



# CONSTRUCTION EQUIPMENT

## VOLVO SD115B 23655 - HYDRAULIC SYSTEM



**Sample No:** VCP392748  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP392748</b>	VCP386102	VCP359055	VCP343524
Sample Date	<b>18 Aug 2023</b>	14 Sep 2022	02 May 2022	30 Nov 2021
Machine Hours	<b>5688</b>	5481	5221	4650
Oil Hours	<b>0</b>	500	500	2000
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	ABNORMAL

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: ROBERT TURNER  
 rturner@ripatampa.com  
 T:  
 F:

### OIL CONDITION

Visc @ 40°C	cSt	<b>39.1</b>	39.1	38.3	▲ 29.6
Acid Number (AN)	mg KOH/g	<b>0.41</b>	0.40	0.46	0.471

### CONTAMINATION

Particles >4µm	---	957	7490	965	
Particles >6µm	---	77	1971	99	
Particles >14µm	---	1	160	14	
ISO 4406:1999 (c)	---	17/13/7	20/18/14	17/14/11	
Silicon	ppm	<b>6</b>	5	5	13
Sodium	ppm	<b>&lt;1</b>	<1	1	3
Potassium	ppm	<b>0</b>	0	<1	<1

**Diagnosis**  
 No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

### WEAR METALS

Iron	ppm	<b>23</b>	19	17	▲ 25
Copper	ppm	<b>6</b>	5	4	10
Lead	ppm	<b>1</b>	1	1	2
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>2</b>	1	1	2
Chromium	ppm	<b>0</b>	0	0	<1
Molybdenum	ppm	<b>2</b>	2	3	7
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	<1	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	<1

### ADDITIVES

Calcium	ppm	<b>122</b>	115	125	264
Magnesium	ppm	<b>13</b>	12	16	43
Zinc	ppm	<b>375</b>	363	392	340
Phosphorus	ppm	<b>318</b>	320	346	310
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>2</b>	1	5	4

**Depot:** RIPTAM  
**Unique No:** 10617346  
**Signed:** Don Baldrige  
**Report Date:** 24 Aug 2023

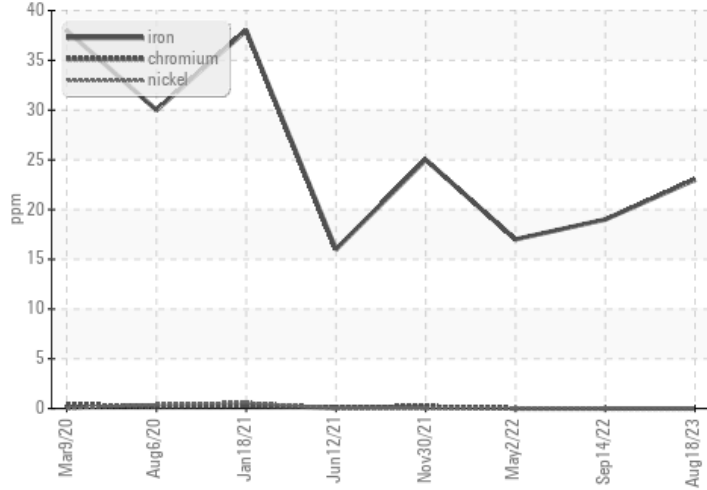


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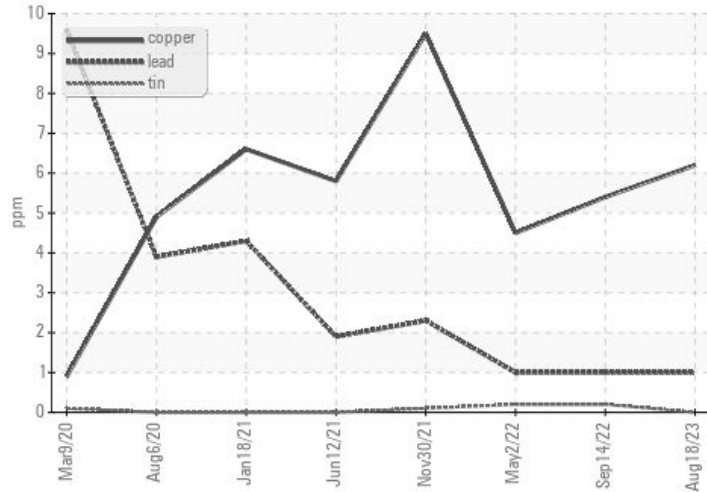


## VOLVO GRAPHS

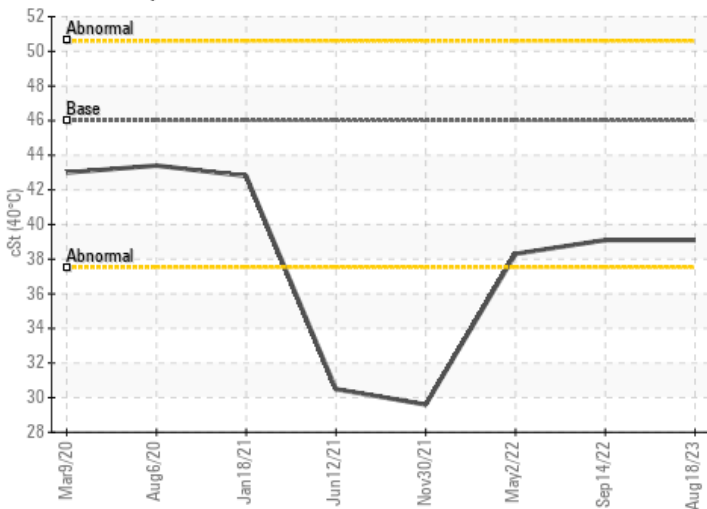
### Ferrous Alloys



### Non-ferrous Metals



### Viscosity @ 40°C



### Acid Number

