



# CONSTRUCTION EQUIPMENT

## SWA532686 LIBERTY LF VOLVO A40G 352020 - HYDRAULIC SYSTEM



**Sample No:** VCP423812  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA532686 LIBERTY LF



### SAMPLE INFORMATION

Sample Number	<b>VCP423812</b>	VCP322898	VCP342331	---
Sample Date	<b>16 Apr 2024</b>	02 Apr 2024	11 Nov 2021	---
Machine Hours	<b>6476</b>	6397	4531	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Not Changd	Not Changd	---
Sample Status	<b>ABNORMAL</b>	ABNORMAL	NORMAL	---

**LIBERTY ENVIRONMENTALIST INC**  
 7900 S MERIDIAN  
 CLARKLAKE, MI  
 US 49234  
 Contact: SERVICE MANAGER



### OIL CONDITION

Visc @ 40°C	cSt	<b>42.9</b>	40.6	42.4	---
Acid Number (AN)	mg KOH/g	<b>0.40</b>	0.41	0.327	---

T: (517)787-1177  
 F:



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Particles >4µm		<b>38923</b>	96649	5582	---
Particles >6µm		<b>▲ 11917</b>	▲ 38692	■ 1221	---
Particles >14µm		<b>▲ 545</b>	▲ 3785	■ 67	---
ISO 4406:1999 (c)		<b>22/21/16</b>	24/22/19	20/17/13	---
Silicon	ppm	<b>■ 8</b>	■ 2	■ 0	---
Sodium	ppm	<b>■ &lt;1</b>	■ 15	■ 0	---
Potassium	ppm	<b>■ 1</b>	■ 2	■ 0	---

### Diagnosis

The oil change at the time of sampling has been noted. 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	<b>■ 11</b>	■ 0	■ 0	---
Copper	ppm	<b>■ 2</b>	■ 2	■ <1	---
Lead	ppm	<b>■ 2</b>	■ 0	■ <1	---
Tin	ppm	<b>■ &lt;1</b>	■ <1	■ 0	---
Aluminum	ppm	<b>■ 3</b>	■ 4	■ 0	---
Chromium	ppm	<b>■ &lt;1</b>	■ <1	■ 0	---
Molybdenum	ppm	<b>■ &lt;1</b>	■ 0	■ 0	---
Nickel	ppm	<b>■ &lt;1</b>	■ <1	■ 0	---
Titanium	ppm	<b>&lt;1</b>	<1	0	---
Silver	ppm	<b>0</b>	0	<1	---
Manganese	ppm	<b>■ &lt;1</b>	■ 0	■ 0	---
Vanadium	ppm	<b>0</b>	<1	0	---



### ADDITIVES

Calcium	ppm	<b>■ 55</b>	■ 0	■ 0	---
Magnesium	ppm	<b>■ 2</b>	■ 1	■ 0	---
Zinc	ppm	<b>■ 430</b>	■ 136	■ 0	---
Phosphorus	ppm	<b>■ 356</b>	■ 23	■ 3	---
Barium	ppm	<b>■ 0</b>	■ 0	■ 0	---
Boron	ppm	<b>■ 0</b>	■ 0	■ <1	---

**Depot:** LIBCLA  
**Unique No:** 10993856  
**Signed:** Wes Davis  
**Report Date:** 24 Apr 2024

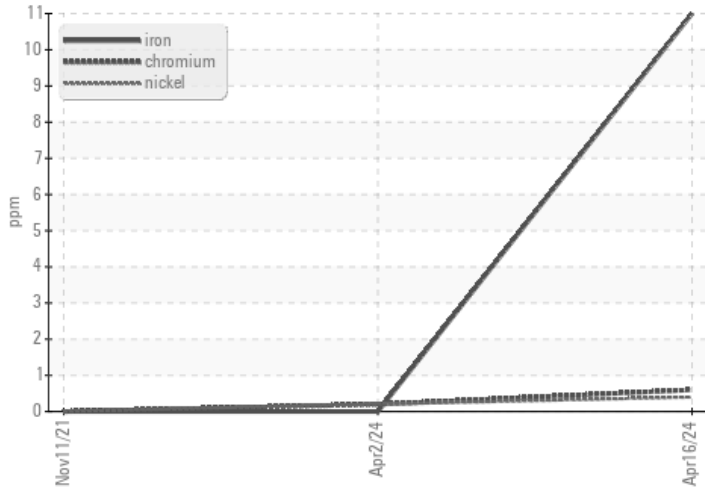


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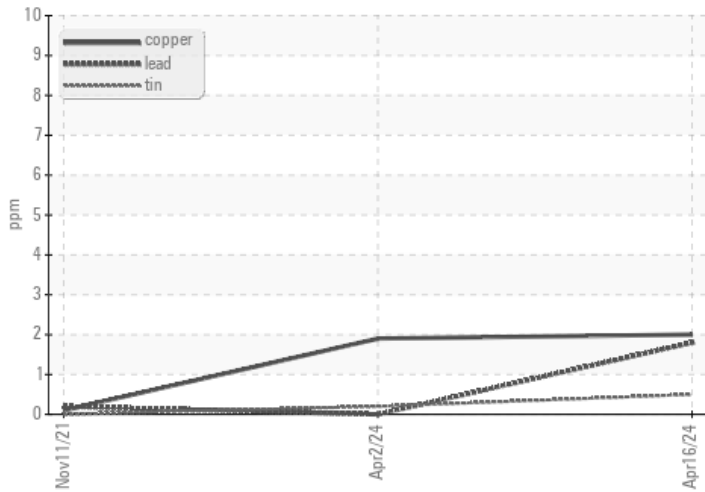


## VOLVO GRAPHS

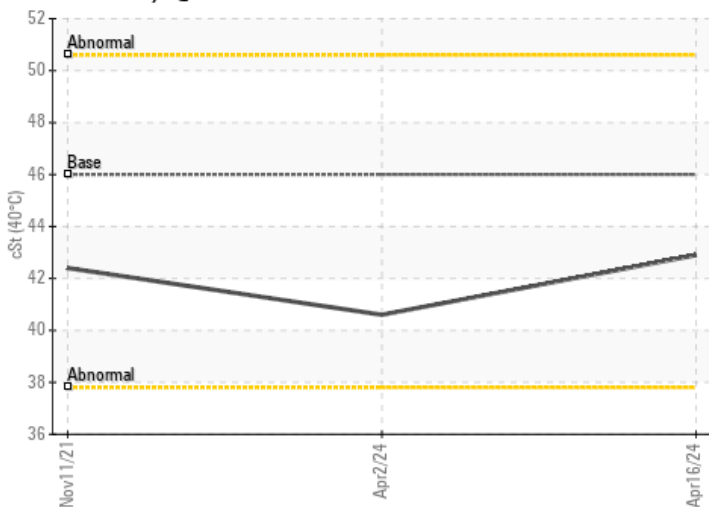
### Ferrous Alloys



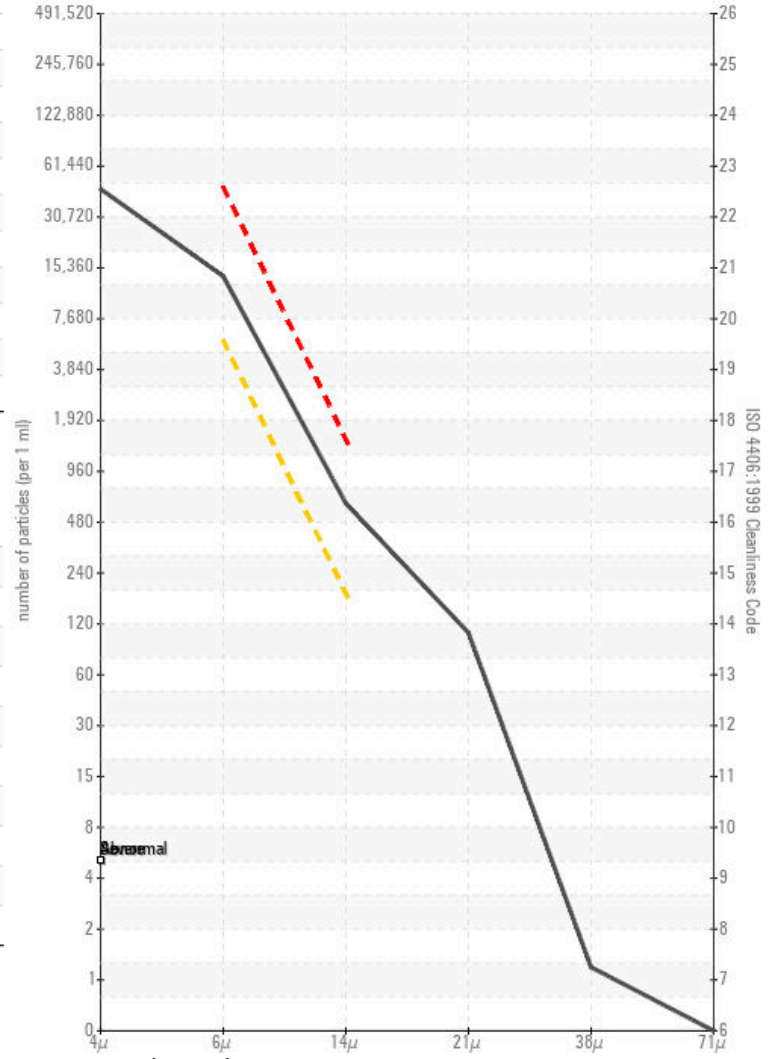
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

