



CONSTRUCTION EQUIPMENT

SW-28378-2 CMC ROCK VOLVO EC480EL 315023 - DIESEL ENGINE



Sample No: VCP412549
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-28378-2 CMC ROCK



SAMPLE INFORMATION

Sample Number	VCP412549	VCP412537	VCP419279	---
Sample Date	04 Jan 2024	08 Sep 2023	16 Jun 2023	---
Machine Hours	2330	1576	1010	---
Oil Hours	800	560	500	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	ATTENTION	ATTENTION	ABNORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.0	▲ 12.1	▲ 12.2	---
Base Number (BN)	mg KOH/g	■ 5.3	■ 7.4	■ 7.7	---
Oxidation (PA)	%	61	65	67	---

Diagnosis

Oil and filter 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. All component wear rates are normal. 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	NEG	NEG	---
Soot %	%	■ 0.1	■ 0.1	■ 0.1	---
Nitration (PA)	%	69	66	60	---
Sulfation (PA)	%	54	56	56	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	■ 0.7	<1.0	■ 0.4	---
Silicon	ppm	■ 8	■ 8	■ 8	---
Sodium	ppm	■ 5	■ 3	■ 1	---
Potassium	ppm	■ 1	■ <1	■ 1	---



WEAR METALS

Iron	ppm	■ 8	■ 7	■ 7	---
Copper	ppm	■ 6	■ 13	▲ 90	---
Lead	ppm	■ 1	■ 1	■ 1	---
Tin	ppm	■ <1	■ <1	■ 1	---
Aluminum	ppm	■ <1	■ <1	■ <1	---
Chromium	ppm	■ 0	■ 0	■ <1	---
Molybdenum	ppm	■ 56	■ 60	■ 62	---
Nickel	ppm	■ 0	■ 0	■ 0	---
Titanium	ppm	<1	6	0	---
Silver	ppm	■ 0	■ 0	■ 0	---
Manganese	ppm	■ <1	■ <1	■ <1	---
Vanadium	ppm	0	<1	0	---



ADDITIVES

Calcium	ppm	■ 955	■ 1299	■ 1248	---
Magnesium	ppm	■ 825	1064	■ 953	---
Zinc	ppm	■ 1144	■ 1364	■ 1358	---
Phosphorus	ppm	■ 888	■ 1069	■ 1041	---
Barium	ppm	■ 0	■ 0	■ 0	---
Boron	ppm	■ 4	■ 5	■ 5	---

Depot: VOLVO8770
Unique No: 10836337
Signed: Angela Borella
Report Date: 24 Jan 2024



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GRAPHS

