

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L586 048061-1334 - Diesel Engine

Sample No: LH0258024

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



SAMPLE INFORMATION

Sample Number	LH0258024	LH0220149	LH0236173	LH0207476
Sample Date	29 Jun 2023	24 Feb 2023	14 Sep 2022	07 Mar 2022
Machine Hours	6839	5960	5320	4013
Oil Hours	500	1000	1300	1200
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ATTENTION	NORMAL	NORMAL

TT & E IRON

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



OIL CONDITION

Visc @ 100°C	cSt	11.8	12.0	12.0	11.8
Base Number (BN)	mg KOH/g	6.8	9.1	6.4	5.4
Oxidation (PA)	%	61	66	76	78



CONTAMINATION

Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	85	53	88	79
Sulfation (PA)	%	55	57	64	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	7	8
Sodium	ppm	<1	4	3	2
Potassium	ppm	4	<1	1	4

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.



WEAR METALS

Iron	ppm	5	7	6	9
Copper	ppm	2	1	4	5
Lead	ppm	<1	1	3	2
Tin	ppm	<1	<1	1	1
Aluminum	ppm	1	2	3	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	6	8	10	4
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	0	0	0	<1



ADDITIVES

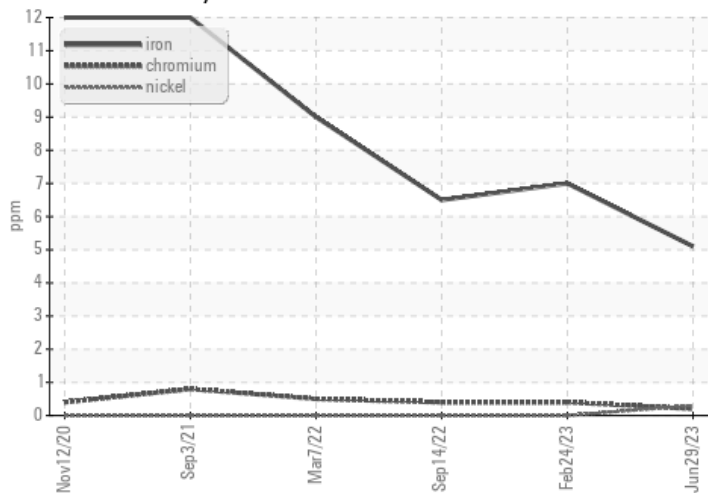
Calcium	ppm	1642	3640	1235	1389
Magnesium	ppm	609	189	689	835
Zinc	ppm	895	1136	845	936
Phosphorus	ppm	784	969	693	852
Barium	ppm	0	0	0	0
Boron	ppm	59	183	22	44

Depot: TTENEW
Unique No: 10561107
Signed: Wes Davis
Report Date: 18 Jul 2023

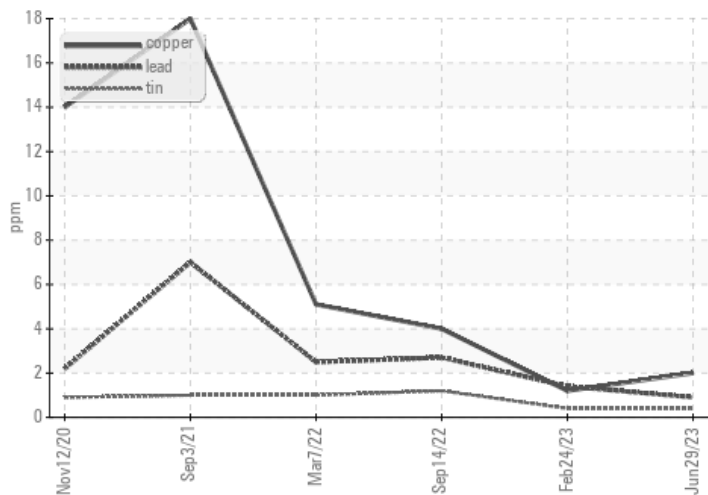


GRAPHS

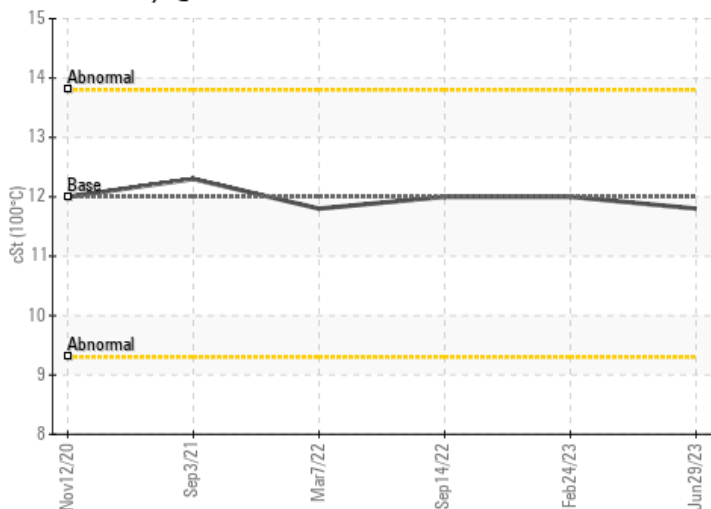
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

