



# CONSTRUCTION EQUIPMENT

## RA47 VOLVO A40G 352354 - HYDRAULIC SYSTEM



**Sample No:** VCP435349  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** RA47



### SAMPLE INFORMATION

Sample Number	<b>VCP435349</b>	VCP374260	VCP320590	VCP317443
Sample Date	<b>16 Nov 2023</b>	13 May 2022	02 Feb 2022	27 Aug 2021
Machine Hours	<b>5488</b>	2872	2226	1496
Oil Hours	<b>500</b>	500	2000	500
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Not Chngd
Sample Status	<b>ABNORMAL</b>	ATTENTION	NORMAL	ABNORMAL

**HOUSBY HEAVY EQUIPMENT, LLC**  
 4410 SE 4 MILE DR  
 ANKENY, IA  
 US 50021  
 Contact: RANDY VANDERLEEST  
 rvanderleest@housby.com  
 T:  
 F: (515)964-2865

### OIL CONDITION

Visc @ 40°C	cSt	<b>42.7</b>	41.5	42.1	43.0
Acid Number (AN)	mg KOH/g	<b>0.25</b>	0.37	0.30	0.433

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>11194</b>	17734	6562	173979
Particles >6µm		<b>▲ 5037</b>	3915	1912	▲ 82950
Particles >14µm		<b>▲ 711</b>	▲ 183	142	▲ 5306
ISO 4406:1999 (c)		<b>21/20/17</b>	21/19/15	20/18/14	25/24/20
Silicon	ppm	<b>8</b>	5	4	8
Sodium	ppm	<b>0</b>	<1	<1	1
Potassium	ppm	<b>2</b>	0	0	9

### Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

### WEAR METALS

Iron	ppm	<b>10</b>	4	3	2
Copper	ppm	<b>3</b>	3	3	3
Lead	ppm	<b>2</b>	2	2	2
Tin	ppm	<b>0</b>	<1	0	0
Aluminum	ppm	<b>2</b>	1	0	<1
Chromium	ppm	<b>&lt;1</b>	0	0	0
Molybdenum	ppm	<b>1</b>	<1	0	0
Nickel	ppm	<b>&lt;1</b>	0	0	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	<1	0	0
Manganese	ppm	<b>0</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	0	<1

### ADDITIVES

Calcium	ppm	<b>111</b>	53	53	54
Magnesium	ppm	<b>13</b>	<1	1	1
Zinc	ppm	<b>455</b>	396	428	409
Phosphorus	ppm	<b>365</b>	323	344	323
Barium	ppm	<b>9</b>	0	0	0
Boron	ppm	<b>0</b>	1	0	<1

**Depot:** VOLVO0080  
**Unique No:** 10753099  
**Signed:** Don Baldrige  
**Report Date:** 23 Nov 2023

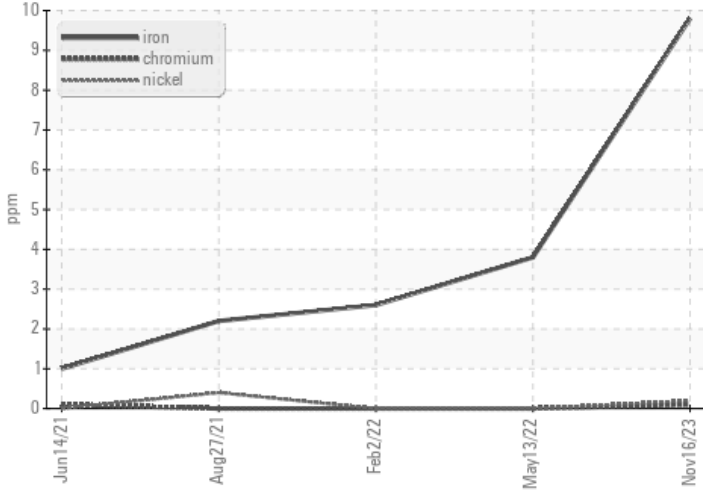


# CONSTRUCTION EQUIPMENT

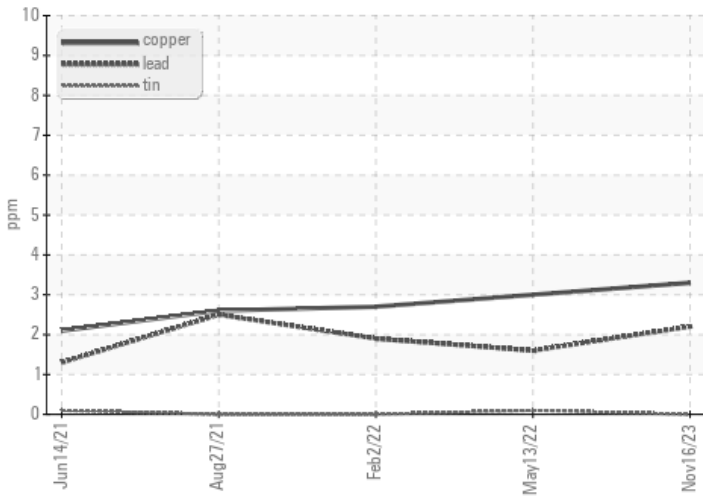


## GRAPHS

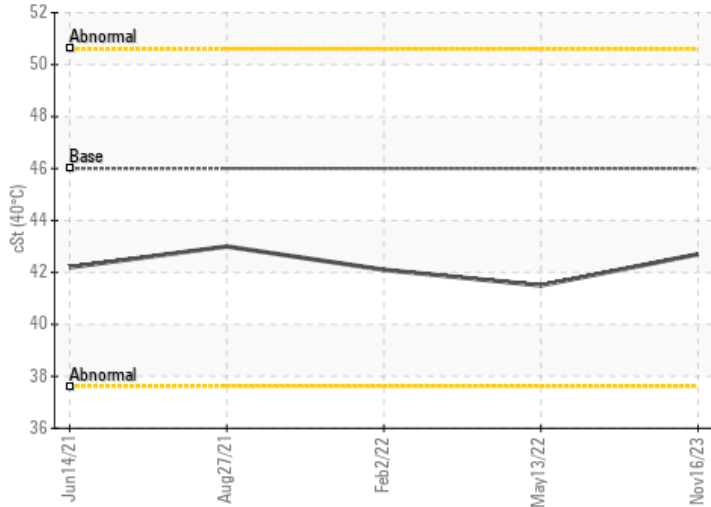
Ferrous Alloys



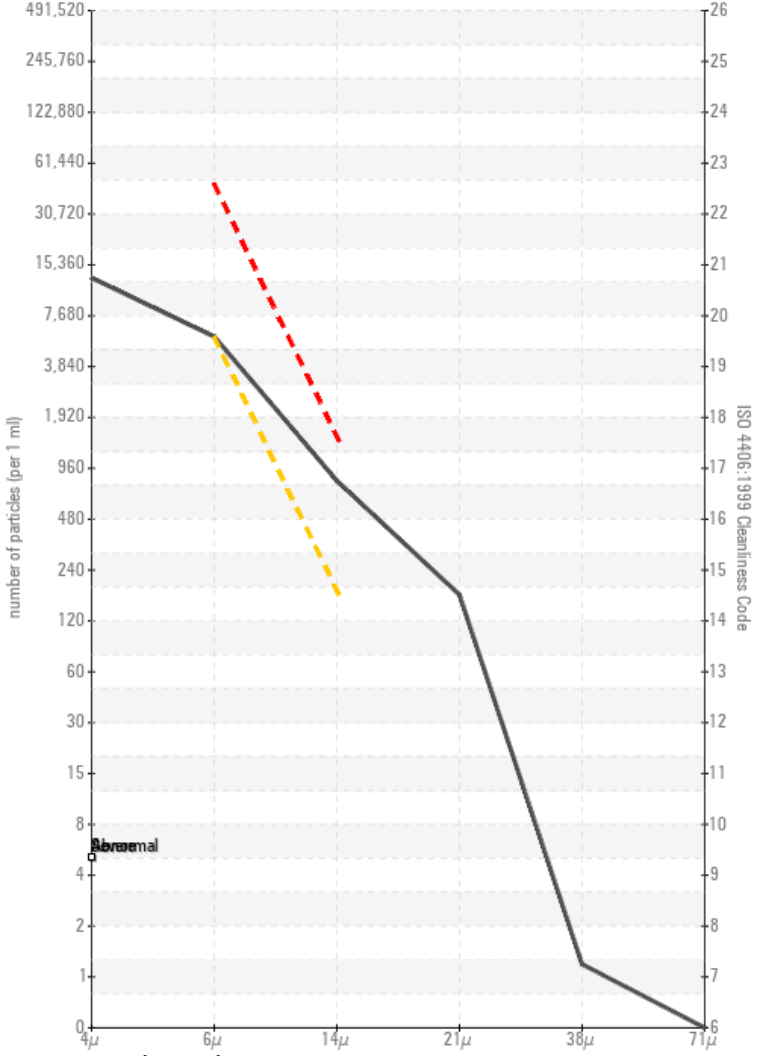
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

