



CONSTRUCTION EQUIPMENT

W02007424 VOLVO EC350 314259 - DIESEL ENGINE



Sample No: VCP418750
Oil Type: MOBIL 15W40
Job No: W02007424



SAMPLE INFORMATION

Sample Number	VCP418750	VCP397771	VCP388665	VCP377291
Sample Date	25 Aug 2023	27 Jan 2023	03 Oct 2022	27 Jul 2022
Machine Hours	2590	1974	1553	1193
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	▲ 12.0	▲ 11.8	▲ 11.9
Base Number (BN)	mg KOH/g	■ 7.8	■ 8.2	■ 10.5	■ 9.9
Oxidation (PA)	%	68	65	70	88



CONTAMINATION

Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	68	62	63	76
Sulfation (PA)	%	62	60	59	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	■ 1.3
Silicon	ppm	■ 6	■ 4	■ 4	■ 5
Sodium	ppm	■ 2	■ <1	■ 0	■ <1
Potassium	ppm	■ 2	■ 0	■ <1	■ <1

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.



WEAR METALS

Iron	ppm	■ 5	■ 4	■ 4	■ 2
Copper	ppm	■ 1	■ <1	■ 1	■ 3
Lead	ppm	■ <1	■ <1	■ <1	■ <1
Tin	ppm	■ <1	■ <1	■ <1	■ 1
Aluminum	ppm	■ 2	■ 2	■ <1	■ 1
Chromium	ppm	■ <1	■ 0	■ 0	■ 0
Molybdenum	ppm	■ 124	■ 100	■ 56	■ 45
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	<1	0	0	0
Silver	ppm	■ 0	■ 0	0	<1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	■ 1689	■ 1414	■ 1333	■ 1731
Magnesium	ppm	■ 718	■ 640	■ 758	■ 450
Zinc	ppm	■ 941	■ 883	■ 1200	■ 1029
Phosphorus	ppm	■ 783	■ 711	■ 1019	■ 863
Barium	ppm	■ 0	■ <1	■ 0	■ 0
Boron	ppm	■ 309	■ 263	■ 16	■ 52

Depot: VOLVO0002
Unique No: 10631069
Signed: Sean Felton
Report Date: 05 Sep 2023



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GRAPHS

