

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L538 1559-59801 - Front Right Wheel Hub

Sample No: LH0209849

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0209849	LH0254772	LH05774532	LH0209836
Sample Date	28 Feb 2024	03 May 2023	21 Feb 2023	01 Mar 2022
Machine Hours	3009	2250	0	966
Oil Hours	0	0	2003	0
Oil Changed	Not Changd	Changed	Not Changd	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

DIEHL AND NUEMAIER

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OIL CONDITION

Visc @ 40°C	cSt	197	194	196	179
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CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	5	5	6	4
Sodium	ppm	5	1	2	2
Potassium	ppm	<1	1	4	<1

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	182	165	123	66
Copper	ppm	<1	<1	0	0
Lead	ppm	0	0	1	0
Tin	ppm	0	0	<1	0
Aluminum	ppm	<1	0	3	0
Chromium	ppm	2	1	2	<1
Molybdenum	ppm	2	<1	<1	0
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	4	4	4	3
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	106	68	39	37
Magnesium	ppm	17	2	4	<1
Zinc	ppm	95	82	57	3
Phosphorus	ppm	2419	2318	1751	2581
Barium	ppm	<1	0	0	0
Boron	ppm	0	2	0	3

Depot: DIEDEF
Unique No: 10927974
Signed: Sean Felton
Report Date: 18 Mar 2024



GRAPHS

