



CONSTRUCTION EQUIPMENT

A12681 VOLVO ECR235CL 110022 - DIESEL ENGINE



Sample No: VCP454665
Oil Type: MOBIL 15W40
Job No: A12681



SAMPLE INFORMATION

Sample Number	VCP454665	VCP425984	VCP354076	VCP358532
Sample Date	16 May 2024	31 May 2023	26 Aug 2022	21 Apr 2022
Machine Hours	10505	9960	9785	9447
Oil Hours	300	250	250	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.6	12.9	13.3	12.7
Base Number (BN)	mg KOH/g	6.0	9.0	11.1	10.9
Oxidation (PA)	%	50	57	89	84



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.6	0.2	0.2	0.2
Nitration (PA)	%	70	54	68	64
Sulfation (PA)	%	53	52	66	64
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	3	6
Sodium	ppm	22	3	<1	<1
Potassium	ppm	4	<1	1	0



WEAR METALS

Iron	ppm	13	4	5	5
Copper	ppm	1	0	<1	<1
Lead	ppm	1	0	0	<1
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	2	<1	2	1
Chromium	ppm	1	0	<1	<1
Molybdenum	ppm	17	24	42	46
Nickel	ppm	<1	0	0	<1
Titanium	ppm	2	<1	4	<1
Silver	ppm	1	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	2187	2195	1603	1795
Magnesium	ppm	191	296	482	578
Zinc	ppm	1125	1160	1110	1116
Phosphorus	ppm	892	936	929	966
Barium	ppm	<1	0	0	0
Boron	ppm	10	35	58	54

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: 11048559
Signed: Wes Davis
Report Date: 29 May 2024



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GRAPHS

