

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR 944X EX20177-19 - Diesel Engine

Sample No: LH0264002

Oil Type: {unknown}



Sample Information

Sample Number	LH0264002	---	---	---
Sample Date	03 Jun 2024	---	---	---
Machine Hours	2542	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

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Oil Condition

Visc @ 100°C	cSt	4.8	---	---	---
Base Number (BN)	mg KOH/g	7.7	---	---	---
Oxidation (PA)	%	40	---	---	---

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 high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.



Contamination

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	67	---	---	---
Sulfation (PA)	%	40	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	59.2	---	---	---
Silicon	ppm	18	---	---	---
Sodium	ppm	1	---	---	---
Potassium	ppm	2	---	---	---



Wear Metals

Iron	ppm	6	---	---	---
Copper	ppm	2	---	---	---
Lead	ppm	0	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	25	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



Additives

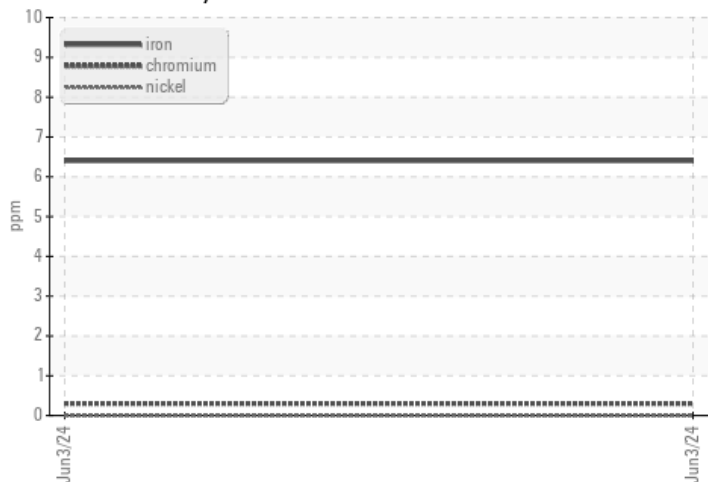
Calcium	ppm	666	---	---	---
Magnesium	ppm	362	---	---	---
Zinc	ppm	597	---	---	---
Phosphorus	ppm	469	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	9	---	---	---

Depot: LEC0008
Unique No: 11074721
Signed: Jonathan Hester
Report Date: 18 Jun 2024

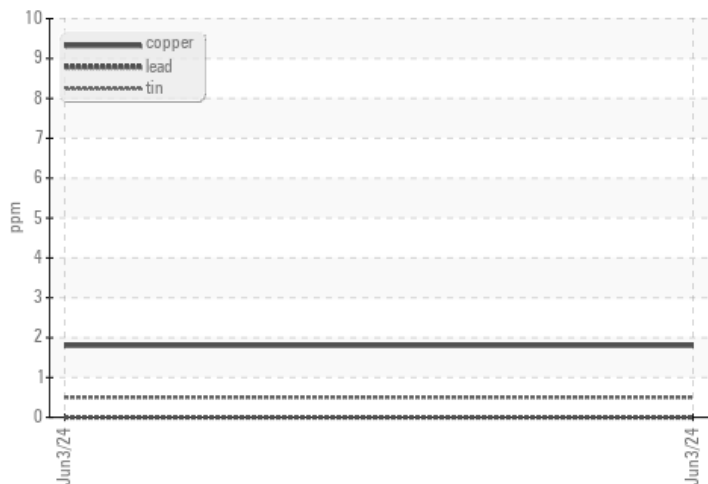


Graphs

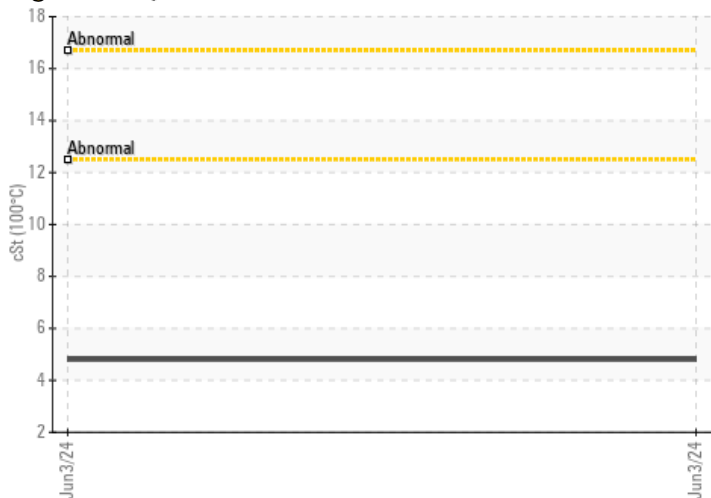
Ferrous Alloys



Non-ferrous Metals



● Viscosity @ 100°C



Base Number

