

LIEBHERR

CONSTRUCTION EQUIPMENT



[[YORKTOWN MATERIALS]] LIEBHERR R946 045303-1491 - Diesel

Sample No: LH0267617
 Oil Type: DIESEL ENGINE OIL SAE 15W40



LIEBHERR EQUIPMENT SOURCE
 4100 CHESTNUT AVENUE
 NEWPORT NEWS, VA
 US 23607
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 F: (757)298-8700



SAMPLE INFORMATION

Sample Number	LH0267617	---	---	---
Sample Date	21 Sep 2023	---	---	---
Machine Hours	3480	---	---	---
Oil Hours	3480	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---



OIL CONDITION

Visc @ 100°C	cSt	12.8	---	---	---
Base Number (BN)	mg KOH/g	9.3	---	---	---
Oxidation (PA)	%	57	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	63	---	---	---
Sulfation (PA)	%	52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	6	---	---	---
Sodium	ppm	<1	---	---	---
Potassium	ppm	6	---	---	---



WEAR METALS

Iron	ppm	8	---	---	---
Copper	ppm	37	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	6	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	54	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1337	---	---	---
Magnesium	ppm	829	---	---	---
Zinc	ppm	1217	---	---	---
Phosphorus	ppm	1012	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	17	---	---	---

Diagnosis

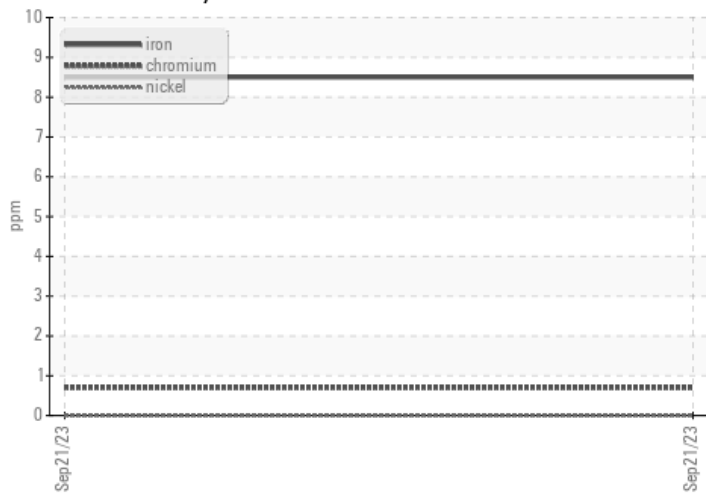
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Metal levels are typical for a components first oil change. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: LIEBHERRUS
 Unique No: 10683876
 Signed: Wes Davis
 Report Date: 09 Oct 2023

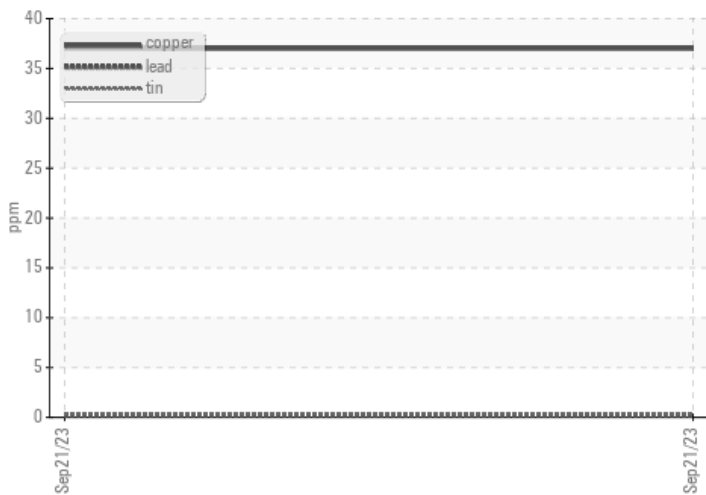


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

