

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 142548-1216 - Transmission

Sample No: LH0264763

Oil Type: DIESEL ENGINE OIL SAE 5W40



AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
 Contact: CHRIS BARTNIK
 cbartnik@amstate.com
 T: (715)675-6900
 F: (715)675-9748



Sample Information

Sample Number	LH0264763	LH0272490	LH0254793	LH0243156
Sample Date	20 May 2024	30 Oct 2023	14 Apr 2023	11 Jan 2023
Machine Hours	3013	1993	1008	473
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL



Oil Condition

Visc @ 40°C	cSt	46.0	47.4	49.7	49.6
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Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	● 6	● 5	● 5	● 6
Sodium	ppm	● 6	● 9	● 16	● 38
Potassium	ppm	● 0	● 0	● 0	● 2



Wear Metals

Iron	ppm	● 30	● 23	● 21	● 21
Copper	ppm	● 14	● 19	● 17	● 21
Lead	ppm	● 0	● 0	● 0	● <1
Tin	ppm	● <1	● 0	● <1	● 2
Aluminum	ppm	● 0	● <1	● 1	● 5
Chromium	ppm	● <1	● 0	● <1	● <1
Molybdenum	ppm	● 13	● 16	● 26	● <1
Nickel	ppm	● 0	● 0	● 0	● 0
Titanium	ppm	● 87	● 57	● 27	● <1
Silver	ppm	● 0	● 0	● 0	● <1
Manganese	ppm	● 5	● 6	● 25	● 28
Vanadium	ppm	● <1	● 0	● <1	● <1



Additives

Calcium	ppm	● 1538	● 1539	● 1906	● 3434
Magnesium	ppm	● 774	● 644	● 525	● 10
Zinc	ppm	● 1256	● 1194	● 1167	● 1121
Phosphorus	ppm	● 1169	● 1059	● 1047	● 1070
Barium	ppm	● 0	● 0	● 0	● 0
Boron	ppm	● 194	● 109	● 51	● 2

Diagnosis

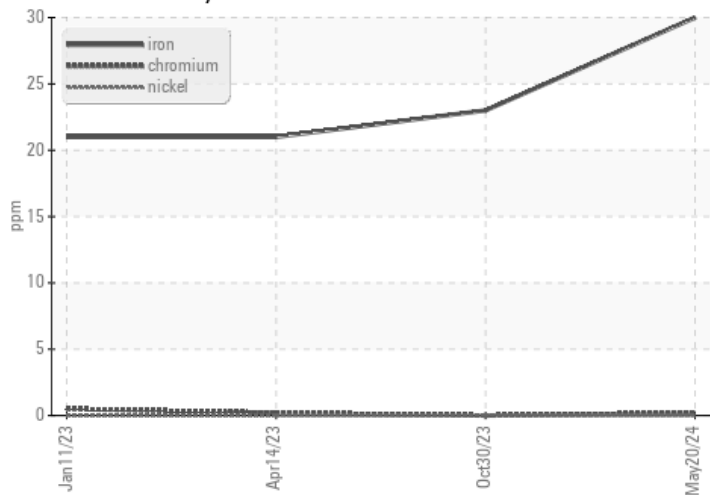
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

Depot: LEC0008
Unique No: 11048157
Signed: Sean Felton
Report Date: 29 May 2024

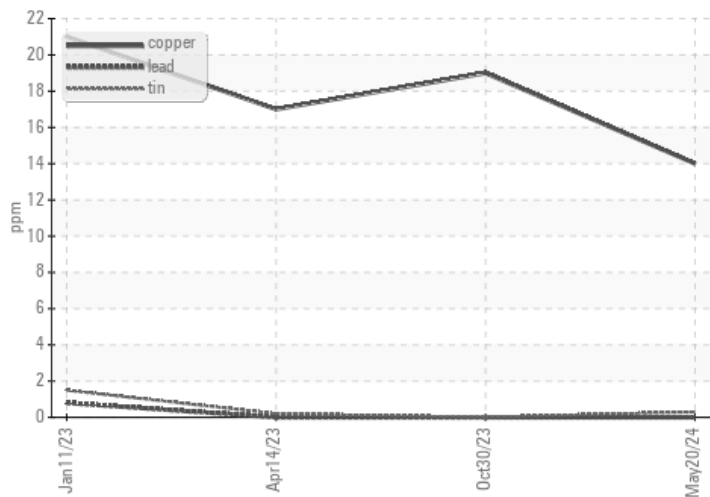


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

