



CONSTRUCTION EQUIPMENT

W02007788 VOLVO EC350EL 310806 - DIESEL ENGINE



Sample No: VCP384485
Oil Type: MOBIL 15W40
Job No: W02007788



SAMPLE INFORMATION

Sample Number	VCP384485	VCP416162	VCP390523	VCP379428
Sample Date	30 Nov 2023	02 Aug 2023	13 Dec 2022	17 Jun 2022
Machine Hours	5964	5474	4972	4495
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.0	▲ 11.9	■ 11.9	11.9
Base Number (BN)	mg KOH/g	■ 6.5	■ 7.6	■ 9.7	■ 9.2
Oxidation (PA)	%	69	66	80	82

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	70	66	75	68
Sulfation (PA)	%	62	59	60	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	■ 1.0	<1.0
Silicon	ppm	■ 5	■ 6	■ 5	■ 5
Sodium	ppm	■ 26	■ 2	■ 2	■ 1
Potassium	ppm	■ <1	■ 0	■ 0	■ 0

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	■ 7	■ 6	■ 5	■ 10
Copper	ppm	■ <1	■ 2	■ 1	■ 5
Lead	ppm	■ 0	■ 0	■ <1	■ <1
Tin	ppm	■ 0	■ <1	■ 2	■ 1
Aluminum	ppm	■ 2	■ <1	■ 1	■ 2
Chromium	ppm	■ 0	■ 0	■ <1	■ 0
Molybdenum	ppm	■ 56	■ 109	■ 47	■ 48
Nickel	ppm	■ 0	■ <1	■ <1	■ <1
Titanium	ppm	0	<1	0	<1
Silver	ppm	■ 0	■ 0	■ 0	<1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	1071	■ 1556	■ 1580	■ 1653
Magnesium	ppm	■ 925	■ 686	■ 620	■ 481
Zinc	ppm	■ 1233	■ 900	■ 1122	■ 1032
Phosphorus	ppm	■ 1013	■ 753	■ 950	■ 829
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 1	■ 214	■ 31	■ 49

Depot: VOLVO0002
Unique No: 10777252
Signed: Don Baldrige
Report Date: 09 Dec 2023



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GRAPHS

