

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [LIEBHERR] LIEBHERR LH50M 1216-123124 - Diesel Engine

Sample No: LH0212803

Oil Type: LIEBHERR MOTOROIL 5W30



**METAL RECYCLING SERVICES - MONROE**  
P.O. BOX 812  
MONROE, NC  
US 28111  
Contact: RYAN BOWDEN

T:  
F: (704)238-0755

#### Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



#### SAMPLE INFORMATION

Sample Number	LH0212803	LH05725758	LH0212794	LH0212794
Sample Date	11 Aug 2023	26 Dec 2022	10 May 2022	08 Oct 2021
Machine Hours	5113	3686	2338	1039
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



#### OIL CONDITION

Visc @ 100°C	cSt	9.7	11.3	11.2	11.8
Base Number (BN)	mg KOH/g	7.6	11.9	13.2	---
Oxidation (PA)	%	96	69	51	54



#### CONTAMINATION

Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	167	136	113	101
Sulfation (PA)	%	67	59	47	47
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.1
Silicon	ppm	10	10	9	10
Sodium	ppm	<1	2	1	3
Potassium	ppm	6	3	2	2



#### WEAR METALS

Iron	ppm	26	14	11	10
Copper	ppm	6	4	3	12
Lead	ppm	19	2	<1	1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	4	3	3	3
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	4	6	<1	5
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	4287	4324	4442	4874
Magnesium	ppm	34	38	21	99
Zinc	ppm	1182	1221	1231	1300
Phosphorus	ppm	1018	1026	1073	1178
Barium	ppm	0	0	0	0
Boron	ppm	196	206	270	265

Depot: METMONNC  
Unique No: 10617266  
Signed: Jonathan Hester  
Report Date: 25 Aug 2023



### GRAPHS

