

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30 101514-1253 - Front Left Wheel Hub

Sample No: LH0272802

Oil Type: GEAR OIL SAE 80W90



SPARTAN RECYCLING
 3071 HOWARD ST
 SPARTANBURG, SC
 US 29303
 Contact: SERVICE MANAGER



SAMPLE INFORMATION

Sample Number	LH0272802	LH0235747	LH0217621	LH0166348
Sample Date	10 Jan 2024	03 Oct 2023	22 Mar 2023	14 Jul 2022
Machine Hours	12010	11543	10552	7420
Oil Hours	0	0	2000	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	ABNORMAL	NORMAL	ABNORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	131	110	103	95.9
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T:
F:



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	5	9	10
Sodium	ppm	0	<1	2	6
Potassium	ppm	1	2	2	3

Diagnosis

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. High concentration of visible metal present. 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	243	182	567	329
Copper	ppm	2	4	7	4
Lead	ppm	0	0	0	<1
Tin	ppm	0	0	0	<1
Aluminum	ppm	2	1	1	<1
Chromium	ppm	<1	<1	2	1
Molybdenum	ppm	<1	1	2	<1
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	2	5	3
Vanadium	ppm	0	<1	0	<1



ADDITIVES

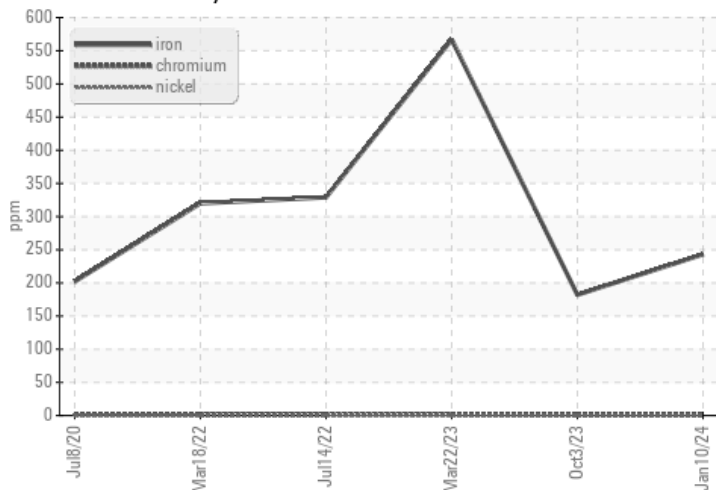
Calcium	ppm	61	80	108	27
Magnesium	ppm	5	10	13	4
Zinc	ppm	0	59	69	17
Phosphorus	ppm	326	289	276	370
Barium	ppm	3	0	0	0
Boron	ppm	0	0	1	2

Depot: SPASPALH
Unique No: 10834563
Signed: Don Baldrige
Report Date: 19 Jan 2024

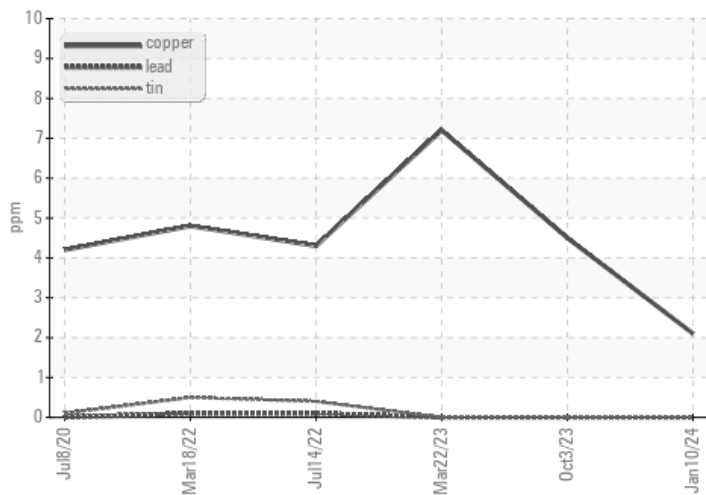


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

