

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### 1215-121379 LIEBHERR LH40M 1215-121379 - Diesel Engine

Sample No: LH0272333

Oil Type: DIESEL ENGINE OIL SAE 5W30



RIVER METALS RECYCLING - LOUISVILLE  
PO BOX 6521  
LOUISVILLE, KY  
US 40206  
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#### Diagnosis

Resample at the next service interval to monitor. 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.



#### Sample Information

Sample Number	LH0272333	LH0212250	LH0212246	LH0212236
Sample Date	11 Jun 2024	01 May 2023	17 Jan 2023	16 Sep 2022
Machine Hours	4940	2884	2502	2180
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ATTENTION	NORMAL



#### Oil Condition

Visc @ 100°C	cSt	12.8	11.6	11.7	11.8
Base Number (BN)	mg KOH/g	7.9	8.8	8.3	8.6
Oxidation (PA)	%	56	80	81	91



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	68	85	83	92
Sulfation (PA)	%	50	52	52	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	1.2	<1.0
Silicon	ppm	5	7	6	6
Sodium	ppm	1	1	<1	0
Potassium	ppm	3	2	<1	3



#### Wear Metals

Iron	ppm	1	4	4	3
Copper	ppm	1	2	4	8
Lead	ppm	0	0	0	3
Tin	ppm	0	<1	<1	0
Aluminum	ppm	2	0	1	0
Chromium	ppm	0	0	<1	1
Molybdenum	ppm	17	46	47	38
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	<1



#### Additives

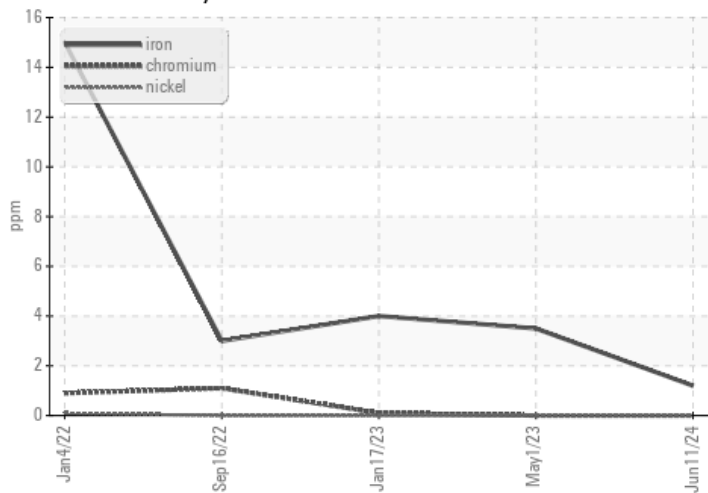
Calcium	ppm	1956	1400	1299	1235
Magnesium	ppm	363	930	891	800
Zinc	ppm	1004	939	856	766
Phosphorus	ppm	887	748	696	601
Barium	ppm	0	0	0	0
Boron	ppm	34	104	96	45

Depot: RIVLOU  
Unique No: 11085728  
Signed: Sean Felton  
Report Date: 20 Jun 2024

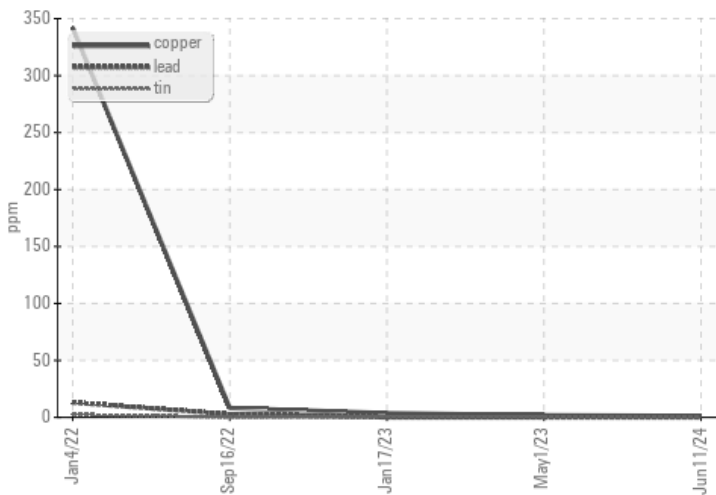


### Graphs

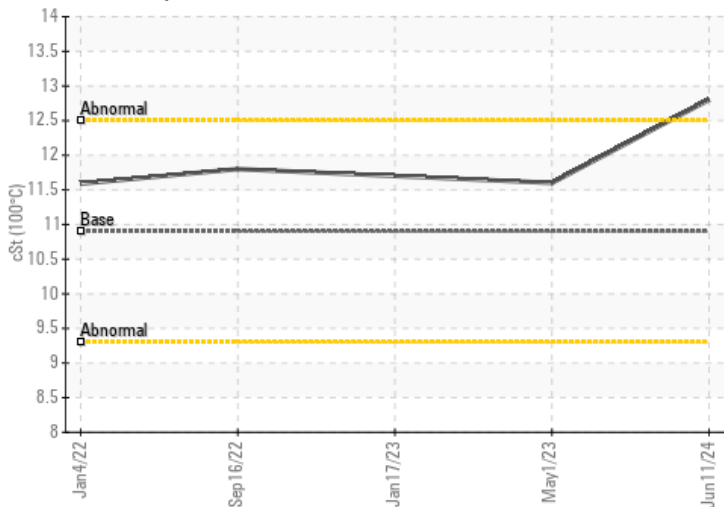
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

