



CONSTRUCTION EQUIPMENT

SW1019028 PERKINS VOLVO EC550E 310081 - DIESEL ENGINE



Sample No: VCP406914
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1019028 PERKINS



SAMPLE INFORMATION

Sample Number	VCP406914	---	---	---
Sample Date	19 May 2023	---	---	---
Machine Hours	560	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 10.8	---	---	---
Base Number (BN)	mg KOH/g	■ 5.2	---	---	---
Oxidation (PA)	%	67	---	---	---

Diagnosis

The oil 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 %	%	■ 0.3	---	---	---
Nitration (PA)	%	81	---	---	---
Sulfation (PA)	%	60	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.8	---	---	---
Silicon	ppm	■ 29	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ 5	---	---	---



WEAR METALS

Iron	ppm	■ 13	---	---	---
Copper	ppm	▲ 235	---	---	---
Lead	ppm	■ 1	---	---	---
Tin	ppm	■ 3	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ < 1	---	---	---
Molybdenum	ppm	■ 88	---	---	---
Nickel	ppm	■ 2	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 3	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 2152	---	---	---
Magnesium	ppm	■ 110	---	---	---
Zinc	ppm	■ 1177	---	---	---
Phosphorus	ppm	■ 978	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 19	---	---	---

Depot: VOLVO6174
Unique No: 10493433
Signed: Jonathan Hester
Report Date: 01 Jun 2023



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GRAPHS

