

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L580 1414-52139 - Diesel Engine

Sample No: LH0264119

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



#### SAMPLE INFORMATION

Sample Number	LH0264119	---	---	---
Sample Date	14 Aug 2023	---	---	---
Machine Hours	2270	---	---	---
Oil Hours	1000	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

**BINDERHOLZ**

260 PIPER LN

ENFIELD, NC

US 27823

Contact: ROBERT BULLOCK

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#### OIL CONDITION

Visc @ 100°C	cSt	11.3	---	---	---
Base Number (BN)	mg KOH/g	10.3	---	---	---
Oxidation (PA)	%	78	---	---	---

#### 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 acceptable for the time in service.



#### CONTAMINATION

Soot %	%	0.1	---	---	---
Nitration (PA)	%	112	---	---	---
Sulfation (PA)	%	58	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	9	---	---	---
Sodium	ppm	2	---	---	---
Potassium	ppm	2	---	---	---



#### WEAR METALS

Iron	ppm	20	---	---	---
Copper	ppm	35	---	---	---
Lead	ppm	2	---	---	---
Tin	ppm	1	---	---	---
Aluminum	ppm	4	---	---	---
Chromium	ppm	1	---	---	---
Molybdenum	ppm	12	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

Calcium	ppm	3987	---	---	---
Magnesium	ppm	215	---	---	---
Zinc	ppm	1264	---	---	---
Phosphorus	ppm	1145	---	---	---
Barium	ppm	10	---	---	---
Boron	ppm	200	---	---	---

Depot: BINENF

Unique No: 10604565

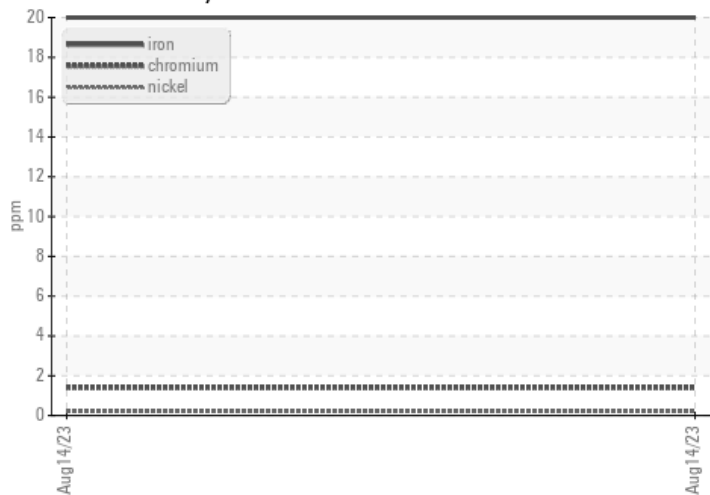
Signed: Sean Felton

Report Date: 16 Aug 2023

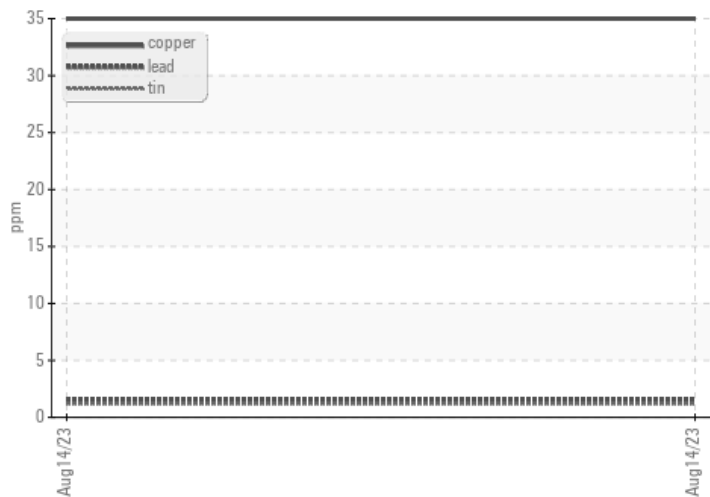


### GRAPHS

#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

