



CONSTRUCTION EQUIPMENT

VOLVO A30F 82299 - HYDRAULIC SYSTEM



Sample No: VCP454425
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:



SAMPLE INFORMATION

Sample Number	VCP454425	VCP333241	---	---
Sample Date	08 Feb 2024	20 Jan 2022	---	---
Machine Hours	11488	10461	---	---
Oil Hours	0	1500	---	---
Oil Changed	Not Chngd	Not Chngd	---	---
Sample Status	SEVERE	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	▲ 52.8	■ 42.5	---	---
Acid Number (AN)	mg KOH/g	■ 0.45	■ 0.46	---	---



CONTAMINATION

Water	%	▲ 0.557	NEG	---	---
Particles >4µm		■ 3341	---	---	---
Particles >6µm		■ 1820	---	---	---
Particles >14µm		▲ 310	---	---	---
ISO 4406:1999 (c)		19/18/15	---	---	---
Silicon	ppm	■ 3	■ 3	---	---
Sodium	ppm	■ 2	■ 0	---	---
Potassium	ppm	■ 0	■ 1	---	---

Diagnosis

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. Appearance is milky. There is a moderate amount of particulates present in the oil. There is a moderate concentration of water present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.



WEAR METALS

Iron	ppm	■ 2	■ 3	---	---
Copper	ppm	■ 2	■ 29	---	---
Lead	ppm	■ 3	■ <1	---	---
Tin	ppm	■ 0	■ <1	---	---
Aluminum	ppm	■ <1	■ 0	---	---
Chromium	ppm	■ 0	■ 0	---	---
Molybdenum	ppm	■ 0	■ <1	---	---
Nickel	ppm	■ 0	■ 0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	■ <1	■ 0	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	■ 110	■ 78	---	---
Magnesium	ppm	■ 4	■ 2	---	---
Zinc	ppm	■ 446	■ 465	---	---
Phosphorus	ppm	■ 360	■ 353	---	---
Barium	ppm	■ <1	■ 0	---	---
Boron	ppm	■ 0	■ <1	---	---

Depot: RIPTAM
Unique No: 10874647
Signed: Jonathan Hester
Report Date: 16 Feb 2024

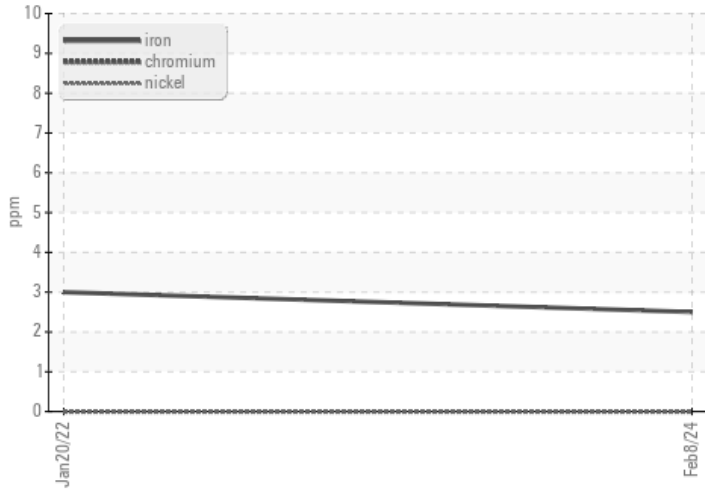


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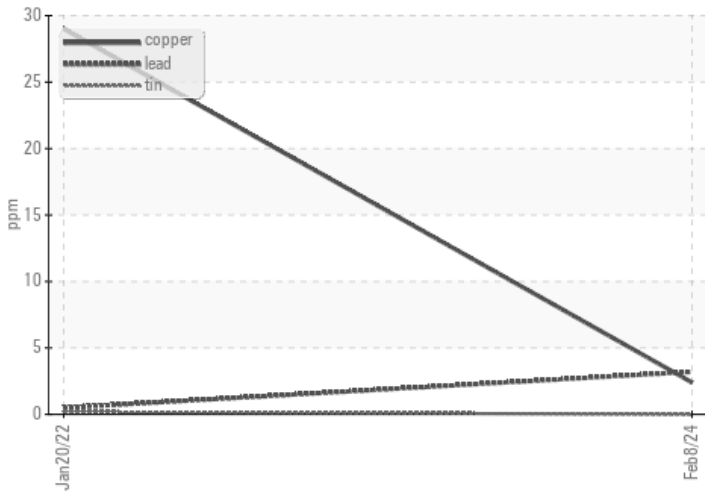


GRAPHS

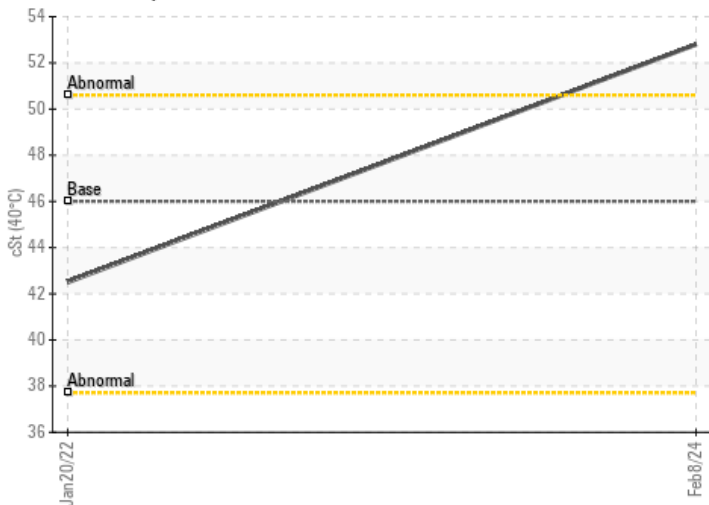
Ferrous Alloys



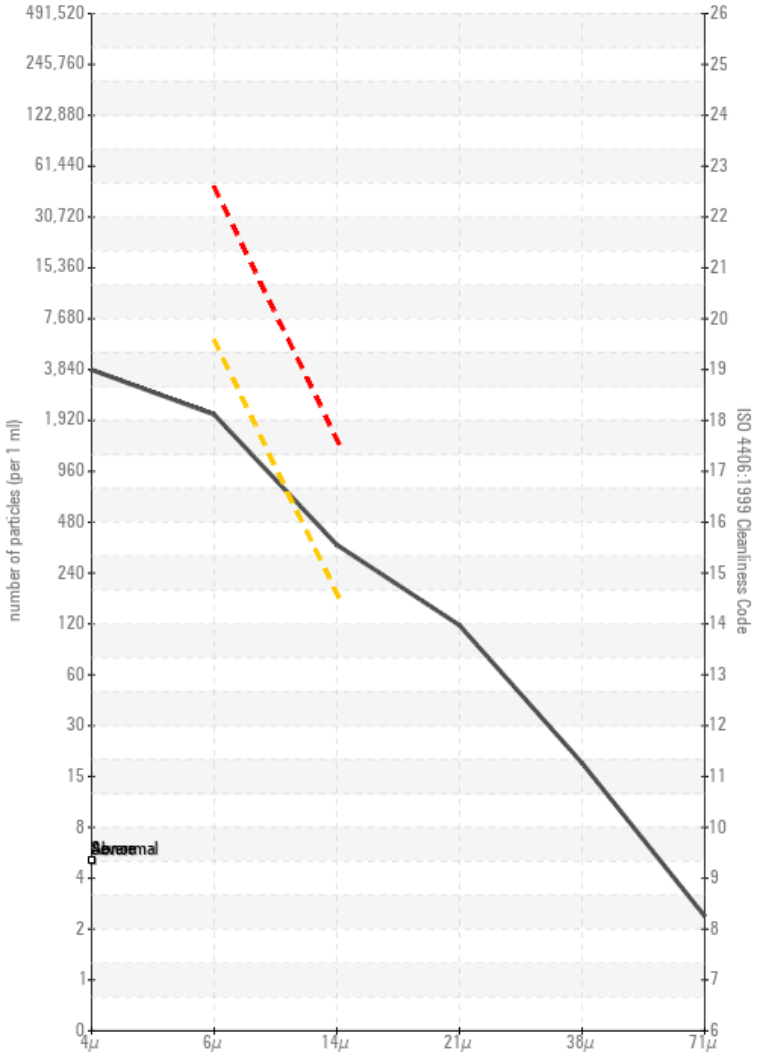
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

