



CONSTRUCTION EQUIPMENT

SW1026881 MGC VOLVO ECR145E 314588 - DIESEL ENGINE



Sample No: VCP441358
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1026881 MGC



SAMPLE INFORMATION

Sample Number	VCP441358	VCP353734	---	---
Sample Date	29 Nov 2023	29 Jul 2022	---	---
Machine Hours	1011	502	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	█ 13.4	█ 13.2	---	---
Base Number (BN)	mg KOH/g	█ 9.1	█ 7.1	---	---
Oxidation (PA)	%	65	49	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level has decreased, but is still abnormal. All other 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 acceptable for the time in service.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.2	█ 0.2	---	---
Nitration (PA)	%	61	65	---	---
Sulfation (PA)	%	53	53	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 9	█ 21	---	---
Sodium	ppm	█ <1	█ 2	---	---
Potassium	ppm	█ 2	█ 0	---	---



WEAR METALS

Iron	ppm	█ 51	█ 45	---	---
Copper	ppm	█ 4	█ 11	---	---
Lead	ppm	█ 0	█ <1	---	---
Tin	ppm	█ 0	█ 3	---	---
Aluminum	ppm	▲ 19	▲ 36	---	---
Chromium	ppm	█ 2	█ 5	---	---
Molybdenum	ppm	█ 47	█ 7	---	---
Nickel	ppm	█ 2	█ 11	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ 0	█ <1	---	---
Manganese	ppm	█ 0	█ 4	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	█ 1334	█ 2122	---	---
Magnesium	ppm	█ 661	█ 72	---	---
Zinc	ppm	█ 1096	█ 997	---	---
Phosphorus	ppm	█ 871	█ 821	---	---
Barium	ppm	█ 2	█ 0	---	---
Boron	ppm	█ 14	█ 5	---	---

Depot: VOLVO6174
Unique No: 10776018
Signed: Don Baldrige
Report Date: 07 Dec 2023



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GRAPHS

