



CONSTRUCTION EQUIPMENT

W02007731 VOLVO A40E 13778 - DIESEL ENGINE



Sample No: VCP418741
Oil Type: MOBIL 15W40
Job No: W02007731



SAMPLE INFORMATION

Sample Number	VCP418741	VCP395660	---	---
Sample Date	10 Nov 2023	13 Dec 2022	---	---
Machine Hours	10142	9894	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ATTENTION	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.4	▲ 12.0	---	---
Base Number (BN)	mg KOH/g	■ 7.0	■ 9.3	---	---
Oxidation (PA)	%	52	63	---	---

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



CONTAMINATION

Water	%	<0.1	<0.1	---	---
Soot %	%	■ 0.2	■ 0.3	---	---
Nitration (PA)	%	65	63	---	---
Sulfation (PA)	%	49	57	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	▲ 3.6	▲ 2.5	---	---
Silicon	ppm	■ 3	■ 1	---	---
Sodium	ppm	■ 3	■ 0	---	---
Potassium	ppm	■ 0	■ 3	---	---



WEAR METALS

Iron	ppm	■ 2	■ 6	---	---
Copper	ppm	■ 2	■ 3	---	---
Lead	ppm	■ <1	■ <1	---	---
Tin	ppm	■ <1	■ <1	---	---
Aluminum	ppm	■ 3	■ 1	---	---
Chromium	ppm	■ 0	■ 0	---	---
Molybdenum	ppm	■ 66	■ 42	---	---
Nickel	ppm	■ <1	■ 0	---	---
Titanium	ppm	0	■ 0	---	---
Silver	ppm	■ 0	■ 1	---	---
Manganese	ppm	■ <1	■ <1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	■ 2051	■ 1633	---	---
Magnesium	ppm	■ 75	■ 426	---	---
Zinc	ppm	■ 1177	■ 1104	---	---
Phosphorus	ppm	■ 1018	■ 962	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 66	■ 54	---	---

Depot: VOLVO0002
Unique No: 10743053
Signed: Wes Davis
Report Date: 20 Nov 2023



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GRAPHS

