



CONSTRUCTION EQUIPMENT

2609-1 VOLVO EC350E 314585 - DIESEL ENGINE



Sample No: VCP407770
Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40
Job No: 2609-1



SAMPLE INFORMATION

Sample Number	VCP407770	---	---	---
Sample Date	30 Aug 2023	---	---	---
Machine Hours	549	---	---	---
Oil Hours	549	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

MCCLUNG LOGAN

17941 SUSSEX HIGHWAY
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 US 19933

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OIL CONDITION

Visc @ 100°C	cSt	▲ 10.6	---	---	---
Base Number (BN)	mg KOH/g	■ 4.8	---	---	---
Oxidation (PA)	%	■ 65	---	---	---

Diagnosis

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 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 %	%	■ 0.1	---	---	---
Nitration (PA)	%	■ 83	---	---	---
Sulfation (PA)	%	■ 55	---	---	---
Glycol	%	■ NEG	---	---	---
Fuel	%	■ 0.8	---	---	---
Silicon	ppm	■ 27	---	---	---
Sodium	ppm	■ 3	---	---	---
Potassium	ppm	■ 2	---	---	---



WEAR METALS

Iron	ppm	■ 9	---	---	---
Copper	ppm	▲ 502	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 3	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 85	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 3	---	---	---
Vanadium	ppm	■ 0	---	---	---



ADDITIVES

Calcium	ppm	■ 2192	---	---	---
Magnesium	ppm	■ 98	---	---	---
Zinc	ppm	■ 1221	---	---	---
Phosphorus	ppm	■ 1032	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 49	---	---	---

Depot: VOLVO1023
Unique No: 10636133
Signed: Jonathan Hester
Report Date: 13 Sep 2023



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GRAPHS

