

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(341435)] LIEBHERR LH50M 128733-1216 - Hydraulic System

Sample No: LH0278633

Oil Type: {unknown}



#### SAMPLE INFORMATION

Sample Number	LH0278633	LH0277774	LH0274633	LH0256934
Sample Date	17 Jan 2024	20 Nov 2023	16 Aug 2023	11 Jun 2023
Machine Hours	8647	8180	7832	14253
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Changed	Not Changd
Sample Status	SEVERE	SEVERE	SEVERE	SEVERE

**COMBINED METAL INDUSTRIES**  
 454 DOBBIE DRIVE  
 CAMBRIDGE, ON  
 CA N1T 1S7  
 Contact: Service Manager



#### OIL CONDITION

Visc @ 40°C	cSt	41.1	41.4	40.9	41.2

T:  
F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		3341	1666	65082	3986
Particles >6µm		876	448	19821	1081
Particles >14µm		58	23	851	86
ISO 4406:1999 (c)		19/17/13	18/16/12	23/21/17	19/17/14
Silicon	ppm	2	2	2	2
Sodium	ppm	2	2	2	1
Potassium	ppm	1	0	<1	<1

#### Diagnosis

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. NOTE: An increase in the particle count is noted. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



#### WEAR METALS

PQ		9	0	9	6
Iron	ppm	124	123	126	116
Copper	ppm	4	4	4	4
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	1	<1
Chromium	ppm	1	1	1	1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	4	0
Manganese	ppm	2	2	2	2
Vanadium	ppm	0	0	0	<1



#### ADDITIVES

Calcium	ppm	415	434	480	536
Magnesium	ppm	3	2	3	2
Zinc	ppm	779	806	797	774
Phosphorus	ppm	635	634	674	699
Barium	ppm	0	0	0	0
Boron	ppm	0	<1	<1	<1

**Depot:** COM454CAM  
**Unique No:** 5710805  
**Signed:** Kevin Marson  
**Report Date:** 19 Jan 2024

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### GRAPHS

