

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50 1216-131051 - Rear Left Wheel Hub

Sample No: LH0272174

Oil Type: GEAR OIL SAE 80W90



#### SAMPLE INFORMATION

Sample Number	LH0272174	LH0213099	LH0213113	LH0213015
Sample Date	18 Dec 2023	30 Aug 2023	24 Jan 2023	03 Dec 2021
Machine Hours	10742	9756	7995	1664
Oil Hours	1000	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	ABNORMAL	NORMAL

#### BOISE WHITE PAPER

3RD AVE AND HWY 11, 400 2ND ST  
INTERNATIONAL FALLS, MN  
US 56649  
Contact: GARY MANN  
garymann@packagingcorp.com  
T:  
F: (218)285-5860



#### OIL CONDITION

Visc @ 40°C	cSt	131	176	157	156



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	7	13	20	19
Sodium	ppm	3	3	3	3
Potassium	ppm	0	1	0	<1



#### WEAR METALS

Iron	ppm	126	134	184	86
Copper	ppm	12	12	104	58
Lead	ppm	0	0	4	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	<1	2	2	1
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	2	0	4	5
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	2	2	4	3
Vanadium	ppm	<1	<1	0	0



#### ADDITIVES

Calcium	ppm	64	11	101	203
Magnesium	ppm	14	0	1	2
Zinc	ppm	29	4	65	70
Phosphorus	ppm	756	519	1506	1675
Barium	ppm	0	0	3	3
Boron	ppm	15	12	57	7

#### Diagnosis

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

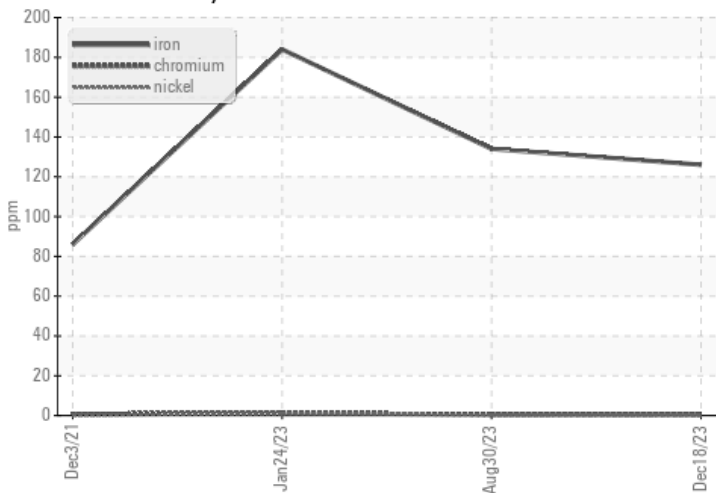
All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: BOIINT  
Unique No: 10844605  
Signed: Wes Davis  
Report Date: 23 Jan 2024

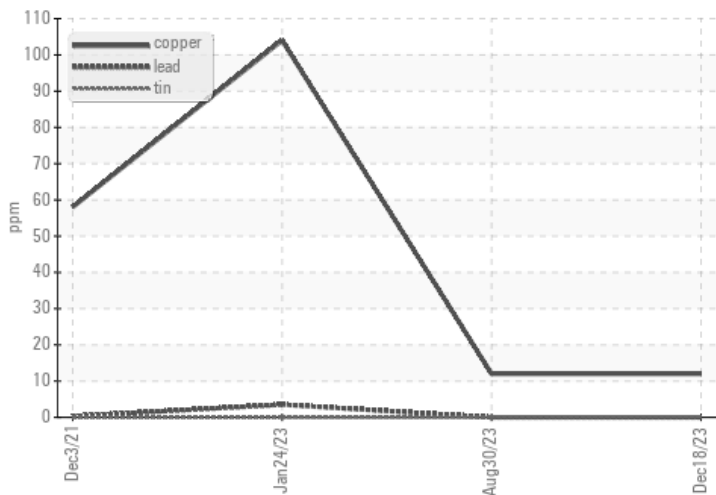


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C

