



CONSTRUCTION EQUIPMENT

594455 MOSAIC VOLVO EC480 314327 - DIESEL ENGINE



Sample No: VCP425164
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 594455 MOSAIC



SAMPLE INFORMATION

Sample Number	VCP425164	VCP422277	VCP397272	VCP386125
Sample Date	19 Aug 2023	31 Mar 2023	02 Dec 2022	02 Dec 2022
Machine Hours	4013	3549	3030	3030
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	NORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.1	▲ 12.1	■ 12.6	▲ 12.1
Base Number (BN)	mg KOH/g	■ 8.5	■ 8.2	■ 8.9	■ 8.5
Oxidation (PA)	%	87	89	87	83

Diagnosis

Oil and filter change at the time of sampling has been noted. 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

Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	75	80	81	79
Sulfation (PA)	%	61	62	63	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	■ 1.9	<1.0	■ 1.1
Silicon	ppm	■ 10	■ 10	■ 13	■ 8
Sodium	ppm	■ 2	■ 2	■ 4	■ 2
Potassium	ppm	■ 0	■ 0	■ 0	■ 0



WEAR METALS

Iron	ppm	■ 9	■ 7	■ 10	■ 6
Copper	ppm	■ 5	■ 2	■ 12	■ 2
Lead	ppm	■ 1	■ 0	■ 1	■ 1
Tin	ppm	■ 1	■ <1	■ 2	■ <1
Aluminum	ppm	■ 4	■ 2	■ 2	■ <1
Chromium	ppm	■ <1	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 47	■ 59	■ 40	■ 46
Nickel	ppm	■ 0	■ 0	■ 2	■ <1
Titanium	ppm	<1	<1	<1	0
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ 1	■ <1	■ <1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 1727	■ 1733	■ 1639	■ 1675
Magnesium	ppm	■ 520	■ 537	■ 476	■ 507
Zinc	ppm	■ 1147	■ 1122	■ 1051	■ 1116
Phosphorus	ppm	■ 924	■ 937	■ 819	■ 891
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 20	■ 24	■ 15	■ 20

Depot: VOLVO0093
Unique No: 10668485
Signed: Jonathan Hester
Report Date: 28 Sep 2023



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GRAPHS

