



CONSTRUCTION EQUIPMENT

A11691 VOLVO ECR235E 311744 - DIESEL ENGINE



Sample No: VCP433772
Oil Type: MOBIL 15W40
Job No: A11691



SAMPLE INFORMATION

Sample Number	VCP433772	VCP400274	VCP373483	VCP334662
Sample Date	15 Dec 2023	09 Dec 2022	07 Jul 2022	10 Nov 2021
Machine Hours	4195	3633	3115	2310
Oil Hours	500	518	0	250
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.8	14.5	13.3	12.5
Base Number (BN)	mg KOH/g	5.9	7.8	9.8	---
Oxidation (PA)	%	68	91	52	80



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.1	0.1
Nitration (PA)	%	85	106	61	61
Sulfation (PA)	%	61	66	53	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	8	6	8
Sodium	ppm	2	3	2	5
Potassium	ppm	2	0	0	<1



WEAR METALS

Iron	ppm	22	14	7	9
Copper	ppm	2	1	<1	1
Lead	ppm	<1	2	<1	<1
Tin	ppm	1	1	<1	<1
Aluminum	ppm	6	3	1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	21	73	42	48
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	11	2	4	<1
Silver	ppm	0	0	<1	2
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	2048	2139	1711	1745
Magnesium	ppm	259	251	529	530
Zinc	ppm	1150	1309	1131	1035
Phosphorus	ppm	882	1026	918	964
Barium	ppm	0	0	0	0
Boron	ppm	13	28	51	47

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: JAAPHI
Unique No: 10796389
Signed: Wes Davis
Report Date: 22 Dec 2023



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VOLVO GRAPHS

