



CONSTRUCTION EQUIPMENT

VOLVO ECR145EL 311251 - HYDRAULIC SYSTEM



Sample No: VCP444023
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP444023	VCP423432	VCP374607	---
Sample Date	06 Mar 2024	20 Jun 2023	13 Jun 2022	---
Machine Hours	2772	2299	1890	---
Oil Hours	0	0	1500	---
Oil Changed	Not Chngd	Not Chngd	Changed	---
Sample Status	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	46.0	45.1	44.0	---
Acid Number (AN)	mg KOH/g	0.30	0.24	0.60	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Particles >4µm		27154	14545	783	---
Particles >6µm		6034	4629	143	---
Particles >14µm		297	262	9	---
ISO 4406:1999 (c)		22/20/15	21/19/15	17/14/10	---
Silicon	ppm	4	3	4	---
Sodium	ppm	3	<1	0	---
Potassium	ppm	<1	0	<1	---

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	13	9	6	---
Copper	ppm	19	16	28	---
Lead	ppm	2	0	1	---
Tin	ppm	3	0	<1	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	<1	0	0	---
Molybdenum	ppm	1	<1	0	---
Nickel	ppm	<1	0	0	---
Titanium	ppm	<1	0	0	---
Silver	ppm	0	0	<1	---
Manganese	ppm	<1	0	0	---
Vanadium	ppm	<1	<1	0	---



ADDITIVES

Calcium	ppm	66	76	123	---
Magnesium	ppm	2	3	2	---
Zinc	ppm	380	436	583	---
Phosphorus	ppm	370	430	469	---
Barium	ppm	0	0	0	---
Boron	ppm	<1	0	0	---

Depot: RIPTAM
Unique No: 10940524
Signed: Wes Davis
Report Date: 25 Mar 2024

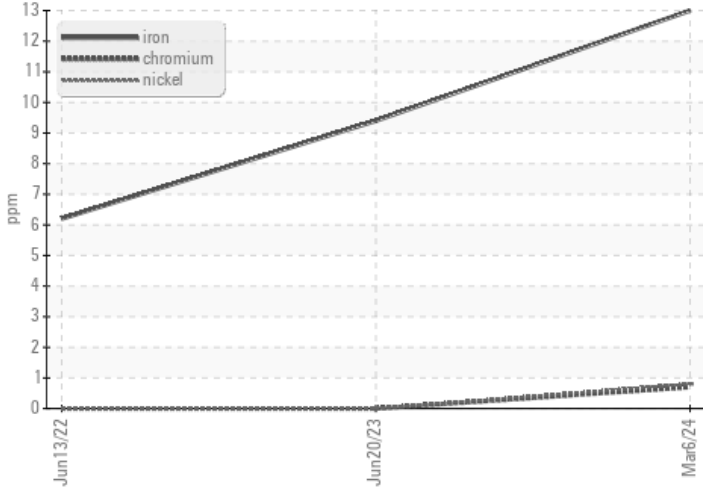


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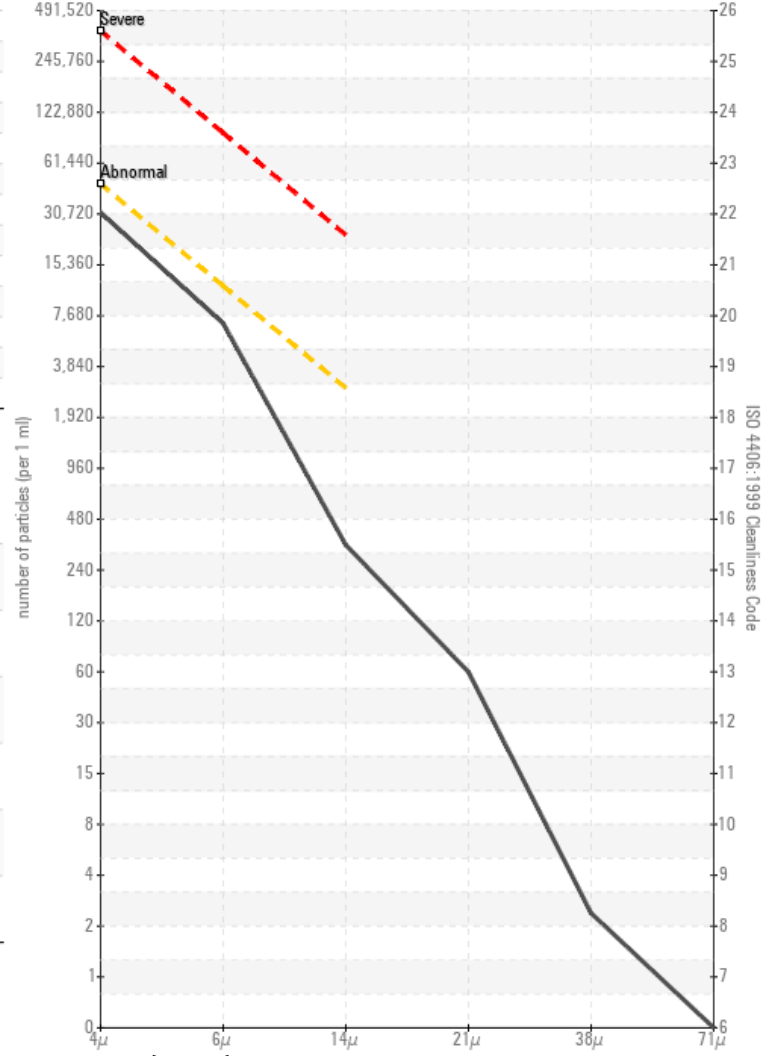


GRAPHS

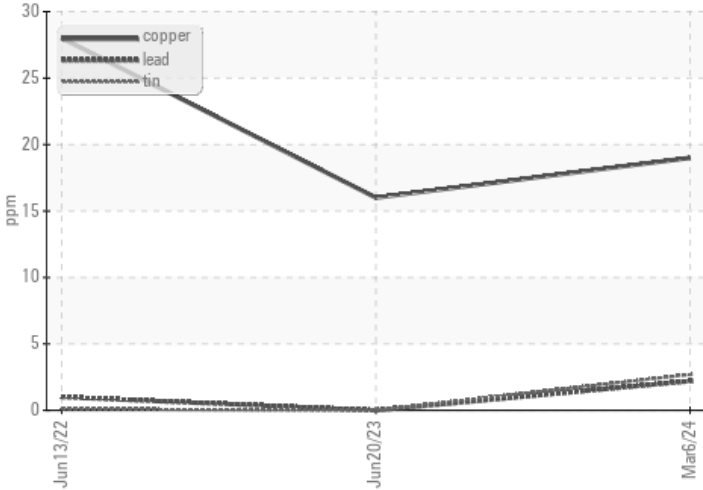
Ferrous Alloys



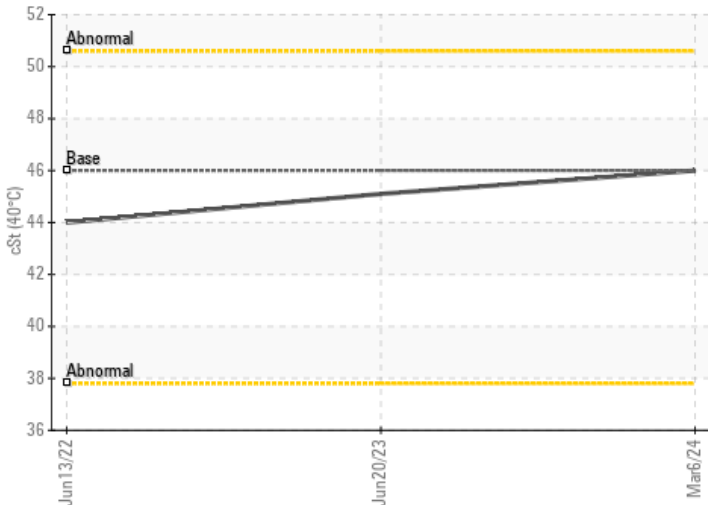
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

