



CONSTRUCTION EQUIPMENT

SW1026328 STEFFY VOLVO EC200EL 314540 - DIESEL ENGINE



Sample No: VCP441204
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1026328 STEFFY



SAMPLE INFORMATION

Sample Number	VCP441204	VCP353842	---	---
Sample Date	12 Nov 2023	03 Jun 2022	---	---
Machine Hours	1052	590	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 10.7	■ 13.3	---	---
Base Number (BN)	mg KOH/g	■ 4.8	■ 6.4	---	---
Oxidation (PA)	%	84	55	---	---

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). Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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	NEG	---	---
Soot %	%	■ 0.1	■ 0.7	---	---
Nitration (PA)	%	83	69	---	---
Sulfation (PA)	%	65	58	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	■ 0.8	<1.0	---	---
Silicon	ppm	▲ 23	■ 17	---	---
Sodium	ppm	■ <1	■ 3	---	---
Potassium	ppm	■ 4	■ 4	---	---



WEAR METALS

Iron	ppm	■ 15	■ 51	---	---
Copper	ppm	▲ 200	■ 16	---	---
Lead	ppm	■ 2	■ <1	---	---
Tin	ppm	■ 3	■ 4	---	---
Aluminum	ppm	■ 3	■ 21	---	---
Chromium	ppm	■ <1	■ 5	---	---
Molybdenum	ppm	■ 93	■ 3	---	---
Nickel	ppm	■ <1	■ 0	---	---
Titanium	ppm	■ <1	■ <1	---	---
Silver	ppm	■ 0	0	---	---
Manganese	ppm	■ 3	■ 3	---	---
Vanadium	ppm	0	<1	---	---



ADDITIVES

Calcium	ppm	■ 2075	■ 2358	---	---
Magnesium	ppm	■ 170	■ 63	---	---
Zinc	ppm	■ 1195	■ 1105	---	---
Phosphorus	ppm	■ 953	■ 904	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 24	■ 3	---	---

Depot: VOLVO6174
Unique No: 10751278
Signed: Jonathan Hester
Report Date: 24 Nov 2023



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VOLVO GRAPHS

