

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-116574 - Swing Drive

Sample No: LH0272160

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0272160	LH0171149	LH0171121	LH0171107
Sample Date	20 Dec 2023	29 Aug 2023	27 Apr 2023	27 Jan 2023
Machine Hours	19776	17910	16726	14930
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

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	142	175	175	149



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	2	5	2	8
Sodium	ppm	2	3	2	4
Potassium	ppm	0	0	2	0



WEAR METALS

Iron	ppm	427	1117	457	1029
Copper	ppm	107	428	177	812
Lead	ppm	0	4	0	26
Tin	ppm	7	25	15	67
Aluminum	ppm	0	2	<1	<1
Chromium	ppm	1	3	<1	4
Molybdenum	ppm	3	<1	0	<1
Nickel	ppm	0	<1	0	1
Titanium	ppm	<1	<1	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	3	8	3	8
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	27	28	16	95
Magnesium	ppm	8	4	10	45
Zinc	ppm	23	24	27	140
Phosphorus	ppm	1151	2112	2266	2038
Barium	ppm	0	0	0	10
Boron	ppm	8	22	20	36

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.

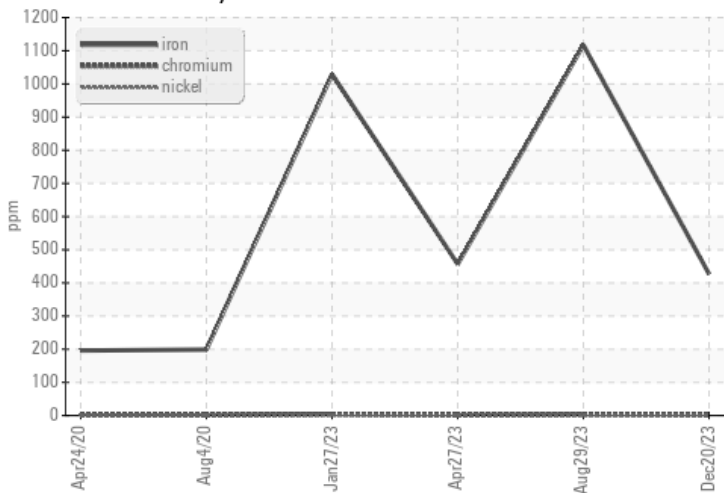
All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: BOIINT
Unique No: 10844583
Signed: Wes Davis
Report Date: 23 Jan 2024

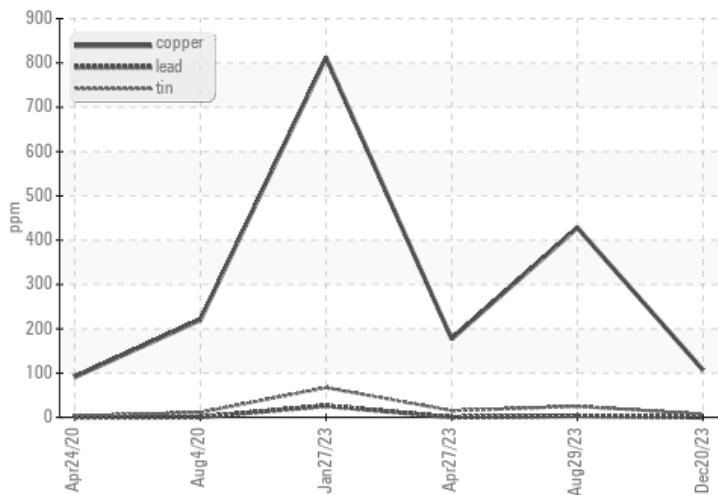


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

