

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [[AMG RESOURCES]] LIEBHERR LH40M 124711-1215 - Diesel En

Sample No: LHMC155858

Oil Type: DIESEL ENGINE OIL SAE 5W40



#### SAMPLE INFORMATION

Sample Number	LHMC155858	LH0253936	LH0253917	LH0236474
Sample Date	20 Dec 2023	26 Sep 2023	12 Jul 2023	21 Apr 2023
Machine Hours	4494	4000	3502	3125
Oil Hours	500	0	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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#### OIL CONDITION

Visc @ 100°C	cSt	13.2	13.0	12.9	13.3
Base Number (BN)	mg KOH/g	6.6	6.0	6.2	6.2
Oxidation (PA)	%	65	73	73	58



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	77	82	77	69
Sulfation (PA)	%	58	65	62	51
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	10	8	8
Sodium	ppm	3	2	3	1
Potassium	ppm	3	2	2	4



#### WEAR METALS

Iron	ppm	5	4	6	6
Copper	ppm	3	2	2	2
Lead	ppm	1	1	<1	<1
Tin	ppm	2	<1	0	<1
Aluminum	ppm	2	1	1	0
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	3	3	5	5
Nickel	ppm	0	0	0	<1
Titanium	ppm	91	92	97	96
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	2	1	2	<1



#### ADDITIVES

Calcium	ppm	1251	1348	1393	1317
Magnesium	ppm	714	766	731	671
Zinc	ppm	1220	1275	1194	1183
Phosphorus	ppm	971	1080	985	979
Barium	ppm	1	0	0	0
Boron	ppm	97	64	67	96

#### 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.

Depot: LEC0008  
 Unique No: 10833218  
 Signed: Wes Davis  
 Report Date: 17 Jan 2024



### GRAPHS

