

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L556 1826-66703 - Diesel Engine

Sample No: LH0268180

Oil Type: DIESEL ENGINE OIL SAE 5W40



#### SAMPLE INFORMATION

Sample Number	LH0268180	LH0243713	LH0244233	LHMC119092
Sample Date	09 Feb 2024	15 Dec 2023	02 Jun 2023	31 Mar 2023
Machine Hours	7715	7039	5209	0
Oil Hours	0	500	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

**ALTER TRADING**  
201 WHEELER AVE  
SOUTH BELOIT, IL  
US 61080  
Contact: Service Manager



#### OIL CONDITION

Visc @ 100°C	cSt	12.5	13.4	13.2	13.3
Base Number (BN)	mg KOH/g	7.4	6.4	6.6	7.6
Oxidation (PA)	%	60	67	67	60

T:  
F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	78	75	70	72
Sulfation (PA)	%	52	59	56	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	9	8	8
Sodium	ppm	<1	4	1	<1
Potassium	ppm	4	5	3	1

#### 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	5	6	5	5
Copper	ppm	2	3	2	2
Lead	ppm	0	0	<1	0
Tin	ppm	0	<1	<1	0
Aluminum	ppm	2	1	0	0
Chromium	ppm	<1	<1	<1	0
Molybdenum	ppm	4	5	22	32
Nickel	ppm	0	0	<1	0
Titanium	ppm	96	83	59	50
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	1	<1	<1	0



#### ADDITIVES

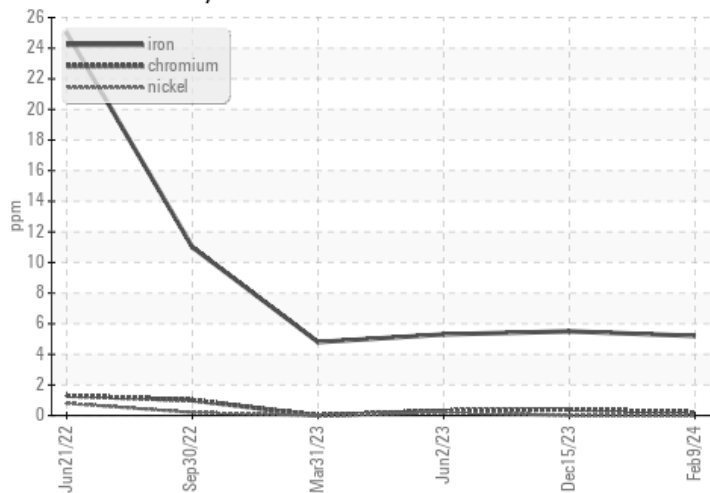
Calcium	ppm	1258	1302	1236	1156
Magnesium	ppm	690	706	666	775
Zinc	ppm	1146	1189	1101	1173
Phosphorus	ppm	1027	975	921	887
Barium	ppm	12	0	2	0
Boron	ppm	119	69	62	55

Depot: ALTSOU  
Unique No: 10876051  
Signed: Wes Davis  
Report Date: 15 Feb 2024

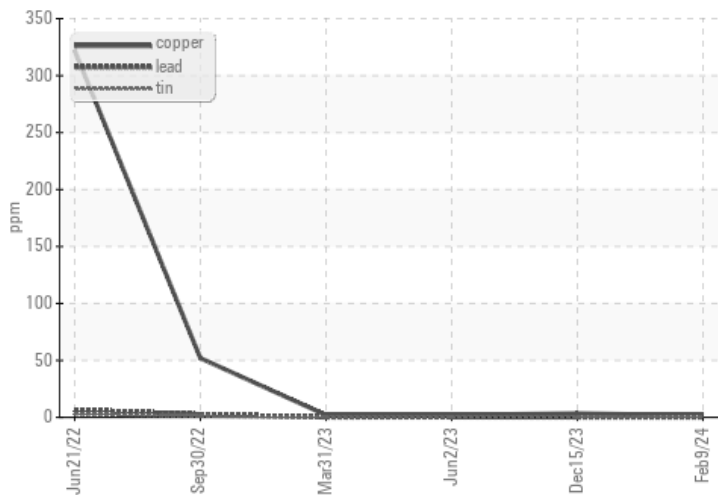


### GRAPHS

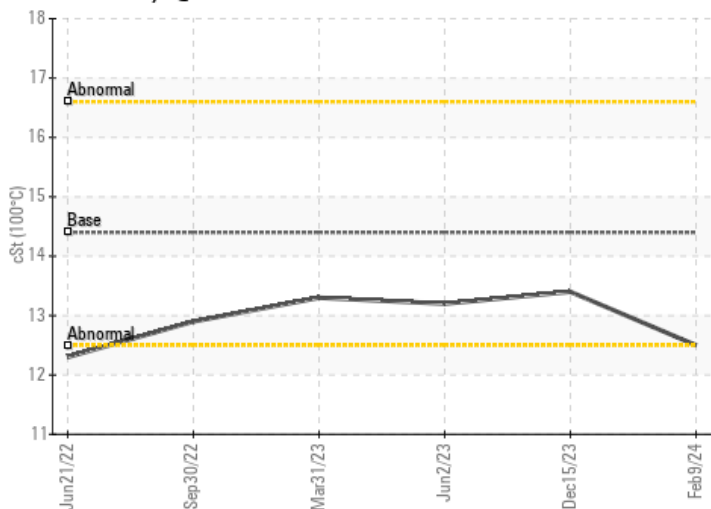
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

