



CONSTRUCTION EQUIPMENT

VOLVO L220H 3569 - DIESEL ENGINE



Sample No: VCP401929
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP401929	---	---	---
Sample Date	18 Dec 2023	---	---	---
Machine Hours	544	---	---	---
Oil Hours	544	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.2	---	---	---
Base Number (BN)	mg KOH/g	■ 6.2	---	---	---
Oxidation (PA)	%	61	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	71	---	---	---
Sulfation (PA)	%	53	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.1	---	---	---
Silicon	ppm	■ 22	---	---	---
Sodium	ppm	■ 1	---	---	---
Potassium	ppm	■ 4	---	---	---



WEAR METALS

Iron	ppm	■ 13	---	---	---
Copper	ppm	▲ 322	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 85	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 2115	---	---	---
Magnesium	ppm	■ 53	---	---	---
Zinc	ppm	■ 1178	---	---	---
Phosphorus	ppm	■ 950	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 47	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: VOLVO1835
Unique No: 10806378
Signed: Don Baldrige
Report Date: 28 Dec 2023



CONSTRUCTION EQUIPMENT



GRAPHS

