

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 117421-1217 - Diesel Engine

Sample No: LH0267280

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



SAMPLE INFORMATION

Sample Number	LH0267280	LH0244336	LH0247839	LH0229341
Sample Date	26 Dec 2023	27 Jun 2023	24 Feb 2023	13 Jun 2022
Machine Hours	5377	4239	3454	1958
Oil Hours	1138	700	1000	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

TT & E IRON

1529 WEST GARNER RD
GARNER, NC
US 27529
Contact: MICHAEL STANCIL
culaterprowler@aol.com
T: (919)524-4326
F:



OIL CONDITION

Visc @ 100°C	cSt	11.9	11.5	11.2	11.1
Base Number (BN)	mg KOH/g	5.1	5.4	9.0	4.5
Oxidation (PA)	%	105	85	69	122

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	113	104	53	127
Sulfation (PA)	%	68	63	57	80
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	8	8	8
Sodium	ppm	2	<1	4	1
Potassium	ppm	4	5	4	9



WEAR METALS

Iron	ppm	5	8	8	14
Copper	ppm	2	2	3	9
Lead	ppm	<1	2	2	14
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	2	3	4
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

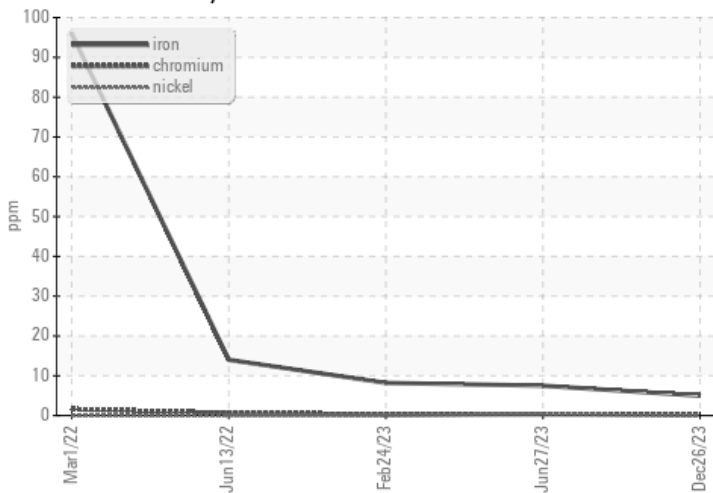
Calcium	ppm	1277	1294	1299	2162
Magnesium	ppm	765	661	690	495
Zinc	ppm	842	803	782	978
Phosphorus	ppm	736	704	677	826
Barium	ppm	0	0	0	0
Boron	ppm	45	28	29	77

Depot: TTENEW
Unique No: 10816682
Signed: Jonathan Hester
Report Date: 05 Jan 2024

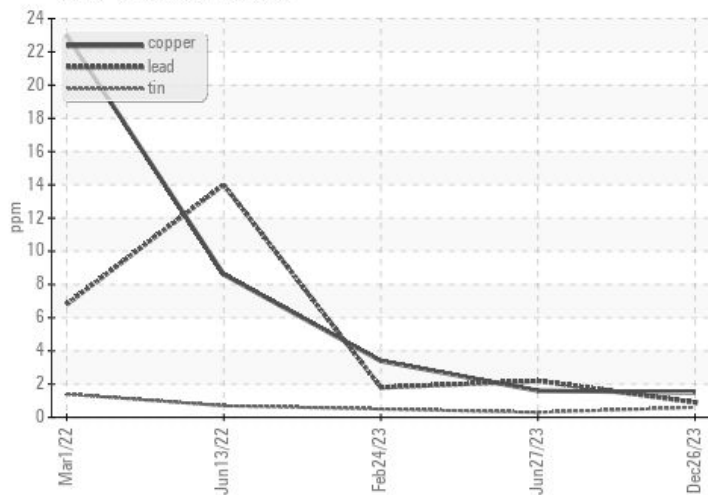


GRAPHS

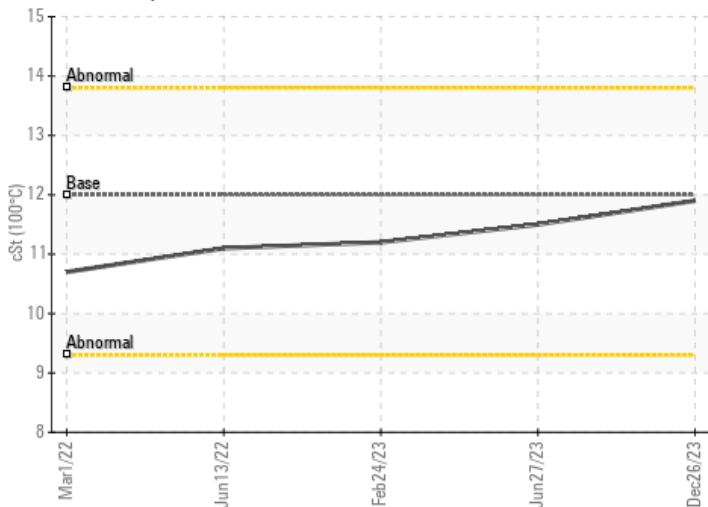
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

