

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 121854-1253 - Diesel Engine

Sample No: LH0267094

Oil Type: CHEVRON DELO LE 5W40



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Sample Information

Sample Number	LH0267094	LH0258820	LH0272748	LH0272577
Sample Date	17 May 2024	15 Mar 2024	02 Jan 2024	27 Oct 2023
Machine Hours	8113	7579	6976	6481
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	13.0	13.2	13.0	12.9
Base Number (BN)	mg KOH/g	6.8	6.6	6.0	6.8
Oxidation (PA)	%	60	64	59	59



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	75	77	73	75
Sulfation (PA)	%	56	58	56	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	8	9
Sodium	ppm	2	2	3	1
Potassium	ppm	3	2	2	3



Wear Metals

Iron	ppm	4	4	4	3
Copper	ppm	2	2	2	2
Lead	ppm	0	0	<1	1
Tin	ppm	<1	0	2	<1
Aluminum	ppm	1	2	2	1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	4	6	6	5
Nickel	ppm	0	0	0	<1
Titanium	ppm	87	87	85	80
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	<1	2	1



Additives

Calcium	ppm	1318	1330	1292	1267
Magnesium	ppm	710	707	712	722
Zinc	ppm	1192	1157	1196	1242
Phosphorus	ppm	1003	897	967	974
Barium	ppm	0	0	0	0
Boron	ppm	109	81	101	79

Diagnosis

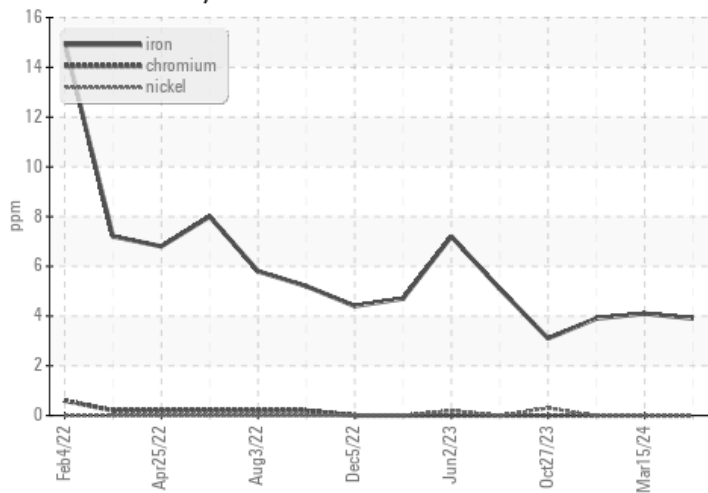
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: LEC0008
 Unique No: 11048365
 Signed: Wes Davis
 Report Date: 29 May 2024

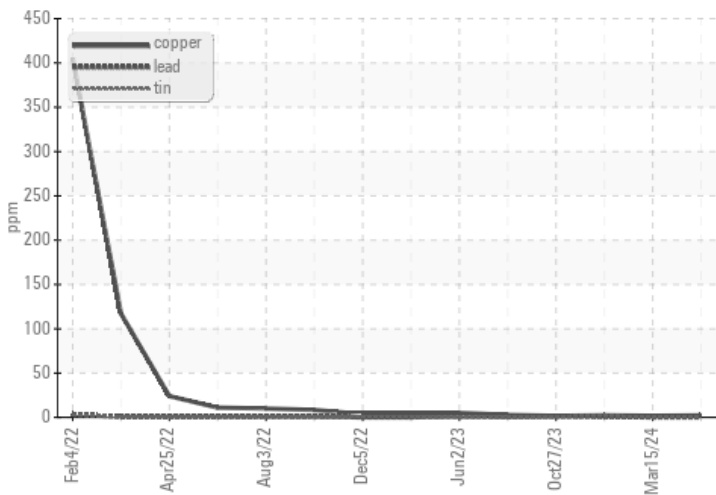


Graphs

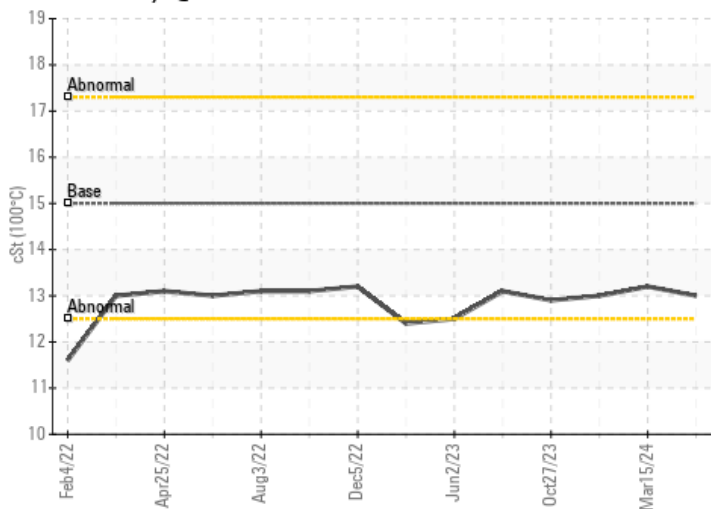
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

