

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L546 1755-67311 - Diesel Engine

Sample No: LH0243335

Oil Type: DIESEL ENGINE OIL SAE 5W40



SAMPLE INFORMATION

Sample Number	LH0243335	LH0244328	---	---
Sample Date	16 Oct 2023	07 Mar 2023	---	---
Machine Hours	962	436	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

FAHRNER EXCAVATING

PO BOX 36

PLOVER, MI

US 54467

Contact: JUSTIN F

excavatinginc@gmail.com

T: (715)341-8902

F:



OIL CONDITION

Visc @ 100°C	cSt	12.6	10.6	---	---
Base Number (BN)	mg KOH/g	6.1	8.4	---	---
Oxidation (PA)	%	67	71	---	---

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 new component breaking in.

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.



CONTAMINATION

Soot %	%	0.4	0.2	---	---
Nitration (PA)	%	84	86	---	---
Sulfation (PA)	%	59	61	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	1.0	---	---
Silicon	ppm	7	13	---	---
Sodium	ppm	3	7	---	---
Potassium	ppm	5	4	---	---



WEAR METALS

Iron	ppm	44	41	---	---
Copper	ppm	65	565	---	---
Lead	ppm	<1	1	---	---
Tin	ppm	2	4	---	---
Aluminum	ppm	2	4	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	39	212	---	---
Nickel	ppm	3	4	---	---
Titanium	ppm	49	19	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	4	---	---
Vanadium	ppm	<1	<1	---	---



ADDITIVES

Calcium	ppm	1282	1392	---	---
Magnesium	ppm	762	803	---	---
Zinc	ppm	1142	1075	---	---
Phosphorus	ppm	847	884	---	---
Barium	ppm	3	1	---	---
Boron	ppm	35	174	---	---

Depot: FAHPLO

Unique No: 10712325

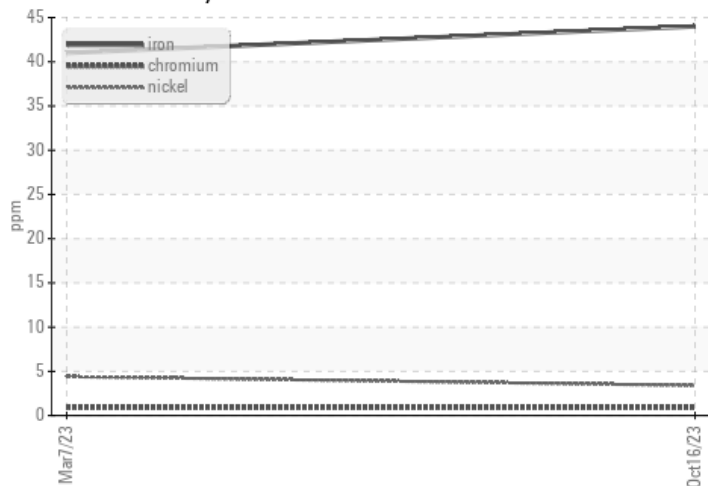
Signed: Wes Davis

Report Date: 26 Oct 2023

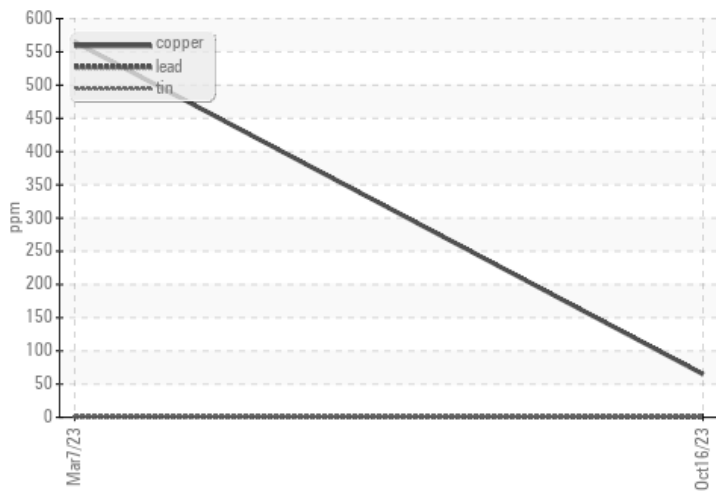


GRAPHS

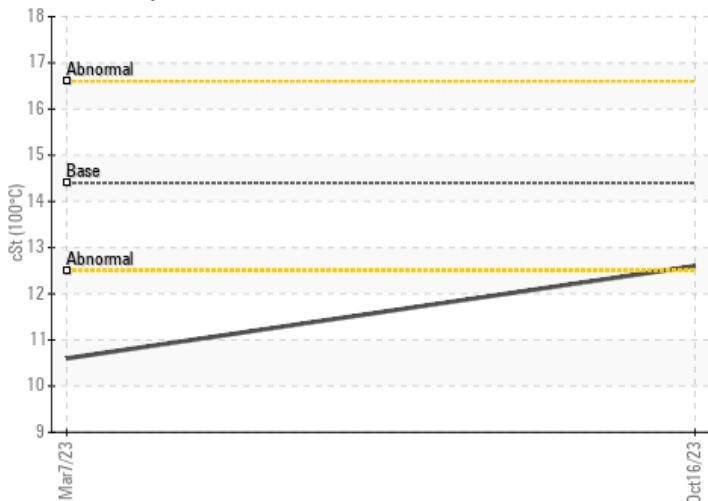
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

