

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 144587-1216 - Hydraulic System

Sample No: LH  
 Oil Type: NOT GIVEN



#### SAMPLE INFORMATION

Sample Number	LH	LH0234461	LH0250061	---
Sample Date	12 Dec 2023	21 Jun 2023	23 Mar 2023	---
Machine Hours	2050	1004	500	---
Oil Hours	0	0	0	---
Oil Changed	Not Changd	Not Changd	N/A	---
Sample Status	SEVERE	ABNORMAL	ABNORMAL	---

#### Industrial Metals

550 Messier St.  
 Winnipeg, MB  
 CA R2J 0G5  
 Contact: Service Manager



#### OIL CONDITION

Visc @ 40°C	cSt	42.5	41.7	46.0	---
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T:  
 F:



#### CONTAMINATION

Water	%	0.057	NEG	NEG	---
Particles >4µm		151529	23363	21447	---
Particles >6µm		89584	8769	5908	---
Particles >14µm		7632	770	144	---
ISO 4406:1999 (c)		24/24/20	22/20/17	22/20/14	---
Silicon	ppm	4	3	2	---
Sodium	ppm	2	2	2	---
Potassium	ppm	<1	1	<1	---

#### Diagnosis

We advise that you check all areas where contaminants can enter the system. We advise that you follow the water drain-off procedure for this component. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. Free water present. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



#### WEAR METALS

Iron	ppm	14	12	9	---
Copper	ppm	5	3	4	---
Lead	ppm	1	1	20	---
Tin	ppm	0	0	0	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	2	<1	<1	---
Molybdenum	ppm	0	0	0	---
Nickel	ppm	<1	<1	<1	---
Titanium	ppm	0	0	0	---
Silver	ppm	<1	<1	0	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	0	0	0	---



#### ADDITIVES

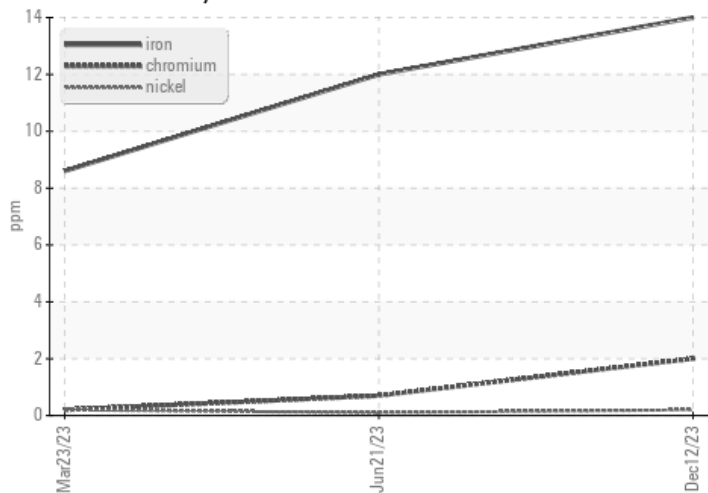
Calcium	ppm	1117	1273	1395	---
Magnesium	ppm	4	4	4	---
Zinc	ppm	728	722	726	---
Phosphorus	ppm	618	673	732	---
Barium	ppm	<1	0	0	---
Boron	ppm	2	1	2	---

Depot: IND550WIN  
 Unique No: 5696328  
 Signed: Kevin Marson  
 Report Date: 19 Dec 2023

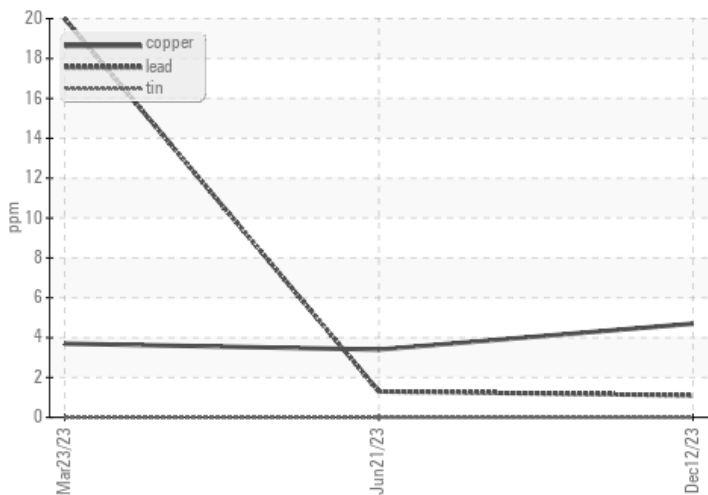


### GRAPHS

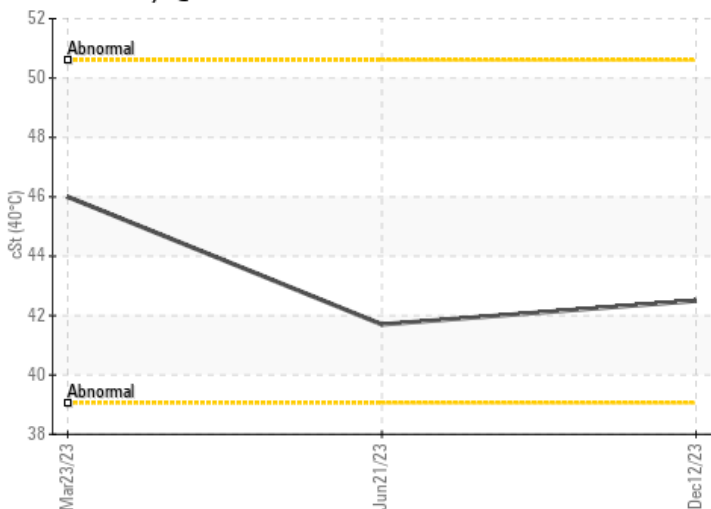
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

