



CONSTRUCTION EQUIPMENT

S50402246 VOLVO L110H 632424 - DIESEL ENGINE



Sample No: VCP435919
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: S50402246



SAMPLE INFORMATION

Sample Number	VCP435919	---	---	---
Sample Date	06 Dec 2023	---	---	---
Machine Hours	1019	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

VCES- VOLVO CONSTRUCTION EQUIPMENT

9150 GOLDEN STATE HIGHWAY
 BAKERSFIELD, CA
 US 93308

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OIL CONDITION

Visc @ 100°C	cSt	█ 12.2	---	---	---
Base Number (BN)	mg KOH/g	█ 8.5	---	---	---
Oxidation (PA)	%	86	---	---	---

Diagnosis

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. 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 component wear rates are normal. Tests indicate that there is no fuel present in the oil. 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.



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	68	---	---	---
Sulfation (PA)	%	64	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	█ 0.4	---	---	---
Silicon	ppm	█ 15	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 2	---	---	---



WEAR METALS

Iron	ppm	█ 8	---	---	---
Copper	ppm	▲ 117	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ 1	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 46	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	█ 1726	---	---	---
Magnesium	ppm	█ 459	---	---	---
Zinc	ppm	█ 1125	---	---	---
Phosphorus	ppm	█ 971	---	---	---
Barium	ppm	█ 12	---	---	---
Boron	ppm	█ 25	---	---	---

Depot: VOLVO4484
Unique No: 10790352
Signed: Doug Bogart
Report Date: 27 Dec 2023



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GRAPHS

