



CONSTRUCTION EQUIPMENT

SPM594972 AMG LIEBHERR LH40 121384-1215 - DIESEL ENGINE



Sample No: VCP420689
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM594972 AMG



SAMPLE INFORMATION

Sample Number	VCP420689	VCP404144	VCP387419	---
Sample Date	15 Aug 2023	06 Feb 2023	17 Nov 2022	---
Machine Hours	9240	7852	7016	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	SEVERE	NORMAL	ATTENTION	---

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OIL CONDITION

Visc @ 100°C	cSt	5.5	12.4	10.9	---
Base Number (BN)	mg KOH/g	8.0	6.9	7.9	---
Oxidation (PA)	%	49	84	96	---

Diagnosis

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. Visc @ 100°C is severely low. Calcium ppm levels are abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



CONTAMINATION

Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	73	88	97	---
Sulfation (PA)	%	44	60	65	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	51.7	<1.0	2.5	---
Silicon	ppm	6	6	5	---
Sodium	ppm	2	0	4	---
Potassium	ppm	6	2	<1	---



WEAR METALS

Iron	ppm	4	6	4	---
Copper	ppm	1	3	2	---
Lead	ppm	2	2	2	---
Tin	ppm	0	<1	<1	---
Aluminum	ppm	1	2	<1	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	33	63	60	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	0	<1	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	583	1059	815	---
Magnesium	ppm	555	919	1078	---
Zinc	ppm	716	1223	1264	---
Phosphorus	ppm	572	982	953	---
Barium	ppm	0	<1	0	---
Boron	ppm	0	<1	21	---

Depot: VOLVO8885
Unique No: 10631062
Signed: Wes Davis
Report Date: 05 Sep 2023



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GRAPHS

