



# CONSTRUCTION EQUIPMENT

## VOLVO ECR145EL 314057 - HYDRAULIC SYSTEM



**Sample No:** VCP451193  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP451193</b>	VCP429671	VCP392705	VCP367196
Sample Date	<b>10 May 2024</b>	13 Dec 2023	27 Jun 2023	12 Sep 2022
Machine Hours	<b>5111</b>	4615	4163	2982
Oil Hours	<b>0</b>	0	4163	500
Oil Changed	<b>Not Chngd</b>	Not Chngd	Changed	Not Chngd
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### 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>41.5</b>	42.1	44.6	42.2
Acid Number (AN)	mg KOH/g	<b>0.45</b>	0.52	0.44	0.46



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Particles >4µm		<b>11952</b>	5162	3609	3228
Particles >6µm		<b>3359</b>	1436	541	504
Particles >14µm		<b>282</b>	92	23	15
ISO 4406:1999 (c)		<b>21/19/15</b>	20/18/14	19/16/12	19/16/11
Silicon	ppm	<b>2</b>	2	2	2
Sodium	ppm	<b>1</b>	0	2	<1
Potassium	ppm	<b>0</b>	<1	3	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>4</b>	4	4	2
Copper	ppm	<b>15</b>	21	28	30
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>0</b>	0	0	<1
Aluminum	ppm	<b>&lt;1</b>	3	2	<1
Chromium	ppm	<b>0</b>	<1	0	0
Molybdenum	ppm	<b>0</b>	0	0	0
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>0</b>	0	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	0	0
Vanadium	ppm	<b>0</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>100</b>	123	44	43
Magnesium	ppm	<b>1</b>	3	2	0
Zinc	ppm	<b>418</b>	536	410	386
Phosphorus	ppm	<b>340</b>	429	352	343
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>0</b>	0	0	0

**Depot:** RIPTAM  
**Unique No:** 1103552  
**Signed:** Wes Davis  
**Report Date:** 21 May 2024

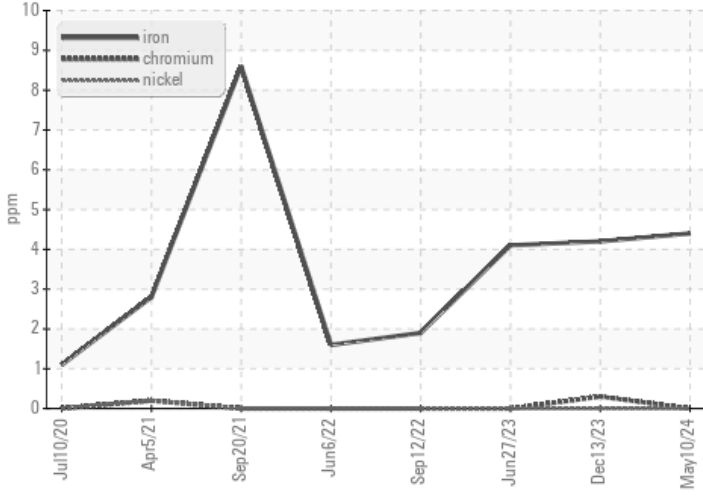


# CONSTRUCTION EQUIPMENT

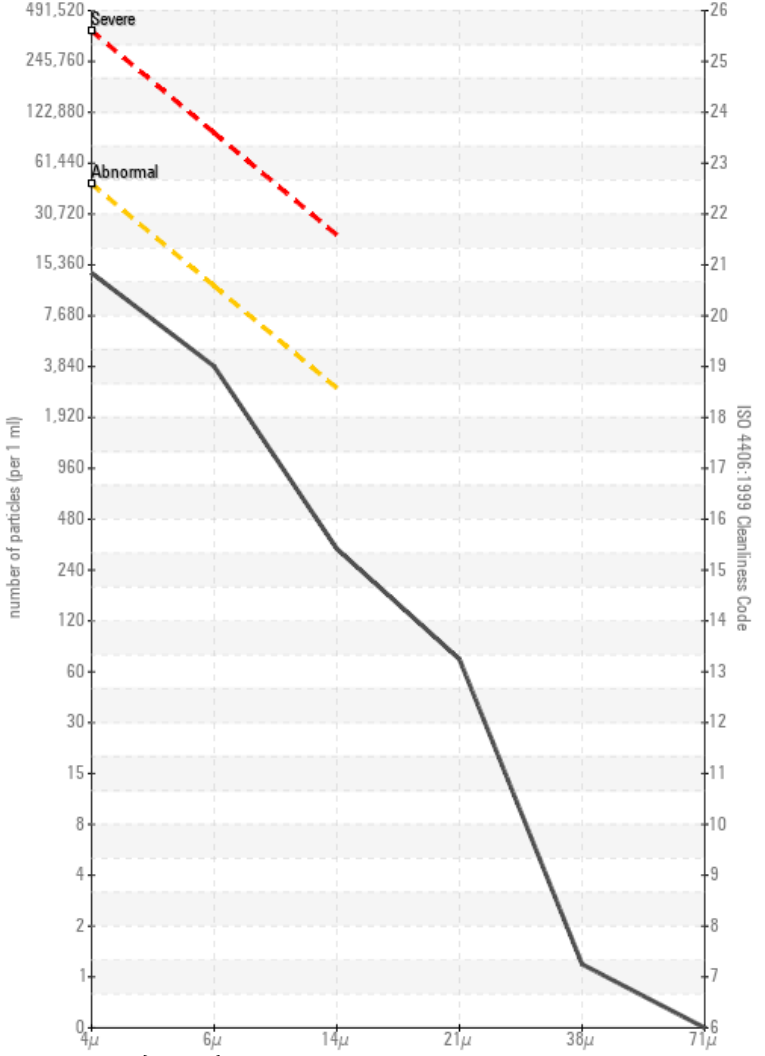


## VOLVO GRAPHS

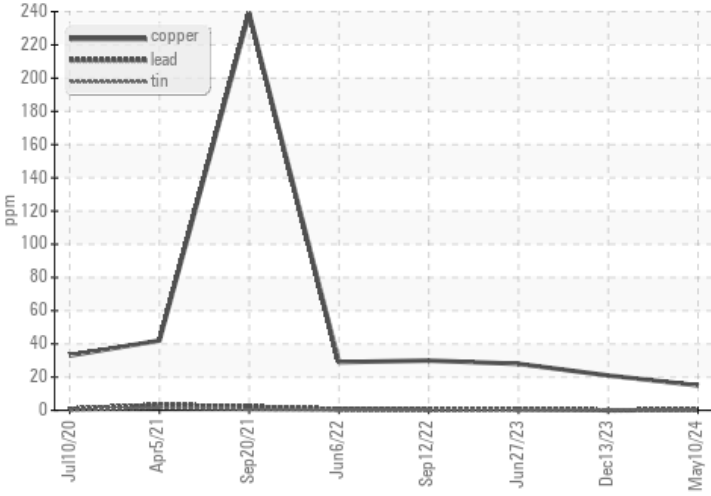
Ferrous Alloys



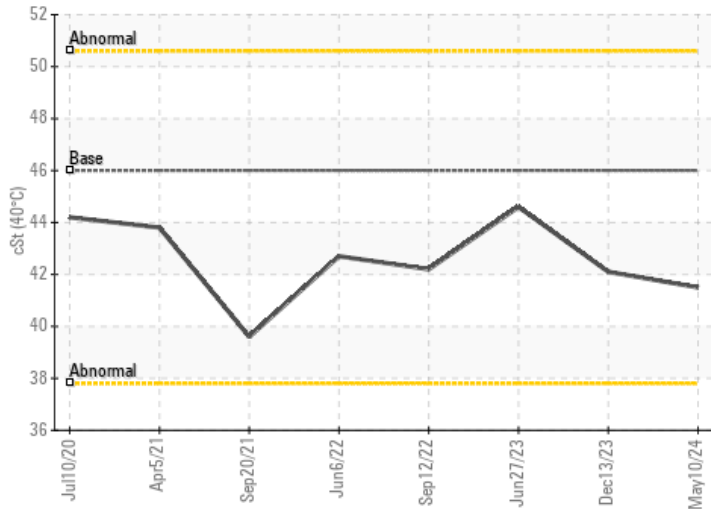
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

