

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 052542-1464 - Diesel Engine

Sample No: LH0258961

Oil Type: LIEBHERR MOTOROIL 5W30



SAMPLE INFORMATION

Sample Number	LH0258961	LH0229817	LH0220877	---
Sample Date	11 Sep 2023	22 Dec 2022	12 Feb 2022	---
Machine Hours	4406	3159	1891	---
Oil Hours	1247	1268	0	---
Oil Changed	Changed	Changed	Not Changd	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---

RECYCLE MANAGEMENT LLC
 1610 S MAIN STREET
 HARRISONBURG, VA
 US 22801
 Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	13.5	11.5	11.4	---
Base Number (BN)	mg KOH/g	7.6	12.1	4.0	---
Oxidation (PA)	%	84	67	178	---

T:
F:



CONTAMINATION

Soot %	%	0.1	0.2	0.1	---
Nitration (PA)	%	93	121	101	---
Sulfation (PA)	%	58	54	101	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	8	9	15	---
Sodium	ppm	0	3	3	---
Potassium	ppm	4	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	8	18	29	---
Copper	ppm	8	31	201	---
Lead	ppm	<1	2	13	---
Tin	ppm	0	2	4	---
Aluminum	ppm	2	2	2	---
Chromium	ppm	<1	2	1	---
Molybdenum	ppm	1	11	109	---
Nickel	ppm	0	0	0	---
Titanium	ppm	<1	<1	<1	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	<1	3	---
Vanadium	ppm	0	<1	0	---



ADDITIVES

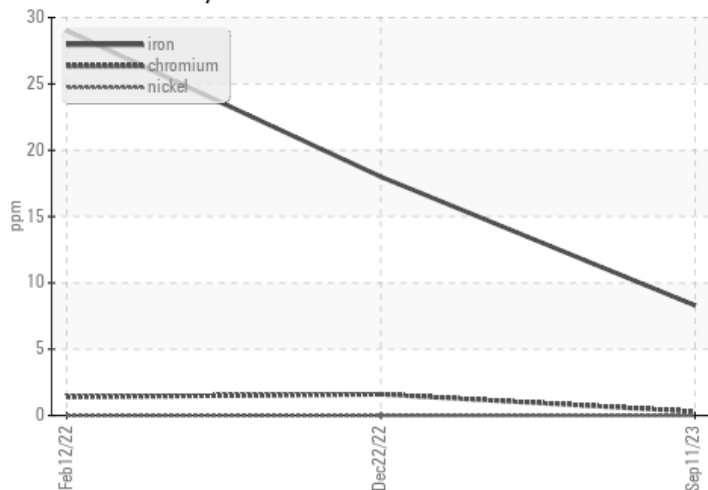
Calcium	ppm	1942	4141	1576	---
Magnesium	ppm	673	98	869	---
Zinc	ppm	1001	1187	911	---
Phosphorus	ppm	799	971	763	---
Barium	ppm	<1	4	28	---
Boron	ppm	123	212	85	---

Depot: RECHARVA
 Unique No: 10735909
 Signed: Wes Davis
 Report Date: 09 Nov 2023

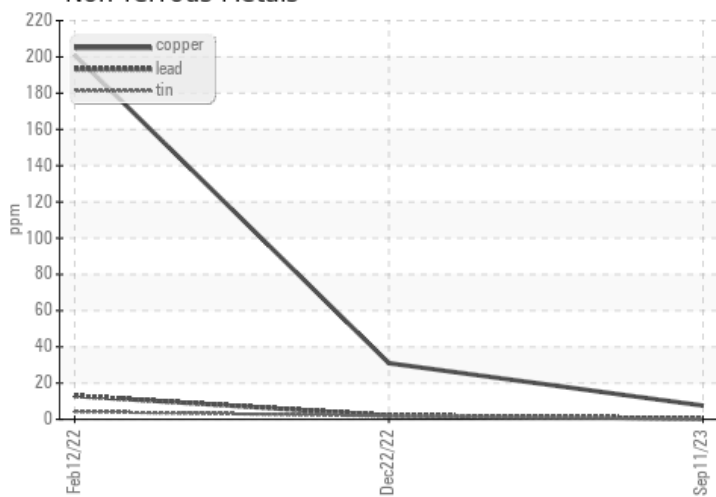


GRAPHS

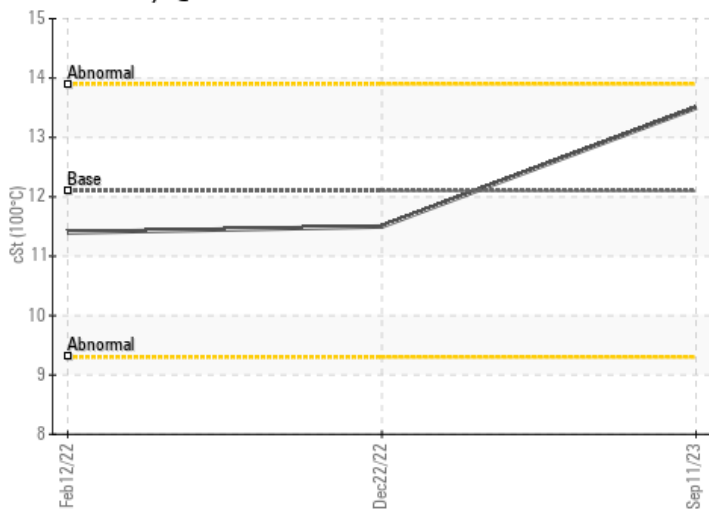
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

