



CONSTRUCTION EQUIPMENT

VOLVO L220H 3569 - DIESEL ENGINE



Sample No: VCP368371
Oil Type: MOBIL 15W40
Job No:



SAMPLE INFORMATION

Sample Number	VCP368371	VCP440844	VCP401929	---
Sample Date	13 Mar 2024	01 Feb 2024	18 Dec 2023	---
Machine Hours	1440	968	544	---
Oil Hours	0	0	544	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	ATTENTION	ATTENTION	ABNORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	11.9	12.1	11.2	---
Base Number (BN)	mg KOH/g	9.1	7.2	6.2	---
Oxidation (PA)	%	55	58	61	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.2	0.2	0.2	---
Nitration (PA)	%	55	63	71	---
Sulfation (PA)	%	53	52	53	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	0.1	---
Silicon	ppm	7	9	22	---
Sodium	ppm	0	0	1	---
Potassium	ppm	2	2	4	---



WEAR METALS

Iron	ppm	6	8	13	---
Copper	ppm	11	65	322	---
Lead	ppm	<1	1	<1	---
Tin	ppm	1	2	2	---
Aluminum	ppm	2	3	2	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	55	82	85	---
Nickel	ppm	0	1	<1	---
Titanium	ppm	<1	<1	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	2	2	---
Vanadium	ppm	0	<1	0	---



ADDITIVES

Calcium	ppm	1601	1227	2115	---
Magnesium	ppm	757	796	53	---
Zinc	ppm	1304	1141	1178	---
Phosphorus	ppm	1109	958	950	---
Barium	ppm	0	0	0	---
Boron	ppm	15	31	47	---

Diagnosis

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.

Depot: VOLVO1835
Unique No: 10940263
Signed: Don Baldrige
Report Date: 26 Mar 2024



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GRAPHS

