

LIEBHERR

CONSTRUCTION EQUIPMENT



[(361220)] LIEBHERR LH50M 134706-1216 - Splitter Box

Sample No: LH0278551

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

Sample Number	LH0278551	LH	LH0234444	LH0250101
Sample Date	08 Dec 2023	12 Sep 2023	15 Jun 2023	27 Mar 2023
Machine Hours	4636	4000	3528	2610
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	NORMAL	NORMAL	NORMAL

Industrial Metals

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



OIL CONDITION

Visc @ 40°C	cSt	173	176	177	174
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T:
F:



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	5	4	5	8
Sodium	ppm	2	2	2	3
Potassium	ppm	0	<1	<1	<1

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	21	20	14	28
Copper	ppm	2	2	<1	<1
Lead	ppm	<1	0	0	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	1	1	<1	2
Chromium	ppm	0	<1	0	<1
Molybdenum	ppm	0	0	0	<1
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

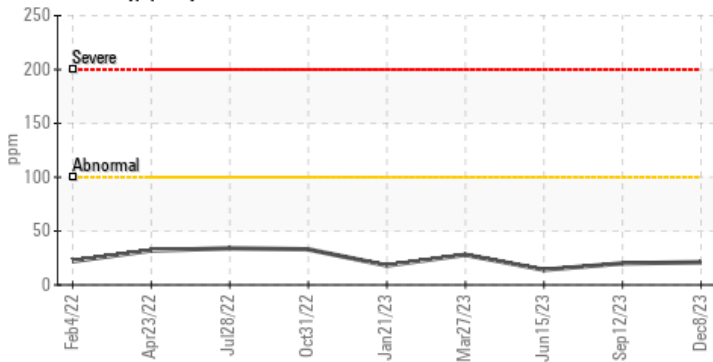
Calcium	ppm	24	16	16	23
Magnesium	ppm	2	2	2	11
Zinc	ppm	40	22	10	21
Phosphorus	ppm	2183	2344	2345	2357
Barium	ppm	<1	0	0	0
Boron	ppm	4	7	13	27

Depot: IND550WIN
Unique No: 5696376
Signed: Kevin Marson
Report Date: 15 Dec 2023

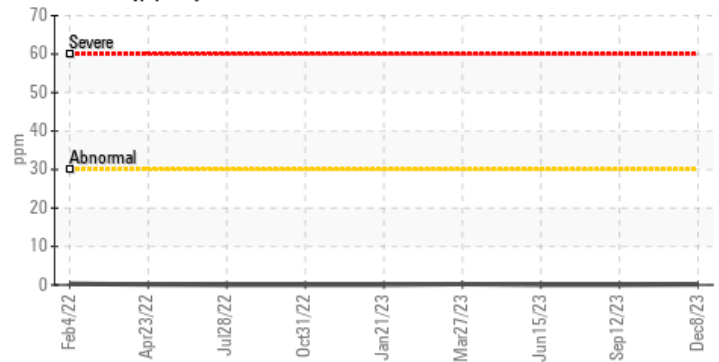


GRAPHS

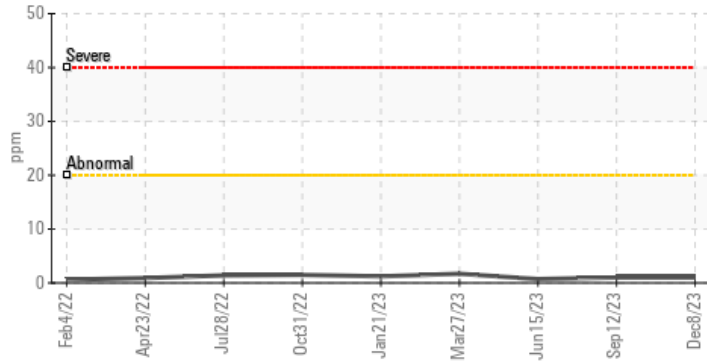
Iron (ppm)



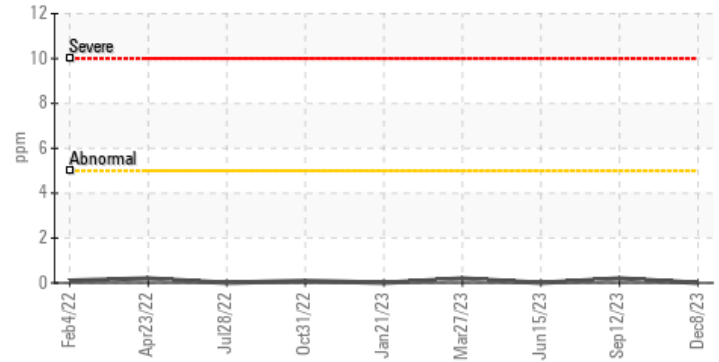
Lead (ppm)



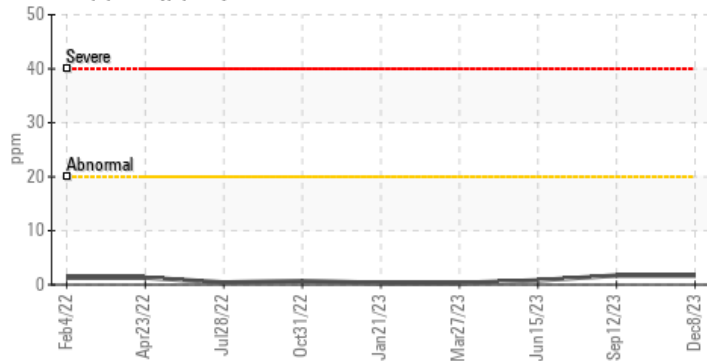
Aluminum (ppm)



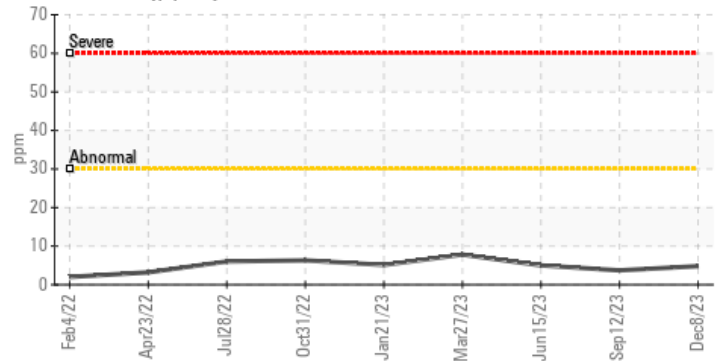
Chromium (ppm)



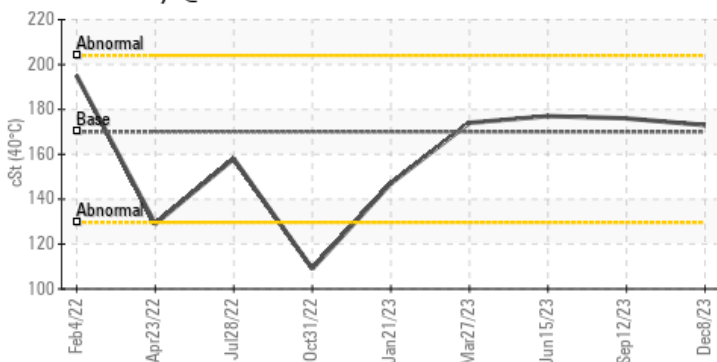
Copper (ppm)



Silicon (ppm)



Viscosity @ 40°C



Additives

