



CONSTRUCTION EQUIPMENT

5592DR NEW ENTERPRIS VOLVO EC480EL 311235 - DIESEL ENGINE



Sample No: VCP431871
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40
Job No: 5592DR NEW ENTERPRIS



SAMPLE INFORMATION

Sample Number	VCP431871	VCP361126	VCP298680	VCP263964
Sample Date	22 May 2024	04 Apr 2022	05 Apr 2021	12 Dec 2019
Machine Hours	2809	1728	1150	486
Oil Hours	500	500	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	■ 12.6	● 11.7	● 12.2	■ 12.3
Base Number (BN)	mg KOH/g	■ 7.9	■ 7.8	---	---
Oxidation (PA)	%	83	83	73	65

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	75	80	83	54
Sulfation (PA)	%	60	66	66	54
Glycol	%	NEG	■ 0.0	NEG	NEG
Fuel	%	<1.0	<1.0	■ 0.4	<1.0
Silicon	ppm	■ 8	■ 7	■ 8	■ 25
Sodium	ppm	■ 4	■ 2	■ 4	■ 3
Potassium	ppm	■ 2	■ 2	■ 1	■ 0



WEAR METALS

Iron	ppm	■ 9	■ 9	■ 10	■ 14
Copper	ppm	■ 5	■ 81	▲ 191	▲ 104
Lead	ppm	■ 2	■ <1	■ 1	■ 1
Tin	ppm	■ 1	■ 1	■ 2	■ 0
Aluminum	ppm	■ 3	■ 2	■ 1	■ 2
Chromium	ppm	■ 0	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 45	■ 44	■ 20	■ 8
Nickel	ppm	■ <1	■ 0	■ <1	■ 1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	■ <1	0	<1	0
Manganese	ppm	■ <1	■ <1	■ <1	■ 2
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	■ 1686	■ 1683	■ 1590	■ 2309
Magnesium	ppm	■ 591	■ 498	■ 458	■ 91
Zinc	ppm	■ 1192	■ 1103	■ 976	■ 1095
Phosphorus	ppm	■ 931	■ 931	■ 785	■ 902
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 25	28	■ 26	■ 6

Depot: VOLVO0022
Unique No: 11046901
Signed: Wes Davis
Report Date: 28 May 2024



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GRAPHS

