



CONSTRUCTION EQUIPMENT

VOLVO A35G 34231 - DIESEL ENGINE



Sample No: VCP315586
Oil Type: SHELL Rotella T5 15W-40
Job No:



SAMPLE INFORMATION

Sample Number	VCP315586	VCP315680	VCP315666	VCP305660
Sample Date	21 Jun 2023	03 Nov 2022	29 Mar 2022	29 Jul 2021
Machine Hours	5241	4458	3994	3280
Oil Hours	0	0	700	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

FREDERICK COUNTY LANDFILL
 107 NORTH KENT STREET
 WINCHESTER, VA
 US 26014
 Contact: DAVE BRADFIELD
 dbradfie@fcva.us
 T: (540)535-5041
 F:



OIL CONDITION

Visc @ 100°C	cSt	▲ 11.5	▲ 12.0	▲ 11.7	▲ 11.9
Base Number (BN)	mg KOH/g	■ 4.9	■ 7.0	■ 6.7	---
Oxidation (PA)	%	■ 58	■ 51	■ 61	■ 63



CONTAMINATION

Soot %	%	■ 0.2	■ 0.2	■ 0.2	■ 0
Nitration (PA)	%	■ 76	■ 77	■ 78	■ 55
Sulfation (PA)	%	■ 59	■ 55	■ 58	■ 61
Glycol	%	■ NEG	■ NEG	■ NEG	■ NEG
Fuel	%	■ <1.0	■ <1.0	■ <1.0	■ <1.0
Silicon	ppm	■ 5	■ 4	■ 4	■ 3
Sodium	ppm	■ <1	■ 0	■ 2	■ 3
Potassium	ppm	■ 1	■ 2	■ 1	■ <1



WEAR METALS

Iron	ppm	■ 9	■ 5	■ 8	■ 4
Copper	ppm	■ 16	■ 2	■ 2	■ <1
Lead	ppm	■ <1	■ <1	■ <1	■ <1
Tin	ppm	■ <1	■ <1	■ <1	■ <1
Aluminum	ppm	■ 1	■ 2	■ 3	■ 0
Chromium	ppm	■ <1	■ 0	■ <1	■ 0
Molybdenum	ppm	■ 97	■ 62	■ 85	■ 69
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	■ 0	■ 0	■ <1	■ <1
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	■ 0	■ 0	■ 0	■ 0



ADDITIVES

Calcium	ppm	■ 2353	■ 2158	■ 2241	■ 1829
Magnesium	ppm	■ 146	■ 106	■ 186	■ 396
Zinc	ppm	■ 1373	■ 1127	■ 1379	■ 1110
Phosphorus	ppm	■ 1157	■ 993	■ 1097	■ 1018
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 82	■ 33	■ 56	■ 114

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.

Depot: FREWIN
Unique No: 10538764
Signed: Don Baldrige
Report Date: 04 Jul 2023



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VOLVO GRAPHS

