



CONSTRUCTION EQUIPMENT

VOLVO A45G 352071 - DIESEL ENGINE



Sample No: VCP427485

Oil Type: DIESEL ENGINE OIL SAE 15W40

Job No:



SAMPLE INFORMATION

Sample Number	VCP427485	VCP412987	VCP382594	VCP397932
Sample Date	09 Oct 2023	12 Jul 2023	12 Apr 2023	09 Dec 2022
Machine Hours	7028	6523	6049	5545
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

SAIIA CONSTRUCTION LLC

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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.2	▲ 12.4	▲ 12.4	▲ 12.4
Base Number (BN)	mg KOH/g	■ 9.9	■ 10.1	■ 8.7	■ 10.0
Oxidation (PA)	%	77	79	73	69

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.



CONTAMINATION

Soot %	%	■ 0.1	■ 0.1	■ 0.2	■ 0.2
Nitration (PA)	%	53	55	54	69
Sulfation (PA)	%	59	59	53	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	■ 5	■ 5	■ 5	■ 3
Sodium	ppm	■ 2	■ 3	■ 2	■ 2
Potassium	ppm	■ <1	■ 0	■ <1	■ 0



WEAR METALS

Iron	ppm	■ 2	■ 4	■ 6	■ 5
Copper	ppm	■ 0	■ <1	■ <1	■ <1
Lead	ppm	■ 1	■ 0	■ <1	■ 1
Tin	ppm	■ 1	■ 0	■ <1	■ <1
Aluminum	ppm	■ 2	■ <1	■ 0	■ 1
Chromium	ppm	■ 0	■ 0	■ <1	■ <1
Molybdenum	ppm	■ 42	■ 41	■ 43	■ 51
Nickel	ppm	■ <1	■ 0	■ 0	■ <1
Titanium	ppm	■ 0	■ <1	■ 0	■ 0
Silver	ppm	■ 0	■ 0	■ 0	■ 0
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	■ 1663	■ 1802	■ 1566	■ 1293
Magnesium	ppm	■ 506	■ 539	■ 525	■ 773
Zinc	ppm	■ 959	■ 1139	■ 1078	■ 1144
Phosphorus	ppm	■ 794	■ 964	■ 911	■ 899
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 50	■ 70	■ 53	■ 19

Depot: SAIBIR

Unique No: 10708804

Signed: Don Baldrige

Report Date: 25 Oct 2023



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GRAPHS

