

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 1204-74217 - Swing Drive

Sample No: LH0268893

Oil Type: LIEBHERR GEAR BASIC 90 LS



MIDDLE RIVER MARINE
 1771 SOUTH TORRENCE AVE
 CHICAGO, IL
 US 60617
 Contact: Scott Molitor
 scottmolitor@gomiddleriver.com
 T:
 F:



Sample Information

Sample Number	LH0268893	LH0236001	LHMC121036	LHMC111781
Sample Date	09 Apr 2024	26 Aug 2022	10 Aug 2017	17 May 2017
Machine Hours	14693	0	8752	7924
Oil Hours	1000	0	0	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	130	142	126.2	262.3
-------------	-----	-----	-----	-------	-------



Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	11	3	5	1
Sodium	ppm	0	<1	2	2
Potassium	ppm	0	<1	5	3



Wear Metals

Iron	ppm	57	36	18	296
Copper	ppm	236	273	4	137
Lead	ppm	0	0	<1	1
Tin	ppm	2	1	0	8
Aluminum	ppm	1	<1	2	<1
Chromium	ppm	<1	<1	<1	3
Molybdenum	ppm	0	2	<1	0
Nickel	ppm	0	<1	0	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	2
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	16	92	211	8
Magnesium	ppm	1	11	29	0
Zinc	ppm	1	37	127	10
Phosphorus	ppm	1067	540	1170	524
Barium	ppm	0	0	<1	0
Boron	ppm	125	11	139	33

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.

Depot: MIDCHIL
 Unique No: 11004482
 Signed: Don Baldrige
 Report Date: 01 May 2024

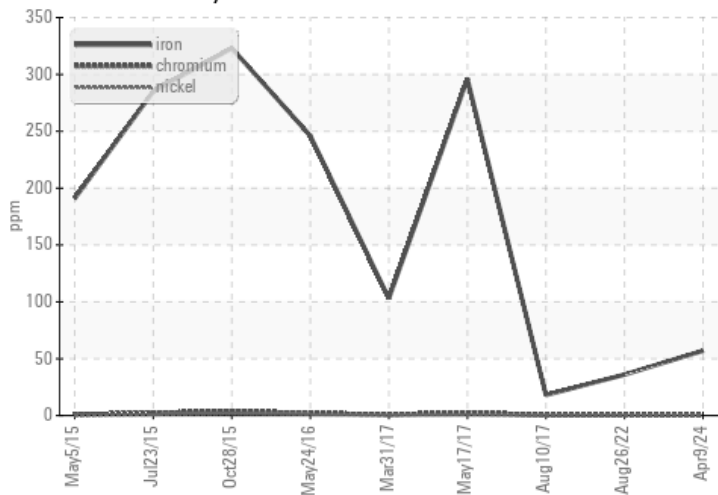
LIEBHERR

CONSTRUCTION EQUIPMENT

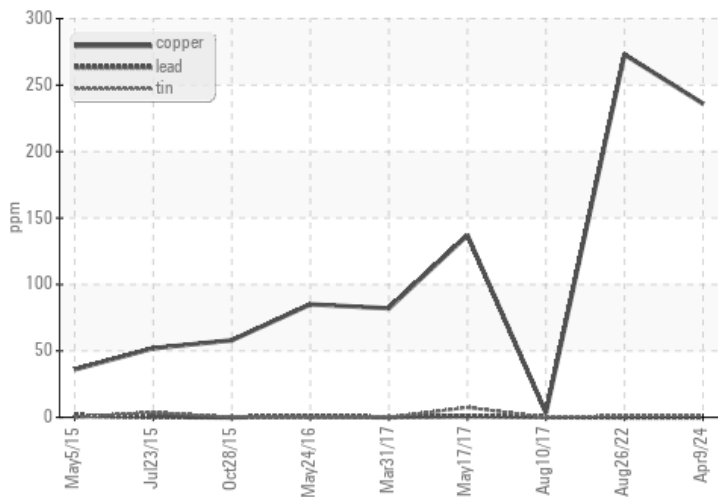


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

