



CONSTRUCTION EQUIPMENT

SW-33181-2 MAVERICK VOLVO L220E 3527 - DIESEL ENGINE



Sample No: VCP446575
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-33181-2 MAVERICK



SAMPLE INFORMATION

Sample Number	VCP446575	VCP120433	---	---
Sample Date	16 Apr 2024	06 Feb 2014	---	---
Machine Hours	549	6059	---	---
Oil Hours	549	0	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	ABNORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	● 11.3	■ 13.99	---	---
Base Number (BN)	mg KOH/g	■ 5.4	---	---	---
Oxidation (PA)	%	■ 59	■ 40	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.3	■ 0.2	---	---
Nitration (PA)	%	■ 78	■ 33	---	---
Sulfation (PA)	%	■ 53	■ 33	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	■ 0.5	<1.0	---	---
Silicon	ppm	■ 19	■ 3	---	---
Sodium	ppm	■ 2	■ 3	---	---
Potassium	ppm	■ 2	■ 1	---	---



WEAR METALS

Iron	ppm	■ 16	■ 7	---	---
Copper	ppm	▲ 156	■ 4	---	---
Lead	ppm	■ <1	■ <1	---	---
Tin	ppm	■ 2	■ 0	---	---
Aluminum	ppm	■ 2	■ 3	---	---
Chromium	ppm	■ <1	■ 1	---	---
Molybdenum	ppm	■ 86	■ 3	---	---
Nickel	ppm	■ 0	■ 0	---	---
Titanium	ppm	0	1	---	---
Silver	ppm	■ 0	0	---	---
Manganese	ppm	■ 2	0	---	---
Vanadium	ppm	0	<1	---	---



ADDITIVES

Calcium	ppm	■ 2242	■ 3135	---	---
Magnesium	ppm	■ 26	■ 131	---	---
Zinc	ppm	■ 1189	■ 1290	---	---
Phosphorus	ppm	■ 993	■ 1153	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 43	■ 25	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. 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.

Depot: VOLVO8770
Unique No: 10992771
Signed: Jonathan Hester
Report Date: 25 Apr 2024



CONSTRUCTION EQUIPMENT



GRAPHS

