	■ 9	■ 9	■ 5
Copper	ppm	<b>■ 2</b>	■ 4	■ 5	■ 4
Lead	ppm	<b>■ 0</b>	■ 2	■ <1	■ 1
Tin	ppm	<b>■ 0</b>	■ <1	■ <1	■ <1
Aluminum	ppm	<b>■ &lt;1</b>	■ 2	■ <1	■ 1
Chromium	ppm	<b>■ 2</b>	■ 1	■ 4	■ 3
Molybdenum	ppm	<b>■ 0</b>	■ 1	■ 0	■ 0
Nickel	ppm	<b>■ 0</b>	■ <1	■ 0	■ 0
Titanium	ppm	<b>0</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>■ 67</b>	■ 315	■ 39	■ 40
Magnesium	ppm	<b>■ 3</b>	■ 5	■ <1	■ <1
Zinc	ppm	<b>■ 424</b>	■ 485	■ 359	■ 406
Phosphorus	ppm	<b>■ 344</b>	■ 406	■ 294	■ 319
Barium	ppm	<b>■ 0</b>	■ 13	■ 0	■ 0
Boron	ppm	<b>■ 0</b>	■ 3	■ 0	■ 2

**Depot:** CALEAS  
**Unique No:** 11047735  
**Signed:** Wes Davis  
**Report Date:** 29 May 2024

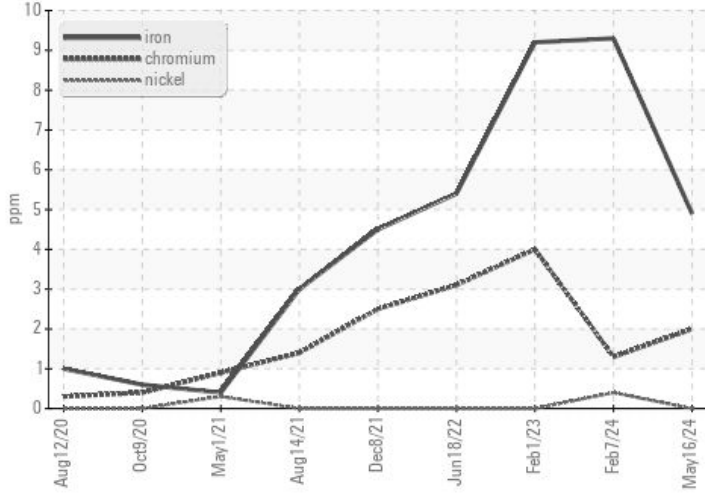


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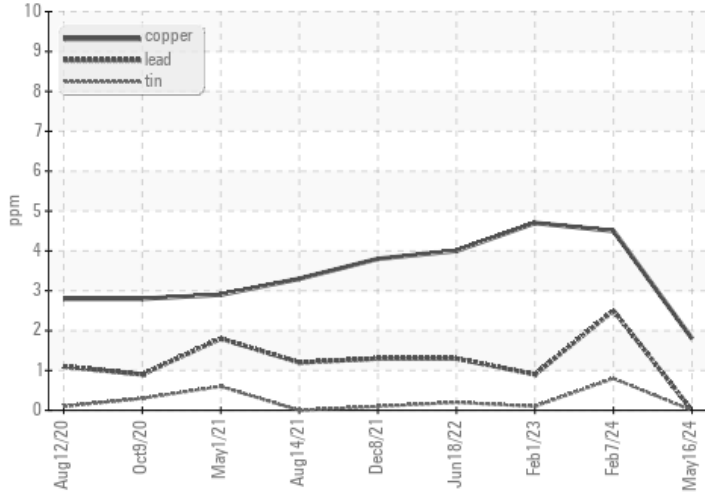


## GRAPHS

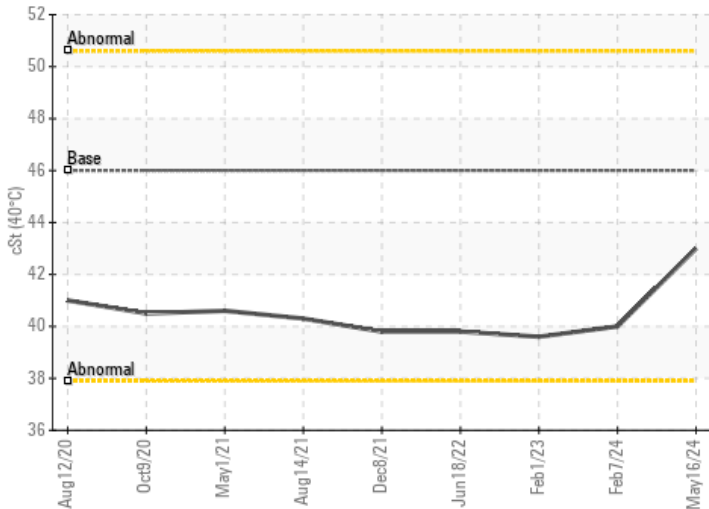
### Ferrous Alloys



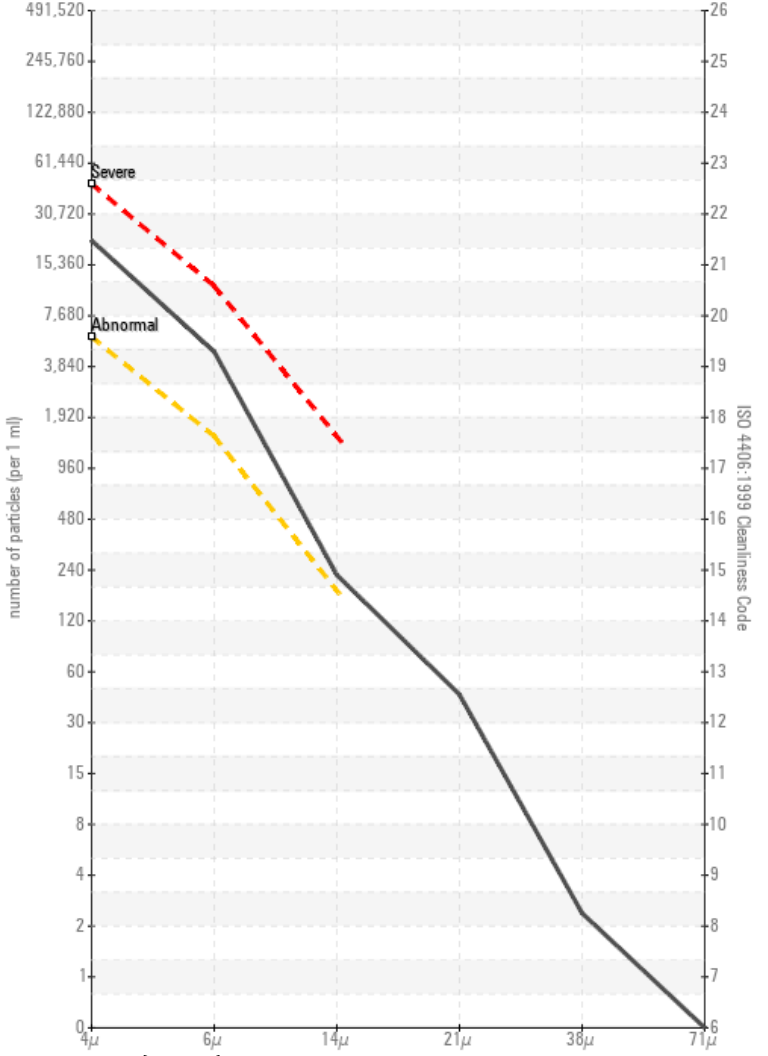
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

