

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 114410-1216 - Diesel Engine

Sample No: LH0268379

Oil Type: LIEBHERR MOTOROIL 5W30



RECO EQUIPMENT INC
 10461 GRAND RIVER RD
 BRIGHTON, MI
 US 48116
 Contact: MATT VISEL
 MVISEL@RECOEQUIP.COM
 T: (810)299-1731
 F:



Sample Information

Sample Number	LH0268379	LH0244114	LHMC50217	LHMC140813
Sample Date	11 Jun 2024	06 Jun 2023	05 Jul 2022	23 Mar 2022
Machine Hours	6530	4573	2990	2490
Oil Hours	0	0	1019	520
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	11.6	13.1	11.0	11.3
Base Number (BN)	mg KOH/g	14.0	7.5	11.7	15.1
Oxidation (PA)	%	55	92	88	69



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.2	0.1
Nitration (PA)	%	116	86	158	122
Sulfation (PA)	%	47	58	63	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	6	9	8
Sodium	ppm	<1	2	2	<1
Potassium	ppm	4	6	16	15



Wear Metals

Iron	ppm	10	5	22	14
Copper	ppm	8	2	31	28
Lead	ppm	<1	1	4	10
Tin	ppm	0	<1	2	<1
Aluminum	ppm	3	3	10	7
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	6	2	4	5
Nickel	ppm	0	1	<1	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	<1	1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	0



Additives

Calcium	ppm	4305	1636	4507	4083
Magnesium	ppm	91	815	80	74
Zinc	ppm	1225	1009	1182	1151
Phosphorus	ppm	1008	843	997	1010
Barium	ppm	0	0	0	0
Boron	ppm	225	134	224	237

Diagnosis

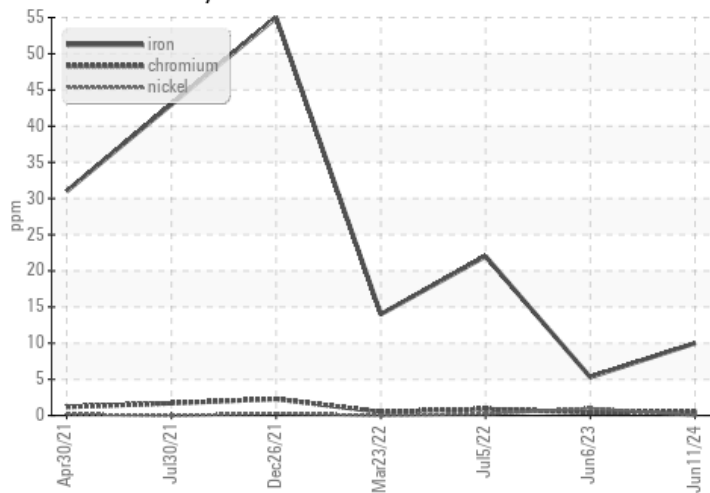
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: RECBRILH
 Unique No: 11089413
 Signed: Wes Davis
 Report Date: 24 Jun 2024

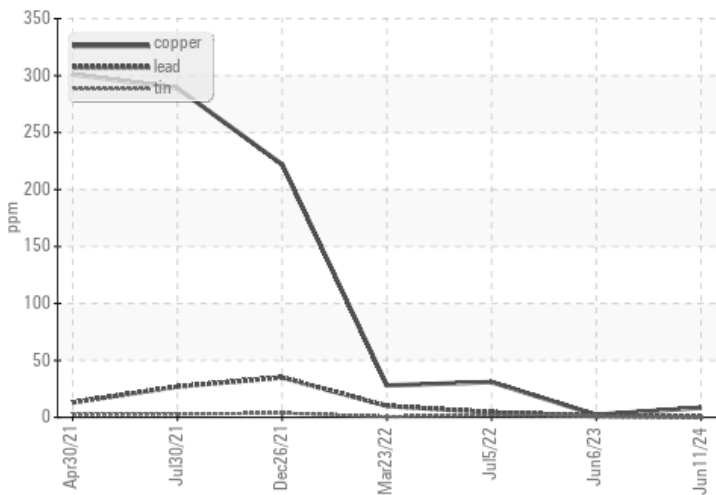


Graphs

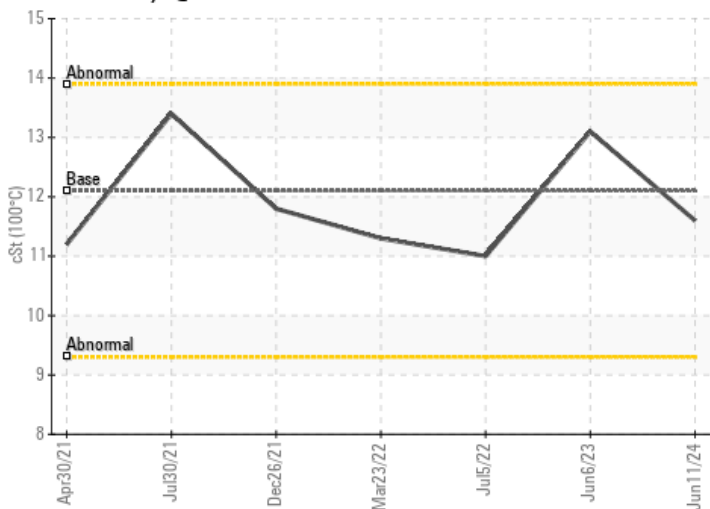
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

