

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH80M 114645-1218 - Diesel Engine

Sample No: LH0267419

Oil Type: LIEBHERR MOTOROIL 5W30



#### SAMPLE INFORMATION

Sample Number	LH0267419	LH0254323	LH0243922	---
Sample Date	14 Sep 2023	20 Mar 2023	27 Jan 2023	---
Machine Hours	9586	8400	8051	---
Oil Hours	0	1000	250	---
Oil Changed	Changed	Not Changd	Not Changd	---
Sample Status	NORMAL	NORMAL	MARGINAL	---

#### SIMS METAL MANAGEMENT

3220 DEEPWATER TERMINAL RD  
RICHMOND, VA  
US 23234  
Contact: Service Manager



#### OIL CONDITION

Visc @ 100°C	cSt	11.1	11.1	11.3	---
Base Number (BN)	mg KOH/g	7.2	8.8	13.3	---
Oxidation (PA)	%	95	62	57	---

T: (703)392-0111  
F:



#### CONTAMINATION

Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	161	122	124	---
Sulfation (PA)	%	66	48	47	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	2.4	---
Silicon	ppm	7	8	8	---
Sodium	ppm	2	1	2	---
Potassium	ppm	0	2	<1	---

#### 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	17	35	8	---
Copper	ppm	3	2	5	---
Lead	ppm	1	0	1	---
Tin	ppm	1	<1	<1	---
Aluminum	ppm	<1	0	3	---
Chromium	ppm	1	4	<1	---
Molybdenum	ppm	14	2	<1	---
Nickel	ppm	0	1	0	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	<1	0	0	---



#### ADDITIVES

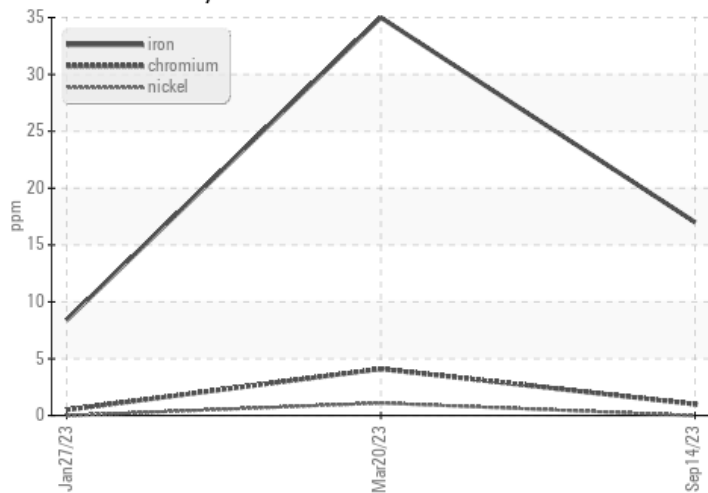
Calcium	ppm	3385	4147	4241	---
Magnesium	ppm	174	43	20	---
Zinc	ppm	1098	1167	1168	---
Phosphorus	ppm	915	985	938	---
Barium	ppm	0	2	0	---
Boron	ppm	171	266	239	---

Depot: SIMRICLH  
Unique No: 10673426  
Signed: Wes Davis  
Report Date: 03 Oct 2023

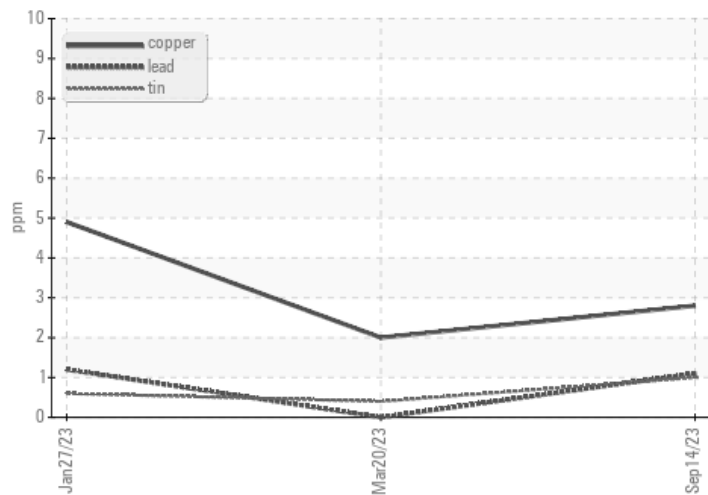


### GRAPHS

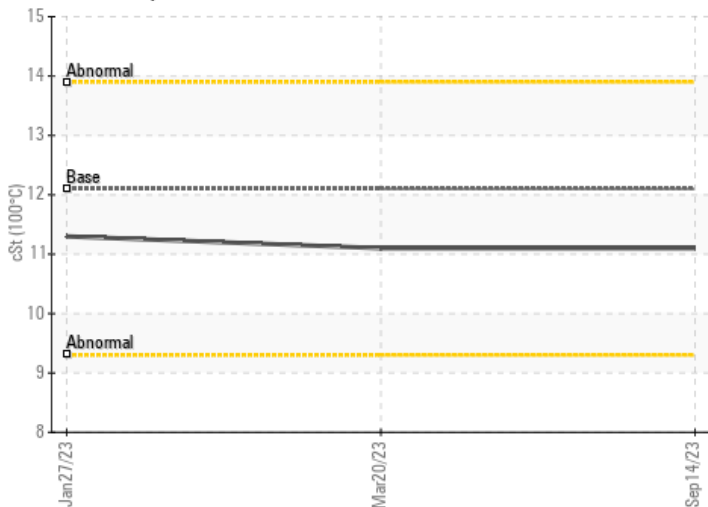
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

