



CONSTRUCTION EQUIPMENT

VOLVO EC750EL 310167 - DIESEL ENGINE



Sample No: VCP411822
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP411822	VCP396191	VCP246420	VCP319147
Sample Date	08 Aug 2023	05 Apr 2023	24 Feb 2022	23 Oct 2021
Machine Hours	5061	4516	2872	2661
Oil Hours	0	0	0	500
Oil Changed	Not Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.1	▲ 10.2	▲ 12.2	■ 12.5
Base Number (BN)	mg KOH/g	■ 9.2	■ 7.3	■ 10.7	---
Oxidation (PA)	%	67	61	80	83

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 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	■ 0.5	■ 0.2	■ 0.5
Nitration (PA)	%	40	53	57	70
Sulfation (PA)	%	56	55	63	64
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	■ 2.8	■ 0.8	<1.0
Silicon	ppm	■ 5	■ 9	■ 6	■ 5
Sodium	ppm	■ 2	■ 5	■ 1	■ 1
Potassium	ppm	■ 2	■ 2	■ 1	■ 7



WEAR METALS

Iron	ppm	■ 3	■ 16	■ 1	■ 13
Copper	ppm	■ 2	■ 6	■ 5	■ 4
Lead	ppm	■ <1	■ 2	■ <1	■ 3
Tin	ppm	■ <1	■ <1	■ <1	■ 2
Aluminum	ppm	■ 2	■ 3	■ 1	■ 2
Chromium	ppm	■ <1	■ 1	■ <1	■ 1
Molybdenum	ppm	■ 31	■ 41	■ 51	■ 41
Nickel	ppm	■ <1	■ <1	■ 0	■ 3
Titanium	ppm	0	<1	■ 0	<1
Silver	ppm	■ 0	■ 0	0	<1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	■ 1496	■ 2244	■ 1751	■ 1536
Magnesium	ppm	■ 412	■ 514	■ 499	■ 538
Zinc	ppm	■ 1064	■ 1486	■ 1153	■ 1249
Phosphorus	ppm	■ 863	■ 1212	■ 963	■ 813
Barium	ppm	■ 0	■ 0	■ 0	■ <1
Boron	ppm	■ 48	■ 39	■ 48	■ 19

Depot: VOLVO9010
Unique No: 10605804
Signed: Don Baldrige
Report Date: 17 Aug 2023



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GRAPHS

