



CONSTRUCTION EQUIPMENT

1109 VOLVO EC350E 314719 - DIESEL ENGINE



Sample No: VCP420796
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 1109



SAMPLE INFORMATION

Sample Number	VCP420796	---	---	---
Sample Date	12 Oct 2023	---	---	---
Machine Hours	558	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

VCES- VOLVO CONSTRUCTION EQUIPMENT
 8594 FRUITRIDGE ROAD
 SACRAMENTO, CA
 US 95826
 Contact: RAY KRANZUSCH
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 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	▲ 11.9	---	---	---
Base Number (BN)	mg KOH/g	■ 5.1	---	---	---
Oxidation (PA)	%	49	---	---	---

Diagnosis

The oil 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.



CONTAMINATION

Soot %	%	■ 0	---	---	---
Nitration (PA)	%	59	---	---	---
Sulfation (PA)	%	52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 1.3	---	---	---
Silicon	ppm	■ 22	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ 3	---	---	---



WEAR METALS

Iron	ppm	■ 11	---	---	---
Copper	ppm	▲ 416	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 1	---	---	---
Chromium	ppm	■ 0	---	---	---
Molybdenum	ppm	■ 11	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 2025	---	---	---
Magnesium	ppm	105	---	---	---
Zinc	ppm	■ 1015	---	---	---
Phosphorus	ppm	■ 852	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 9	---	---	---

Depot: VOLVO4485
Unique No: 10714698
Signed: Don Baldrige
Report Date: 31 Oct 2023



CONSTRUCTION EQUIPMENT



GRAPHS

