

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 121854-1253 - Diesel Engine

Sample No: LH0258820

Oil Type: CHEVRON DELO LE 5W40



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SAMPLE INFORMATION

Sample Number	LH0258820	LH0272748	LH0272577	LH0263824
Sample Date	15 Mar 2024	02 Jan 2024	27 Oct 2023	08 Aug 2023
Machine Hours	7579	6976	6481	6007
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 100°C	cSt	13.2	13.0	12.9	13.1
Base Number (BN)	mg KOH/g	6.6	6.0	6.8	6.7
Oxidation (PA)	%	64	59	59	57



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	77	73	75	73
Sulfation (PA)	%	58	56	56	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	8	9	8
Sodium	ppm	2	3	1	2
Potassium	ppm	2	2	3	3



WEAR METALS

Iron	ppm	4	4	3	5
Copper	ppm	2	2	2	3
Lead	ppm	0	<1	1	<1
Tin	ppm	0	2	<1	<1
Aluminum	ppm	2	2	1	<1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	6	6	5	13
Nickel	ppm	0	0	<1	0
Titanium	ppm	87	85	80	72
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	<1	2	1	<1



ADDITIVES

Calcium	ppm	1330	1292	1267	1383
Magnesium	ppm	707	712	722	760
Zinc	ppm	1157	1196	1242	1239
Phosphorus	ppm	897	967	974	1002
Barium	ppm	0	0	0	0
Boron	ppm	81	101	79	70

Diagnosis

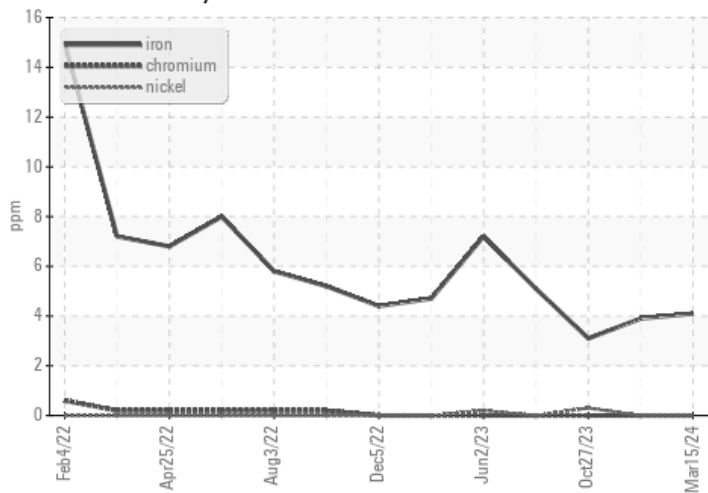
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: LEC0008
 Unique No: 10952115
 Signed: Wes Davis
 Report Date: 01 Apr 2024

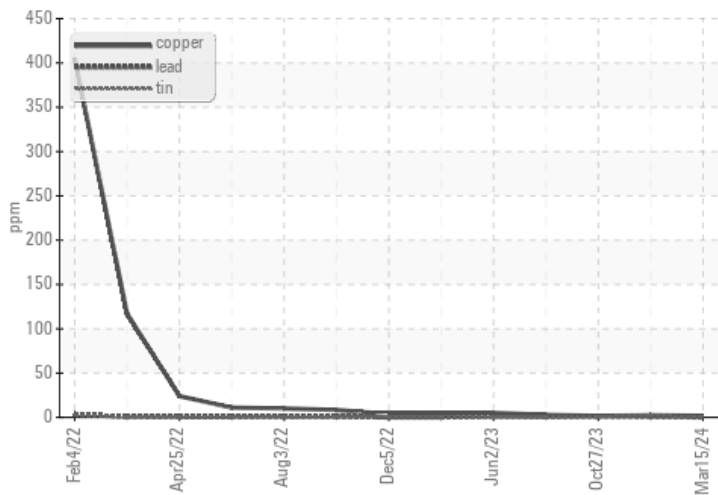


GRAPHS

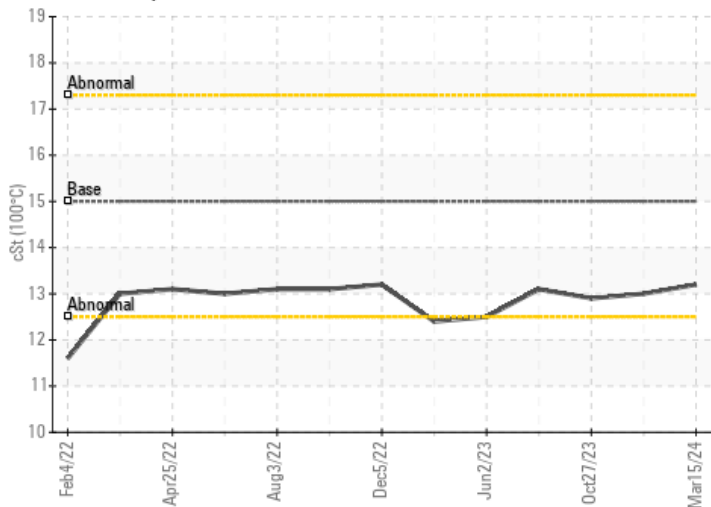
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

