

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH60M 145111-1217 - Swing Drive

Sample No: LH0296539

Oil Type: GEAR OIL SAE 80W90



#### RAM IRON AND METAL

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TORONTO, ON  
CA M3J 1Z5  
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#### Sample Information

Sample Number	LH0296539	LH0285000	LH0266082	LH0261404
Sample Date	07 Jul 2024	12 Feb 2024	20 Jun 2023	27 Apr 2023
Machine Hours	4008	2972	1188	558
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



#### Oil Condition

Visc @ 40°C	cSt	104	104	121	177



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	3	1	1	<1
Sodium	ppm	<1	0	2	3
Potassium	ppm	<1	<1	<1	<1



#### Wear Metals

Iron	ppm	27	58	145	157
Copper	ppm	15	17	28	26
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	<1	1	<1
Molybdenum	ppm	0	0	<1	<1
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	1	2
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	15	16	16	17
Magnesium	ppm	2	2	2	<1
Zinc	ppm	11	10	12	9
Phosphorus	ppm	1211	1264	1637	2402
Barium	ppm	<1	0	4	4
Boron	ppm	304	314	200	2

#### 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 condition of the oil is acceptable for the time in service.

Depot: RAMTOR  
Unique No: 5811933  
Signed: Wes Davis  
Report Date: 09 Jul 2024



### Graphs

