

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R936LC 057985-1828 - Diesel Engine

Sample No: LH0273568

Oil Type: LIEBHERR MOTOROIL 5W30



Sample Information

Sample Number	LH0273568	---	---	---
Sample Date	17 May 2024	---	---	---
Machine Hours	341	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

LIEBHERR EQUIPMENT SOURCE

4100 CHESTNUT AVENUE
NEWPORT NEWS, VA
US 23607

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Oil Condition

Visc @ 100°C	cSt	3.9	---	---	---
Base Number (BN)	mg KOH/g	4.6	---	---	---
Oxidation (PA)	%	110	---	---	---

Diagnosis

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a very high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



Contamination

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	72	---	---	---
Sulfation (PA)	%	70	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	49.3	---	---	---
Silicon	ppm	3	---	---	---
Sodium	ppm	2	---	---	---
Potassium	ppm	1	---	---	---



Wear Metals

Iron	ppm	14	---	---	---
Copper	ppm	116	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	4	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	28	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



Additives

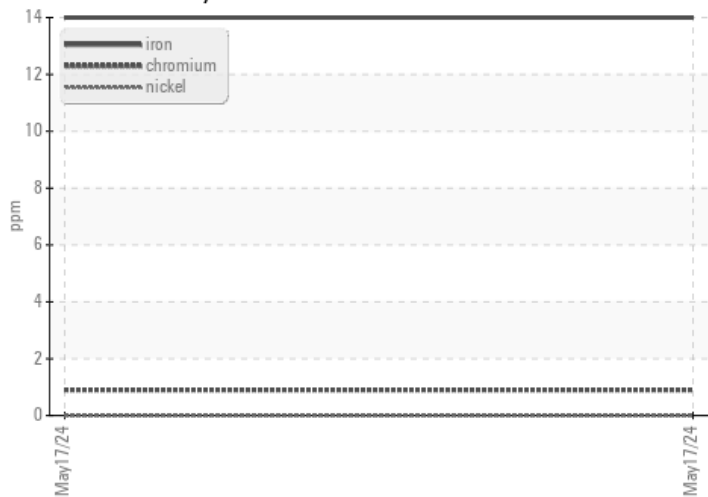
Calcium	ppm	717	---	---	---
Magnesium	ppm	466	---	---	---
Zinc	ppm	456	---	---	---
Phosphorus	ppm	386	---	---	---
Barium	ppm	19	---	---	---
Boron	ppm	56	---	---	---

Depot: LIEBHERRUS
Unique No: 11061045
Signed: Don Baldrige
Report Date: 06 Jun 2024

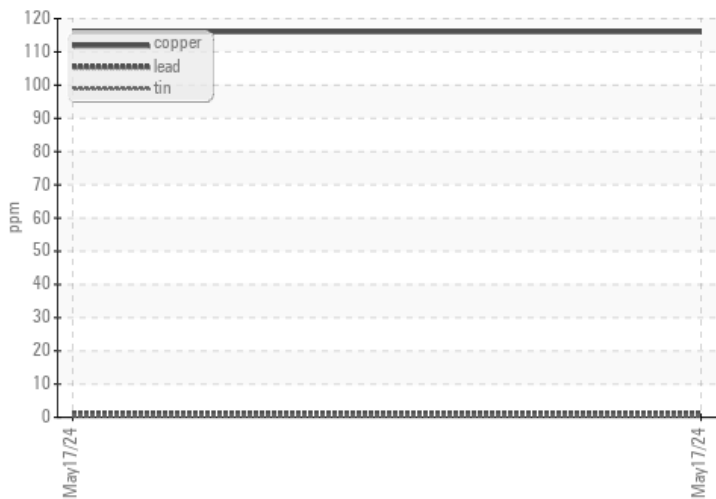


Graphs

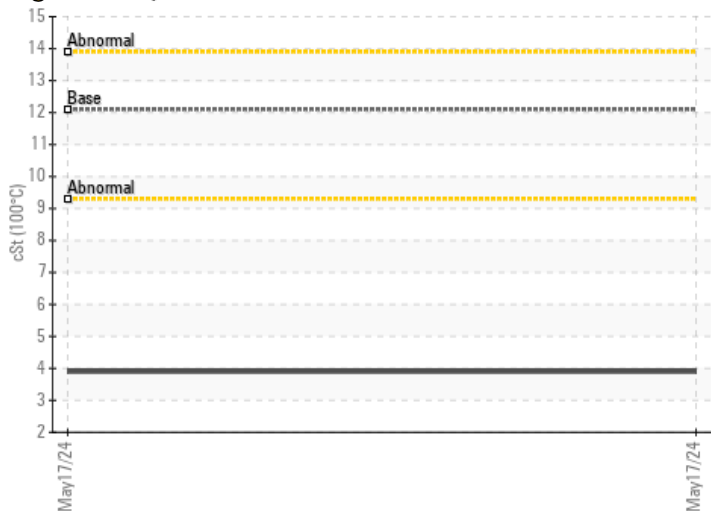
Ferrous Alloys



Non-ferrous Metals



● Viscosity @ 100°C



Base Number

