

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L538 1559-58274 - Front Right Wheel Hub

Sample No: LH0253895

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0253895	LH0236502	LH0220595	LH05490322
Sample Date	02 Aug 2023	15 Mar 2023	02 Aug 2022	10 Mar 2022
Machine Hours	5816	5998	4096	3066
Oil Hours	0	1000	1000	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	NORMAL	NORMAL

REPUBLIC SERVICES

2495 117TH STREET
INVER GROVE HEIGHTS, MN
US 55077

Contact: JOHN SCHAFFER
jschaffer@republicservices.com

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F:



OIL CONDITION

Visc @ 40°C	cSt	149	270	152	159
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CONTAMINATION

Silicon	ppm	1	6	<1	1
Sodium	ppm	0	1	<1	0
Potassium	ppm	<1	1	0	0



WEAR METALS

Iron	ppm	23	88	18	41
Copper	ppm	0	<1	<1	0
Lead	ppm	<1	0	0	0
Tin	ppm	0	0	<1	0
Aluminum	ppm	0	1	1	<1
Chromium	ppm	<1	1	0	<1
Molybdenum	ppm	2	<1	2	1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	3	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	24	73	26	24
Magnesium	ppm	6	<1	5	<1
Zinc	ppm	19	40	16	11
Phosphorus	ppm	1015	1526	1016	1363
Barium	ppm	<1	0	0	0
Boron	ppm	8	97	17	35

Diagnosis

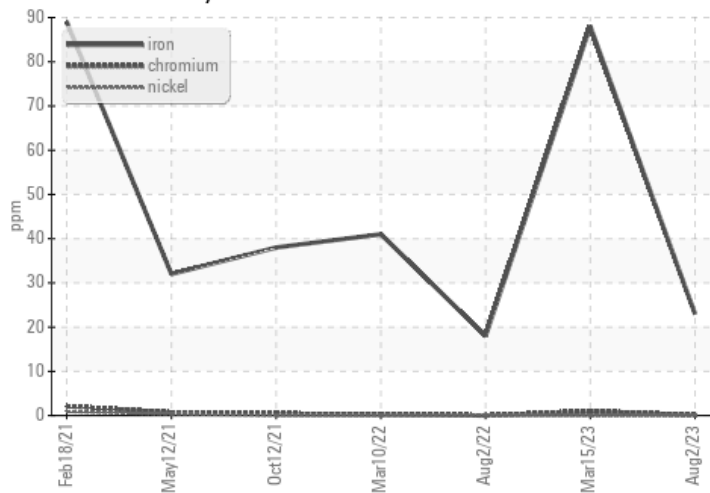
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: REPINV
Unique No: 10605589
Signed: Jonathan Hester
Report Date: 17 Aug 2023

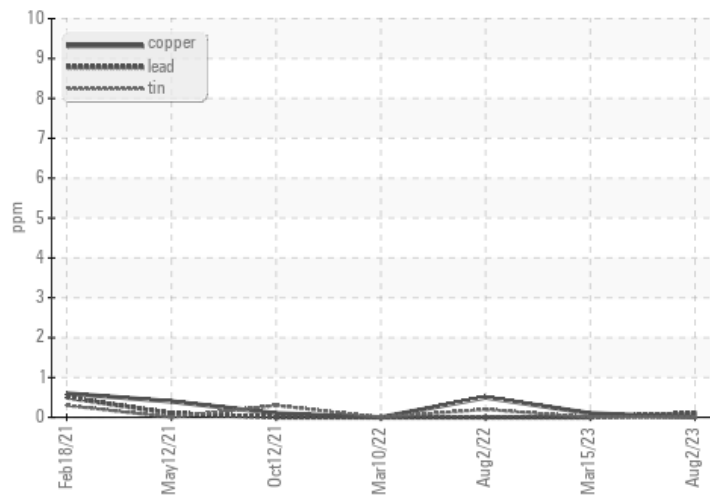


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

