



# CONSTRUCTION EQUIPMENT

## VOLVO L90H 623836 - HYDRAULIC SYSTEM



**Sample No:** VCP440126  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP440126</b>	VCP395974	VCP357455	VCP322135
Sample Date	<b>18 Jun 2024</b>	02 Feb 2023	29 Mar 2022	18 Jun 2021
Machine Hours	<b>7054</b>	6023	4970	4029
Oil Hours	<b>0</b>	2000	970	4029
Oil Changed	<b>Not Chngd</b>	Not Chngd	Not Chngd	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	ABNORMAL	ABNORMAL

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:



### OIL CONDITION

Visc @ 40°C	cSt	<b>42.2</b>	44.1	44.7	43.7
Acid Number (AN)	mg KOH/g	<b>0.36</b>	0.32	0.28	0.320



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>5718</b>	8145	10561	26312
Particles >6µm		<b>1098</b>	2402	2768	8472
Particles >14µm		<b>47</b>	199	224	619
ISO 4406:1999 (c)		<b>20/17/13</b>	20/18/15	21/19/15	22/20/16
Silicon	ppm	<b>11</b>	3	2	2
Sodium	ppm	<b>4</b>	0	0	2
Potassium	ppm	<b>2</b>	<1	1	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>	4	2	5
Copper	ppm	<b>5</b>	6	5	7
Lead	ppm	<b>2</b>	2	2	3
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>&lt;1</b>	0	<1	<1
Chromium	ppm	<b>2</b>	3	2	3
Molybdenum	ppm	<b>2</b>	2	2	<1
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>134</b>	88	104	59
Magnesium	ppm	<b>18</b>	12	13	2
Zinc	ppm	<b>468</b>	445	473	433
Phosphorus	ppm	<b>381</b>	331	353	329
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>4</b>	0	2	3

**Depot:** RIPTAM  
**Unique No:** 11096290  
**Signed:** Wes Davis  
**Report Date:** 25 Jun 2024

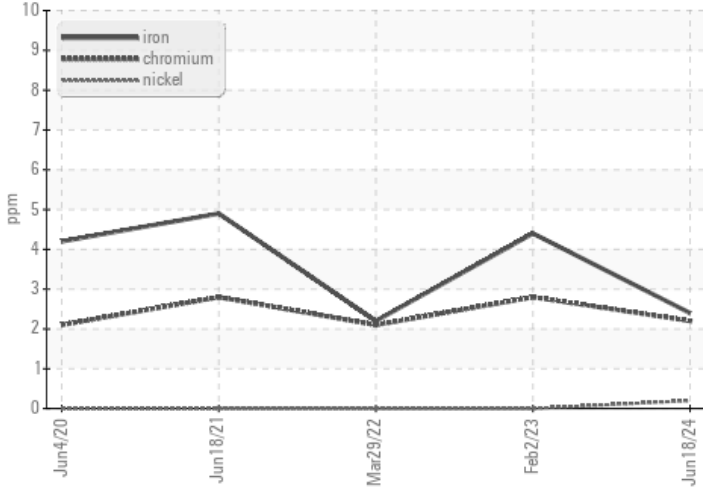


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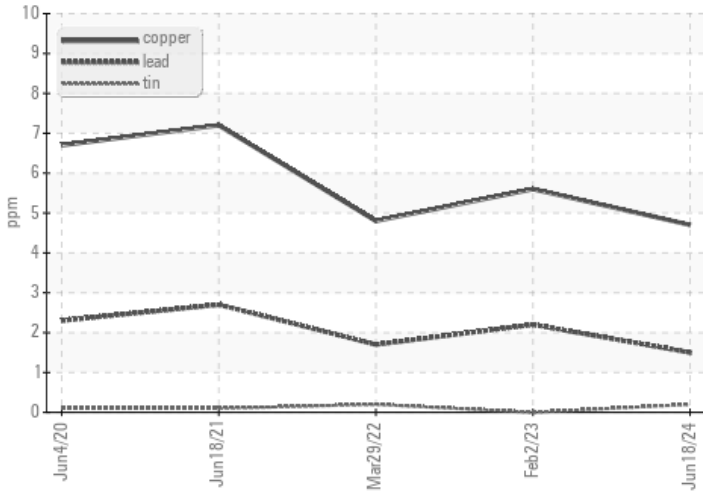


## GRAPHS

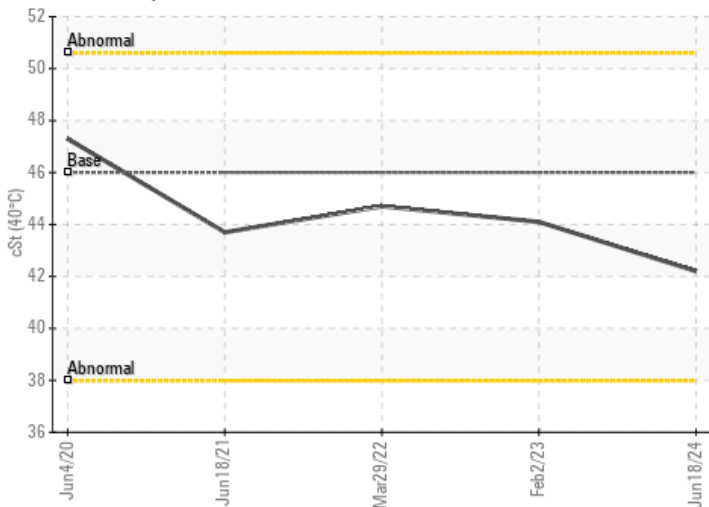
### Ferrous Alloys



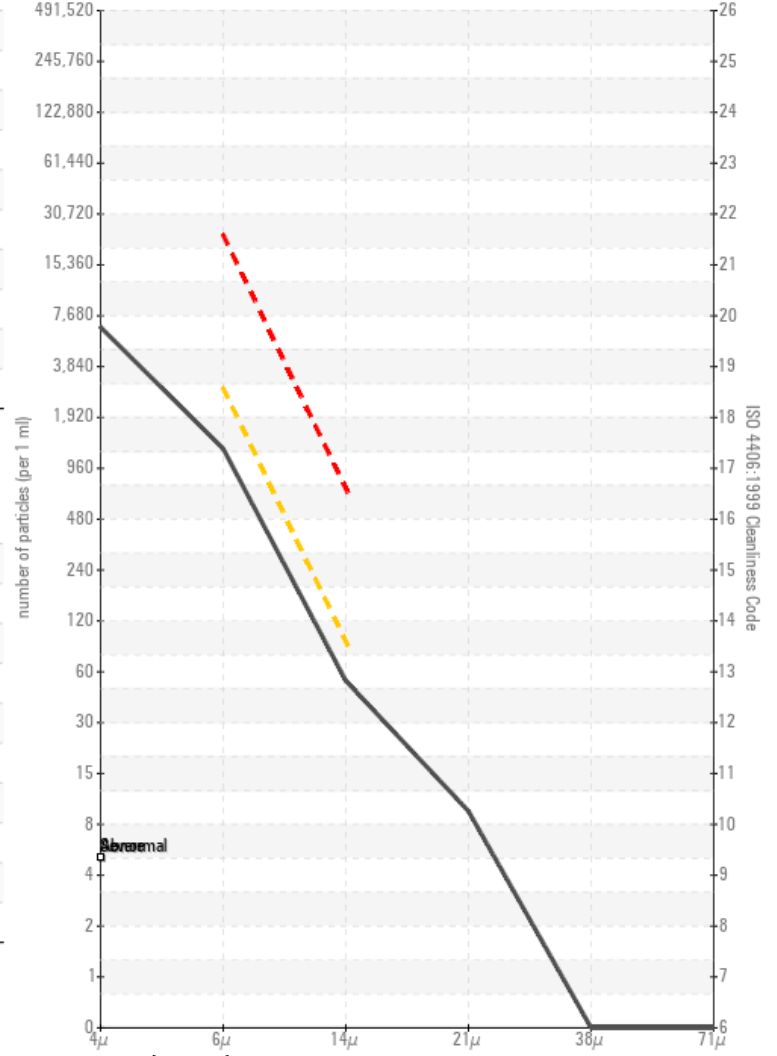
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

