



CONSTRUCTION EQUIPMENT

A10549 VOLVO L110H 632556 - DIESEL ENGINE



Sample No: VCP410764
Oil Type: MOBIL 15W40
Job No: A10549



SAMPLE INFORMATION

Sample Number	VCP410764	---	---	---
Sample Date	22 Jun 2023	---	---	---
Machine Hours	515	---	---	---
Oil Hours	515	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

HMR ASSOCIATES

PO BOX 485
TOUGHKENAMON, PA
US 19374
Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 100°C	cSt	█ 12.5	---	---	---
Base Number (BN)	mg KOH/g	█ 9.9	---	---	---
Oxidation (PA)	%	73	---	---	---

T:
F: (610)268-2225

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 is abnormal. All other metal levels are typical for a new component breaking in. 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

Soot %	%	█ 0.3	---	---	---
Nitration (PA)	%	56	---	---	---
Sulfation (PA)	%	60	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 12	---	---	---
Sodium	ppm	█ 5	---	---	---
Potassium	ppm	█ 4	---	---	---



WEAR METALS

Iron	ppm	█ 30	---	---	---
Copper	ppm	█ 11	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ 2	---	---	---
Aluminum	ppm	▲ 64	---	---	---
Chromium	ppm	█ 5	---	---	---
Molybdenum	ppm	█ 46	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	█ 1574	---	---	---
Magnesium	ppm	█ 692	---	---	---
Zinc	ppm	█ 1217	---	---	---
Phosphorus	ppm	█ 1018	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 50	---	---	---

Depot: HMRTOU
Unique No: 10536806
Signed: Don Baldrige
Report Date: 03 Jul 2023



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GRAPHS

