



CONSTRUCTION EQUIPMENT

VOLVO L180H 1108 - HYDRAULIC SYSTEM



Sample No: VCP0007966

Oil Type: AW HYDRAULIC OIL ISO 32

Job No:



SAMPLE INFORMATION

Sample Number	VCP0007966	VCP0002507	VCP362449	---
Sample Date	28 Nov 2023	26 Jul 2022	04 Apr 2022	---
Machine Hours	10650	6268	5159	---
Oil Hours	10650	6268	1159	---
Oil Changed	N/A	N/A	Not Changd	---
Sample Status	ATTENTION	ABNORMAL	ATTENTION	---

ALTA EQUIPMENT COMPANY

8750 PHILIPS HWY
JACKSONVILLE, FL
US 32256

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OIL CONDITION

Visc @ 40°C	cSt	▲ 49.6	■ 37.4	■ 36.5	---
Acid Number (AN)	mg KOH/g	■ 0.55	■ 0.42	■ 0.31	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Particles >4µm		■ 2308	▲ 21547	▲ 5456	---
Particles >6µm		■ 339	▲ 1715	■ 722	---
Particles >14µm		■ 19	▲ 185	■ 99	---
ISO 4406:1999 (c)		18/16/11	22/18/15	20/17/14	---
Silicon	ppm	■ 2	■ 1	■ 0	---
Sodium	ppm	■ 0	■ 1	■ <1	---
Potassium	ppm	■ 2	■ 0	■ <1	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



WEAR METALS

Iron	ppm	■ <1	■ 4	■ 5	---
Copper	ppm	■ 0	■ 3	■ 2	---
Lead	ppm	■ 0	■ 0	■ <1	---
Tin	ppm	■ 0	■ 0	■ <1	---
Aluminum	ppm	■ 1	■ <1	■ 0	---
Chromium	ppm	■ 0	■ <1	■ <1	---
Molybdenum	ppm	■ <1	■ 0	■ <1	---
Nickel	ppm	■ 0	■ 0	■ <1	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	<1	---
Manganese	ppm	■ 0	■ 0	■ <1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	■ 267	■ 107	■ 30	---
Magnesium	ppm	■ 4	■ 0	■ <1	---
Zinc	ppm	■ 466	■ 389	■ 333	---
Phosphorus	ppm	■ 368	■ 301	■ 270	---
Barium	ppm	■ 0	■ <1	■ 0	---
Boron	ppm	■ 0	■ 0	■ 1	---

Depot: VOLVO0092
Unique No: 10765998
Signed: Don Baldrige
Report Date: 04 Dec 2023

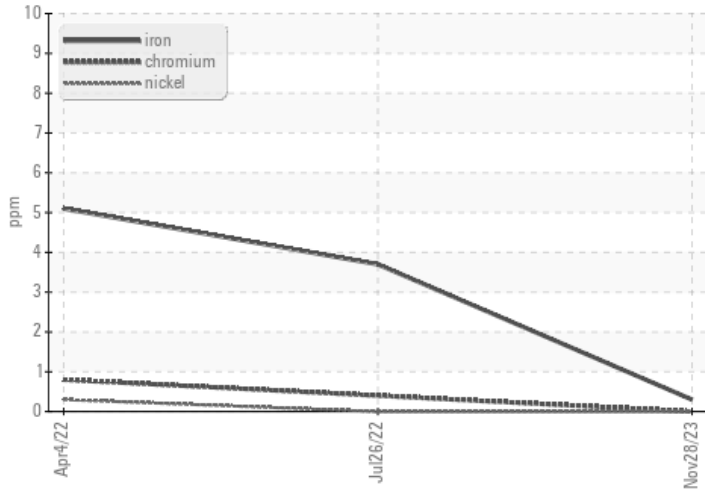


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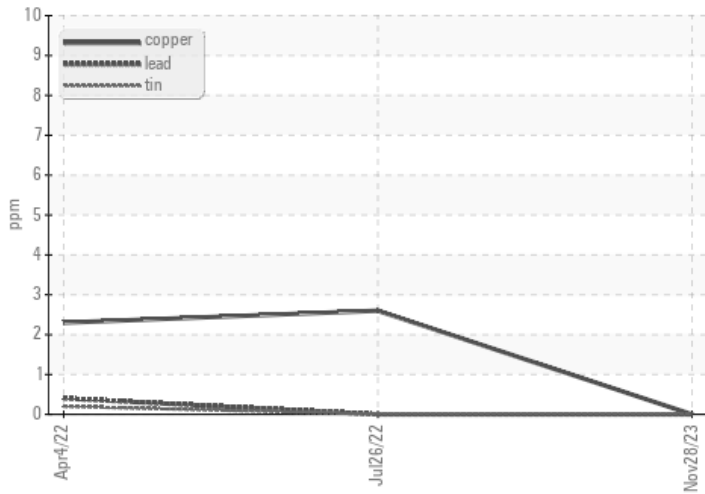


GRAPHS

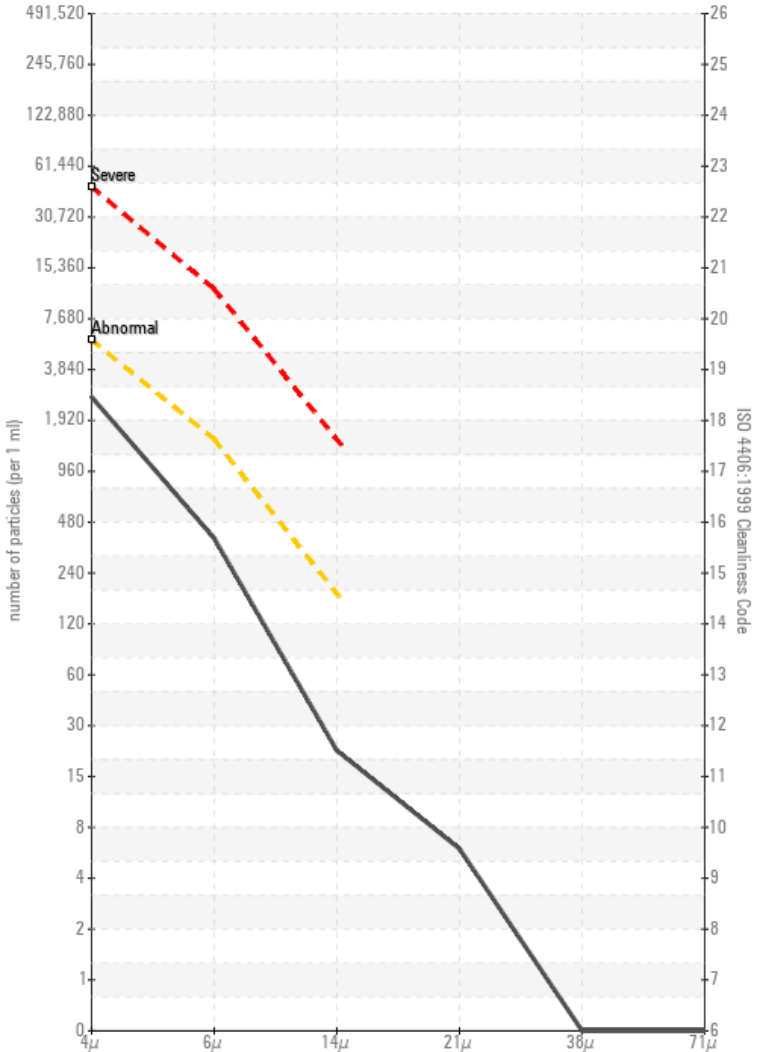
Ferrous Alloys



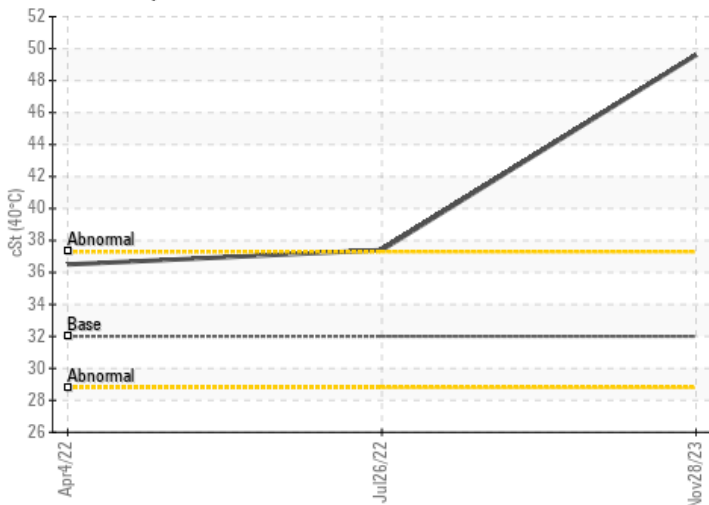
Non-ferrous Metals



Particle Count



Viscosity @ 40°C



Acid Number

