

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L550 021798-456 - Diesel Engine

Sample No: LH0273341

Oil Type: DIESEL ENGINE OIL SAE 5W40



#### Sample Information

Sample Number	LH0273341	LHMC60783	---	---
Sample Date	20 Mar 2024	14 Aug 2012	---	---
Machine Hours	9820	475	---	---
Oil Hours	500	215	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

#### ECO BLOCK

2650 W 5TH AVE  
GARY, IN  
US 46408

Contact: JAMES CROOK  
jcrook@ecoblockmfg.com  
T: (219)886-3000  
F: (219)886-3001



#### Oil Condition

Visc @ 100°C	cSt	12.9	13.56	---	---
Base Number (BN)	mg KOH/g	8.8	---	---	---
Oxidation (PA)	%	83	36	---	---



#### Contamination

Water	%	NEG	NEG	---	---
Soot %	%	0.6	0.2	---	---
Nitration (PA)	%	81	42	---	---
Sulfation (PA)	%	62	39	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	11	5	---	---
Sodium	ppm	201	7	---	---
Potassium	ppm	60	1	---	---



#### Wear Metals

Iron	ppm	11	10	---	---
Copper	ppm	13	6	---	---
Lead	ppm	23	2	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	2	1	---	---
Chromium	ppm	1	2	---	---
Molybdenum	ppm	38	35	---	---
Nickel	ppm	1	<1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	1	<1	---	---
Vanadium	ppm	<1	0	---	---



#### Additives

Calcium	ppm	1577	1165	---	---
Magnesium	ppm	509	950	---	---
Zinc	ppm	936	1170	---	---
Phosphorus	ppm	756	1101	---	---
Barium	ppm	<1	1	---	---
Boron	ppm	20	16	---	---

#### Diagnosis

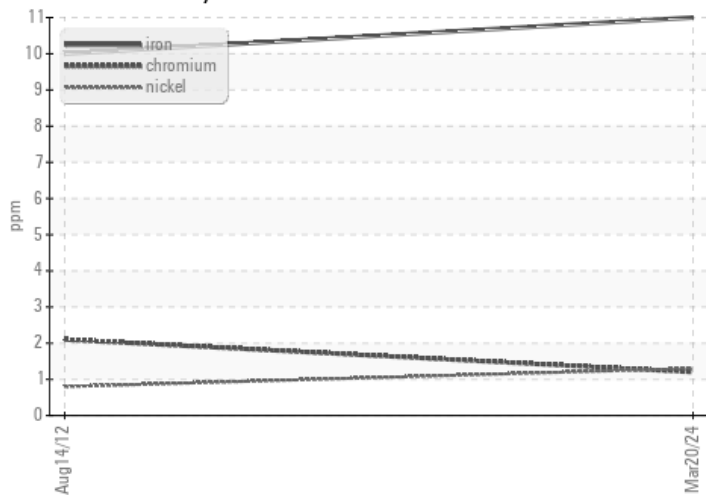
We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: ECOGAR  
Unique No: 10992035  
Signed: Jonathan Hester  
Report Date: 24 Apr 2024

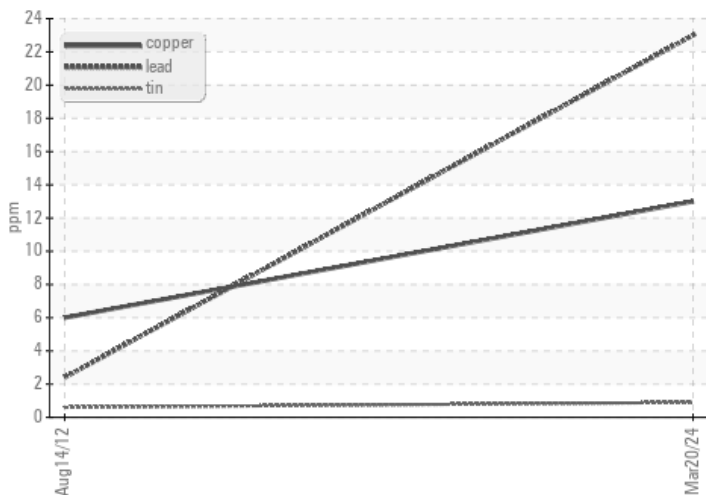


### Graphs

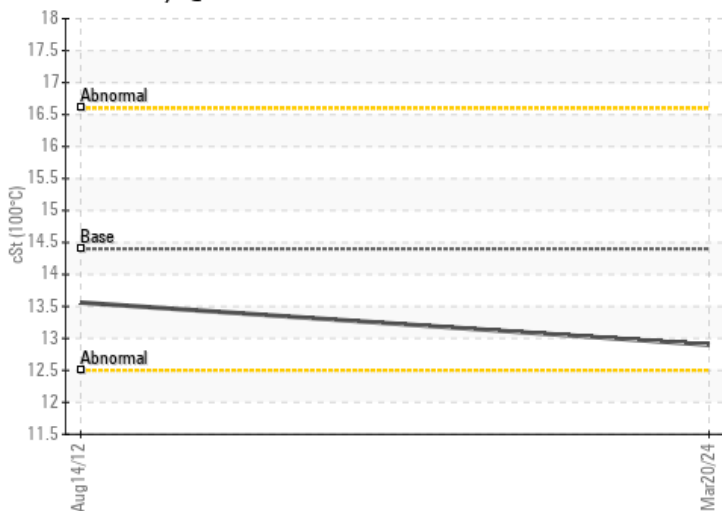
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

