

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A924C056515-1049 - Diesel Engine

Sample No: LH0267723

Oil Type: DIESEL ENGINE OIL SAE 15W40



#### Sample Information

Sample Number	LH0267723	LH0244923	LH0229927	---
Sample Date	06 May 2024	24 Apr 2023	29 Nov 2022	---
Machine Hours	13278	11657	10749	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

#### INTEGRITY METALS

835 EAST INDUSTRIAL  
MORRISTOWN, IN  
US 46161

Contact: HEIDI KERSTIENS  
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T: (765)763-8000  
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#### Oil Condition

Visc @ 100°C	cSt	13.5	13.5	13.9	---
Base Number (BN)	mg KOH/g	7.0	5.8	6.8	---
Oxidation (PA)	%	44	61	64	---



#### Contamination

Water	%	NEG	NEG	NEG	---
Soot %	%	1	1.2	1.7	---
Nitration (PA)	%	66	77	87	---
Sulfation (PA)	%	50	57	64	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	6	6	6	---
Sodium	ppm	2	2	3	---
Potassium	ppm	3	<1	2	---

#### Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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	6	8	14	---
Copper	ppm	1	2	4	---
Lead	ppm	2	0	5	---
Tin	ppm	2	0	<1	---
Aluminum	ppm	2	2	2	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	24	87	85	---
Nickel	ppm	<1	0	<1	---
Titanium	ppm	<1	0	0	---
Silver	ppm	<1	0	0	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	0	0	---



#### Additives

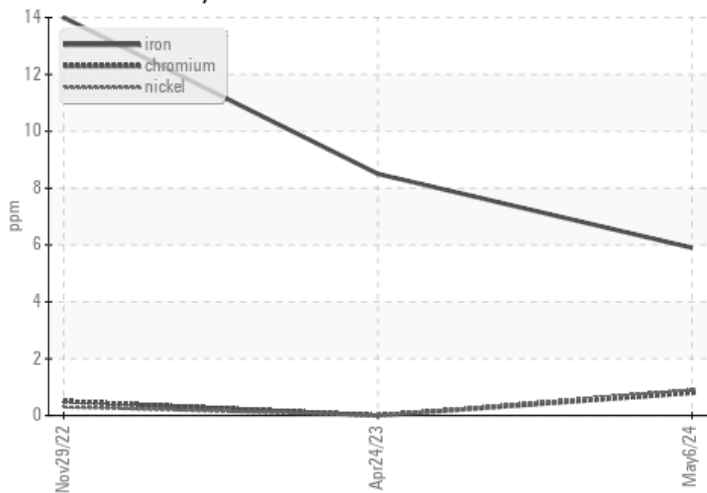
Calcium	ppm	2357	1905	1960	---
Magnesium	ppm	162	318	302	---
Zinc	ppm	1249	1335	1327	---
Phosphorus	ppm	1068	1082	1024	---
Barium	ppm	0	0	0	---
Boron	ppm	9	32	23	---

Depot: INTMORLH  
Unique No: 11016729  
Signed: Wes Davis  
Report Date: 07 May 2024

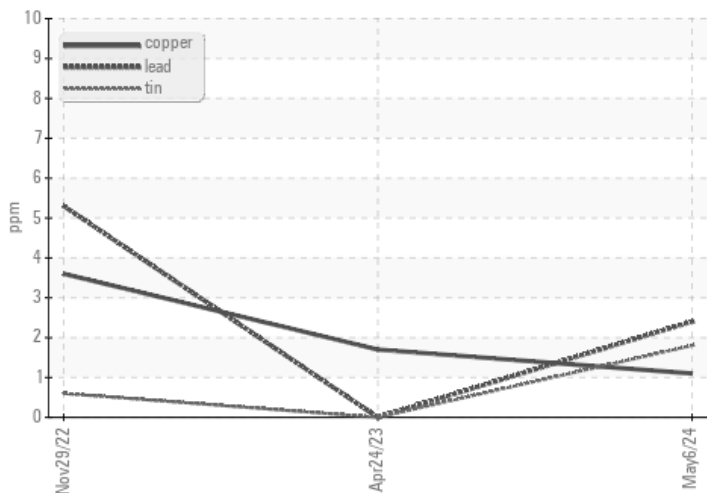


### Graphs

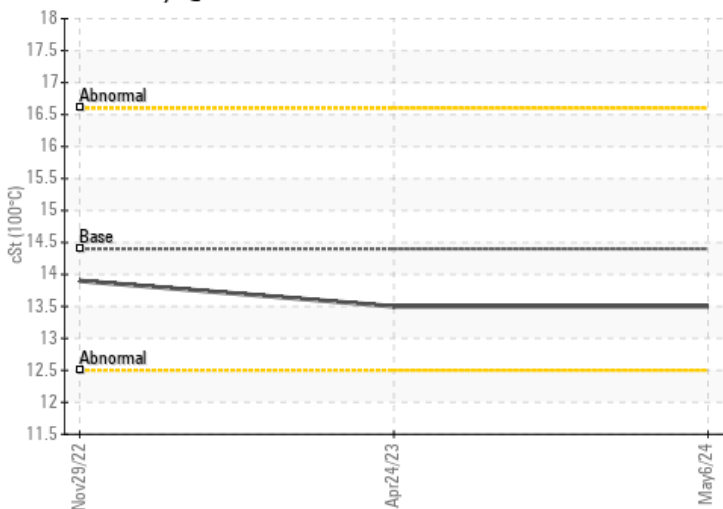
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

