

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30M 091330-1253 - Diesel Engine

Sample No: LH0243233

Oil Type: DIESEL ENGINE OIL SAE 5W30



#### SAMPLE INFORMATION

Sample Number	LH0243233	LHMC114839	LH0208039	LH0157807
Sample Date	14 Jun 2023	13 Dec 2022	11 Nov 2021	12 Jan 2021
Machine Hours	12681	11780	9754	8185
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	ATTENTION

DUMES INC

1640 NORTH 6TH ST

VINCENNES, IN

US 47591

Contact:



#### OIL CONDITION

Visc @ 100°C	cSt	11.6	13.6	14.0	14.4
Base Number (BN)	mg KOH/g	5.4	2.3	---	---
Oxidation (PA)	%	113	141	51	214

T:

F:



#### CONTAMINATION

Water	%	---	---	---	0.114
Soot %	%	0.1	0.1	0.3	0.2
Nitration (PA)	%	108	143	66	205
Sulfation (PA)	%	67	94	42	98
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	9	6	7
Sodium	ppm	1	4	2	5
Potassium	ppm	1	2	<1	0

#### 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.



#### WEAR METALS

Iron	ppm	6	13	1	22
Copper	ppm	2	5	1	6
Lead	ppm	0	2	<1	2
Tin	ppm	<1	1	0	2
Aluminum	ppm	1	3	2	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	51	90	89	53
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1448	2130	2334	1286
Magnesium	ppm	873	257	34	954
Zinc	ppm	952	1405	1208	1198
Phosphorus	ppm	730	1030	1023	995
Barium	ppm	0	0	0	0
Boron	ppm	52	10	68	12

Depot: DUMVINLH

Unique No: 10536531

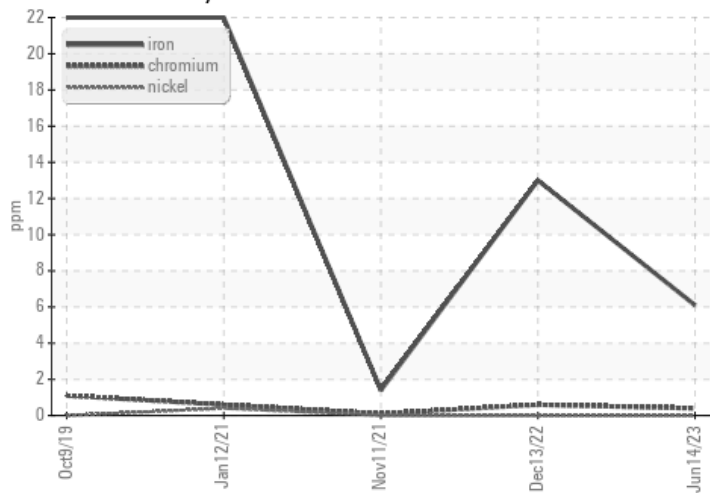
Signed: Don Baldrige

Report Date: 02 Jul 2023

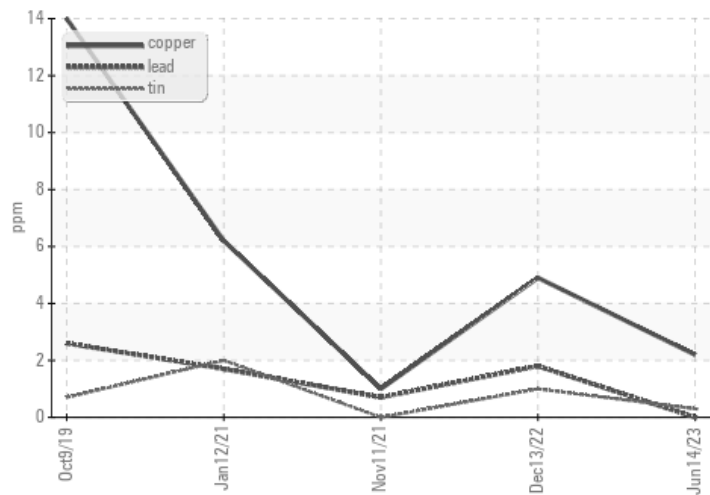


### GRAPHS

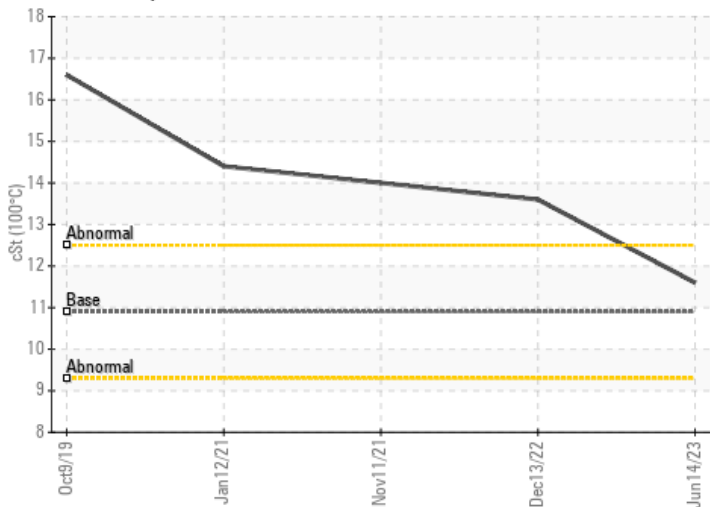
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

