



CONSTRUCTION EQUIPMENT

W02007603 VOLVO EC350 314263 - DIESEL ENGINE



Sample No: VCP416079
Oil Type: MOBIL 15W40
Job No: W02007603



SAMPLE INFORMATION

Sample Number	VCP416079	VCP418024	VCP390786	VCP377287
Sample Date	04 Oct 2023	07 Jul 2023	24 Jan 2023	04 Aug 2022
Machine Hours	2977	2458	1954	1447
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.8	▲ 11.6	▲ 11.5	▲ 12.0
Base Number (BN)	mg KOH/g	■ 7.1	■ 8.2	■ 8.7	■ 9.4
Oxidation (PA)	%	68	71	66	72

Diagnosis

The oil 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)	%	71	68	68	67
Sulfation (PA)	%	61	63	55	68
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	■ 5	■ 4	■ 4	■ 9
Sodium	ppm	■ 2	■ 1	■ <1	■ 2
Potassium	ppm	■ 0	■ 1	■ 0	■ 4



WEAR METALS

Iron	ppm	■ 4	■ 0	■ 5	■ 0
Copper	ppm	■ <1	■ <1	■ 2	■ 2
Lead	ppm	■ <1	■ <1	■ <1	■ 1
Tin	ppm	■ <1	■ 0	■ 1	■ 2
Aluminum	ppm	■ 3	■ 6	■ <1	■ 2
Chromium	ppm	■ <1	■ 0	■ <1	■ <1
Molybdenum	ppm	■ 122	124	■ 58	■ 122
Nickel	ppm	■ <1	■ 0	■ 0	■ <1
Titanium	ppm	<1	0	0	<1
Silver	ppm	■ 0	■ 0	■ 0	0
Manganese	ppm	■ <1	■ 0	■ <1	■ <1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	■ 1453	■ 1802	■ 1397	■ 1400
Magnesium	ppm	■ 621	■ 763	■ 666	■ 611
Zinc	ppm	■ 787	■ 1040	■ 1080	■ 818
Phosphorus	ppm	■ 671	■ 880	■ 899	■ 670
Barium	ppm	■ 0	13	■ 0	■ 0
Boron	ppm	■ 214	■ 293	■ 36	■ 284

Depot: VOLVO0002
Unique No: 10696513
Signed: Don Baldrige
Report Date: 17 Oct 2023



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GRAPHS

