



CONSTRUCTION EQUIPMENT

SPM619136-10 CARMUES VOLVO A60H 350290 - DIESEL ENGINE



Sample No: VCP409078
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SPM619136-10 CARMUES



SAMPLE INFORMATION

Sample Number	VCP409078	VCP390164	---	---
Sample Date	12 Oct 2023	08 Aug 2023	---	---
Machine Hours	1083	510	---	---
Oil Hours	0	510	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ATTENTION	---	---

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.3	▲ 10.7	---	---
Base Number (BN)	mg KOH/g	■ 8.4	■ 5.6	---	---
Oxidation (PA)	%	84	58	---	---

Diagnosis

No corrective action is recommended at this time. 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 %	%	■ 0.6	■ 0.9	---	---
Nitration (PA)	%	73	82	---	---
Sulfation (PA)	%	63	55	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 1.6	---	---
Silicon	ppm	■ 10	■ 30	---	---
Sodium	ppm	■ 3	■ 0	---	---
Potassium	ppm	■ <1	■ 0	---	---



WEAR METALS

Iron	ppm	■ 17	■ 40	---	---
Copper	ppm	■ 118	■ 216	---	---
Lead	ppm	■ <1	■ 0	---	---
Tin	ppm	■ 2	■ 3	---	---
Aluminum	ppm	■ 4	■ 3	---	---
Chromium	ppm	■ 1	■ 4	---	---
Molybdenum	ppm	■ 44	■ 83	---	---
Nickel	ppm	■ 5	■ 4	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	■ 0	■ 0	---	---
Manganese	ppm	■ 1	■ <1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	■ 1597	■ 2297	---	---
Magnesium	ppm	■ 423	14	---	---
Zinc	ppm	■ 1020	■ 1247	---	---
Phosphorus	ppm	■ 854	■ 974	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 28	■ 32	---	---

Depot: VOLVO2990
Unique No: 10714099
Signed: Don Baldrige
Report Date: 30 Oct 2023



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GRAPHS

