



CONSTRUCTION EQUIPMENT

SW-26252-2 MAVERICK VOLVO L220H 3371 - DIESEL ENGINE



Sample No: VCP443480
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-26252-2 MAVERICK



SAMPLE INFORMATION

Sample Number	VCP443480	VCP418718	---	---
Sample Date	02 Nov 2023	11 Jul 2023	---	---
Machine Hours	2742	2147	---	---
Oil Hours	550	600	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---



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OIL CONDITION

Visc @ 100°C	cSt	█ 12.9	█ 12.5	---	---
Base Number (BN)	mg KOH/g	█ 8.3	█ 7.4	---	---
Oxidation (PA)	%	62	68	---	---



CONTAMINATION

Soot %	%	█ 0.2	█ 0.3	---	---
Nitration (PA)	%	63	76	---	---
Sulfation (PA)	%	56	58	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 4	█ 7	---	---
Sodium	ppm	█ 2	█ 2	---	---
Potassium	ppm	█ 1	█ 2	---	---



WEAR METALS

Iron	ppm	█ 6	█ 10	---	---
Copper	ppm	▲ 37	▲ 158	---	---
Lead	ppm	█ 0	█ 2	---	---
Tin	ppm	█ <1	█ 1	---	---
Aluminum	ppm	█ 3	█ 2	---	---
Chromium	ppm	█ <1	█ 0	---	---
Molybdenum	ppm	█ 62	█ 63	---	---
Nickel	ppm	█ <1	█ <1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	█ 0	█ 0	---	---
Manganese	ppm	█ 0	█ 1	---	---
Vanadium	ppm	<1	<1	---	---



ADDITIVES

Calcium	ppm	█ 1109	█ 1382	---	---
Magnesium	ppm	█ 925	813	---	---
Zinc	ppm	█ 1247	█ 1231	---	---
Phosphorus	ppm	█ 1036	█ 995	---	---
Barium	ppm	█ 7	█ 0	---	---
Boron	ppm	█ 2	█ 20	---	---

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 copper level has decreased, but is still abnormal. All other component wear rates are normal. 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.

Depot: VOLVO8770
Unique No: 10737804
Signed: Don Baldrige
Report Date: 14 Nov 2023



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GRAPHS

