

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1216-121548 - Transmission (Manual)

Sample No: LH0267182

Oil Type: DIESEL ENGINE OIL SAE 5W40



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Sample Information

Sample Number	LH0267182	LH0243398	LH0263854	LH0236113
Sample Date	25 Apr 2024	05 Oct 2023	18 Jul 2023	20 Jan 2023
Machine Hours	4279	2969	2422	1172
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	47.4	53.2	46.9	49.2
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Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	6	4	3	4
Sodium	ppm	2	9	15	26
Potassium	ppm	5	2	<1	2



Wear Metals

Iron	ppm	10	7	10	14
Copper	ppm	10	16	18	24
Lead	ppm	1	0	0	<1
Tin	ppm	1	<1	0	<1
Aluminum	ppm	1	2	2	2
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	9	16	18	2
Nickel	ppm	<1	0	0	<1
Titanium	ppm	81	62	46	47
Silver	ppm	0	0	0	0
Manganese	ppm	5	4	8	12
Vanadium	ppm	1	<1	<1	<1



Additives

Calcium	ppm	1350	1573	1850	2336
Magnesium	ppm	664	672	596	308
Zinc	ppm	1119	1264	1205	1084
Phosphorus	ppm	993	1091	1061	1010
Barium	ppm	0	0	0	0
Boron	ppm	163	133	86	100

Diagnosis

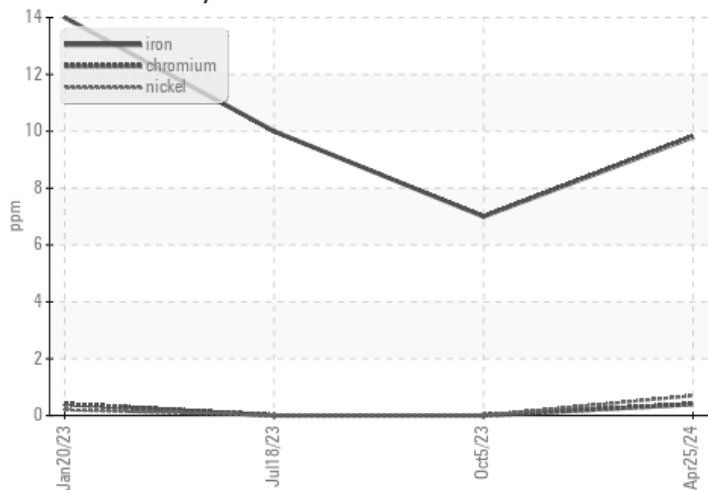
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
Unique No: 11019252
Signed: Sean Felton
Report Date: 10 May 2024

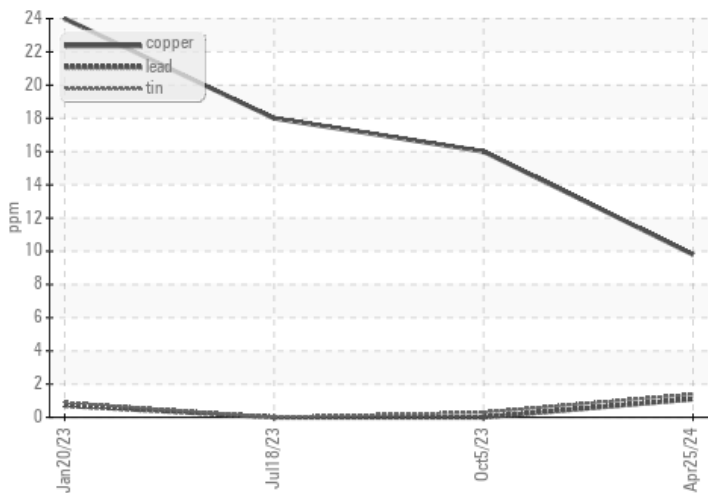


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

