

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L538 064492-1754 - Front Left Wheel Hub

Sample No: LH0263961

Oil Type: GEAR OIL LS 80W90



SAMPLE INFORMATION

Sample Number	LH0263961	LH0220795	---	---
Sample Date	25 Oct 2023	18 Jan 2023	---	---
Machine Hours	1045	464	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

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OIL CONDITION

Visc @ 40°C	cSt	● 137	● 183	---	---
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CONTAMINATION

Silicon	ppm	● 3	● 9	---	---
Sodium	ppm	● 4	● 4	---	---
Potassium	ppm	● 0	● 1	---	---

Diagnosis

Resample at the next service interval to monitor. 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.



WEAR METALS

Iron	ppm	● 35	● 44	---	---
Copper	ppm	● <1	● <1	---	---
Lead	ppm	● 0	● 0	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	● <1	● <1	---	---
Chromium	ppm	● <1	● <1	---	---
Molybdenum	ppm	● <1	● <1	---	---
Nickel	ppm	● <1	● 0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	● 1	● 2	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

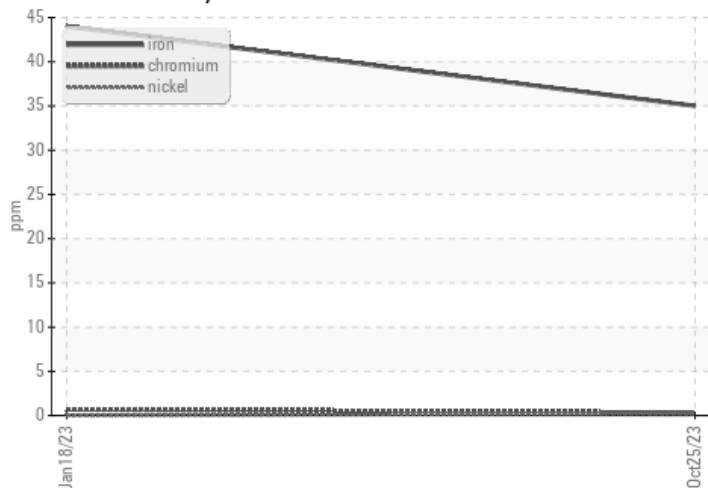
Calcium	ppm	● 33	● 50	---	---
Magnesium	ppm	● 6	● <1	---	---
Zinc	ppm	● 54	● 53	---	---
Phosphorus	ppm	● 1123	● 2139	---	---
Barium	ppm	● 20	● 4	---	---
Boron	ppm	14	● 2	---	---

Depot: LEC0008
 Unique No: 10722240
 Signed: Sean Felton
 Report Date: 01 Nov 2023

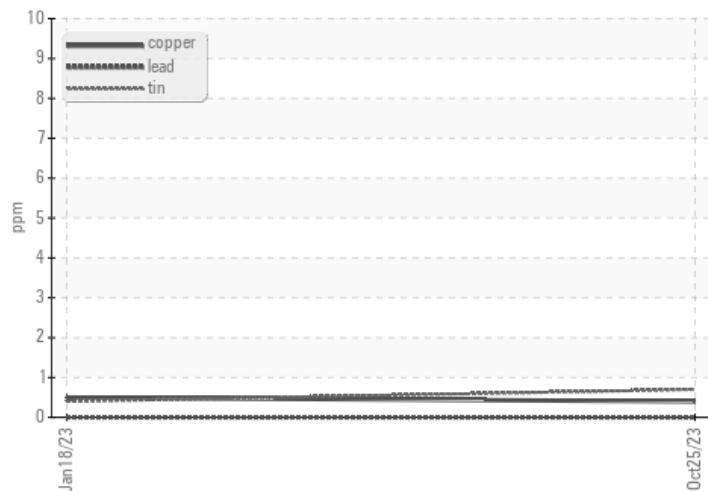


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

