



CONSTRUCTION EQUIPMENT

W020074692 VOLVO EC350EL 310856 - DIESEL ENGINE



Sample No: VCP416139
Oil Type: MOBIL 15W40
Job No: W020074692



SAMPLE INFORMATION

Sample Number	VCP416139	VCP397807	VCP301765	VCP379298
Sample Date	23 Aug 2023	03 Apr 2023	14 Nov 2022	29 Jun 2022
Machine Hours	3993	3499	3004	2520
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	▲ 12.0	▲ 11.8	▲ 11.9	▲ 12.4
Base Number (BN)	mg KOH/g	■ 7.1	■ 8.4	■ 10.2	■ 9.1
Oxidation (PA)	%	65	63	80	86

CONTAMINATION

Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	64	67	72	76
Sulfation (PA)	%	60	57	61	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	■ 6	■ 6	■ 5	■ 4
Sodium	ppm	■ <1	■ 1	■ 0	■ 1
Potassium	ppm	■ 0	■ 0	■ 1	■ 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	■ 5	■ 10	■ 10	■ 5
Copper	ppm	■ <1	■ 2	■ <1	■ <1
Lead	ppm	■ 0	■ <1	■ <1	■ <1
Tin	ppm	■ <1	■ 0	■ <1	■ 1
Aluminum	ppm	■ 5	■ 1	■ 1	■ 1
Chromium	ppm	■ 0	■ <1	■ 0	■ <1
Molybdenum	ppm	■ 121	■ 83	■ 48	■ 40
Nickel	ppm	■ 0	■ 1	■ 0	■ <1
Titanium	ppm	0	0	0	0
Silver	ppm	■ 0	■ 0	■ 0	■ <1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	■ 1611	■ 1384	■ 1549	■ 1609
Magnesium	ppm	■ 688	■ 823	■ 545	■ 488
Zinc	ppm	■ 910	■ 1106	■ 1091	■ 1038
Phosphorus	ppm	■ 766	■ 927	■ 915	■ 859
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 237	■ 106	■ 30	■ 51

Depot: VOLVO0002
Unique No: 10620529
Signed: Don Baldrige
Report Date: 28 Aug 2023



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VOLVO GRAPHS

