



CONSTRUCTION EQUIPMENT

658972 VOLVO ECR145EL 311261 - HYDRAULIC SYSTEM



Sample No: VCP442571
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 658972



SAMPLE INFORMATION

Sample Number	VCP442571	VCP311981	---	---
Sample Date	04 Jan 2024	12 May 2021	---	---
Machine Hours	2833	1858	---	---
Oil Hours	1000	1858	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	ABNORMAL	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	█ 44.3	█ 44.7	---	---
Acid Number (AN)	mg KOH/g	█ 0.48	█ 0.580	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Particles >4µm		---	█ 11953	---	---
Particles >6µm		---	█ 2885	---	---
Particles >14µm		---	█ 276	---	---
ISO 4406:1999 (c)		---	21/19/15	---	---
Silicon	ppm	█ 3	█ 3	---	---
Sodium	ppm	█ <1	█ 0	---	---
Potassium	ppm	█ 0	█ <1	---	---

Diagnosis

We recommend you service the filters on this component. 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	█ 0	█ 4	---	---
Copper	ppm	█ 28	█ 25	---	---
Lead	ppm	█ <1	█ 1	---	---
Tin	ppm	█ 0	0	---	---
Aluminum	ppm	█ 1	█ 0	---	---
Chromium	ppm	█ <1	█ <1	---	---
Molybdenum	ppm	█ 0	█ <1	---	---
Nickel	ppm	█ 0	█ 0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	█ 0	█ <1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	█ 132	█ 127	---	---
Magnesium	ppm	█ 9	█ 2	---	---
Zinc	ppm	█ 508	█ 535	---	---
Phosphorus	ppm	█ 403	█ 444	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 0	█ 2	---	---

Depot: RIPTAM
Unique No: 10861819
Signed: Jonathan Hester
Report Date: 07 Feb 2024

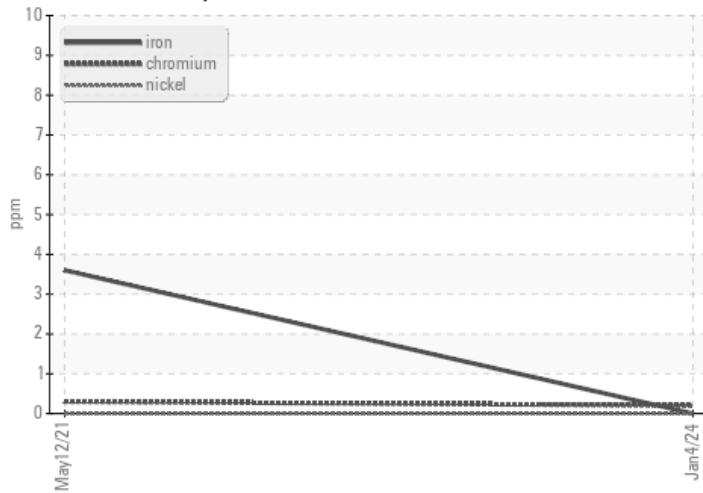


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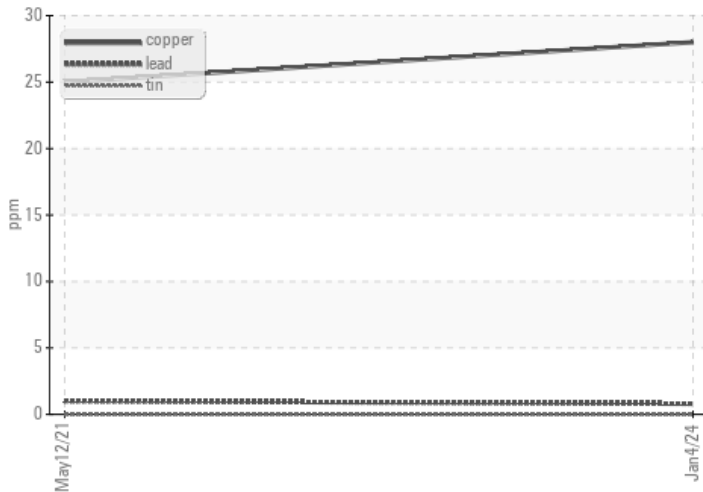


GRAPHS

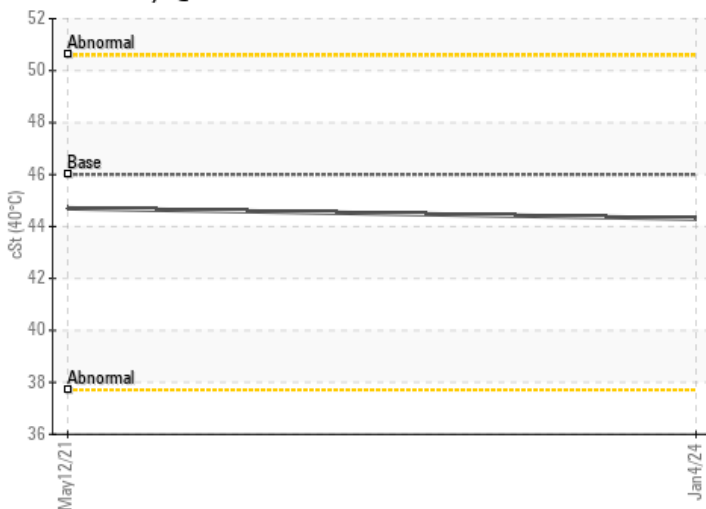
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

