

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH30 1200-79571 - Diesel Engine

Sample No: LH0263908

Oil Type: VALVOLINE 15W40



#### SAMPLE INFORMATION

Sample Number	LH0263908	LHMC113551	LHMC112087	LHMC113540
Sample Date	03 Oct 2023	08 Oct 2019	18 Jul 2019	14 Feb 2019
Machine Hours	12990	9872	9946	8393
Oil Hours	900	250	250	250
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	MARGINAL	NORMAL	NORMAL	NORMAL

#### ROCHESTER IRON AND METAL

1552 EAST LUCAS ST

ROCHESTER, IN

US 46975

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#### OIL CONDITION

Visc @ 100°C	cSt	12.2	13.9	13.6	14.25
Oxidation (PA)	%	78	61	61	69



#### CONTAMINATION

Soot %	%	0.1	0.4	0.2	0.2
Nitration (PA)	%	78	68	63	67
Sulfation (PA)	%	54	53	53	57
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	8	7
Sodium	ppm	<1	3	2	3
Potassium	ppm	2	0	0	8

#### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron	ppm	12	6	4	4
Copper	ppm	7	2	<1	<1
Lead	ppm	<1	<1	<1	0
Tin	ppm	<1	0	0	0
Aluminum	ppm	4	7	4	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	57	65	61	20
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1337	1347	1152	2241
Magnesium	ppm	797	909	1021	77
Zinc	ppm	932	1193	1259	1099
Phosphorus	ppm	720	1083	1020	873
Barium	ppm	0	0	0	0
Boron	ppm	97	17	10	134

Depot: ROCROCLH

Unique No: 10683024

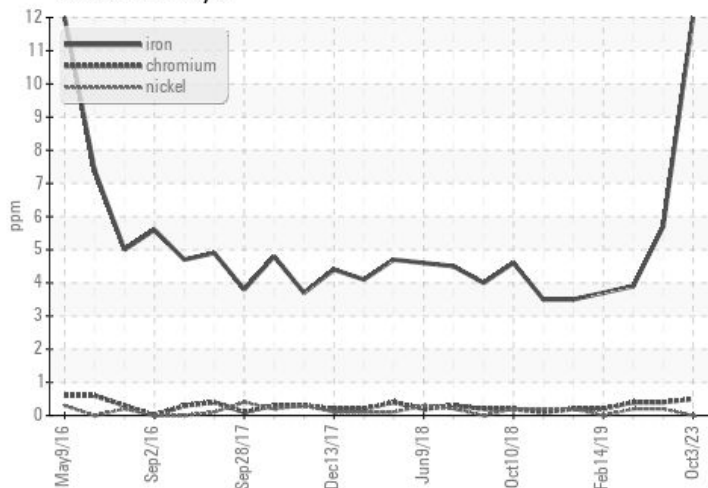
Signed: Doug Bogart

Report Date: 05 Oct 2023

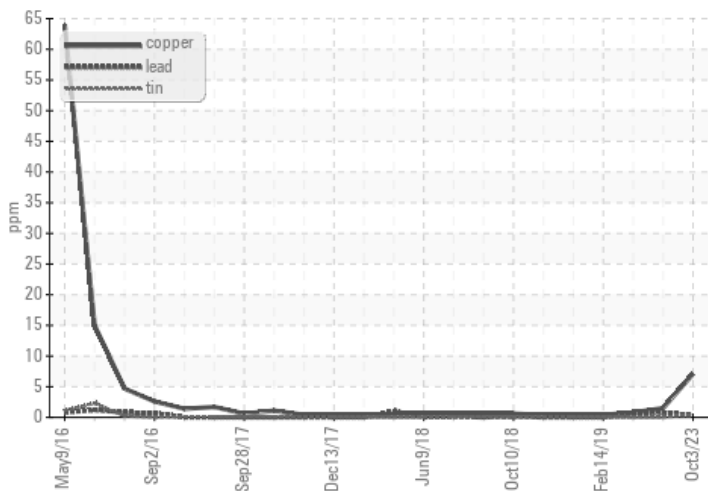


### GRAPHS

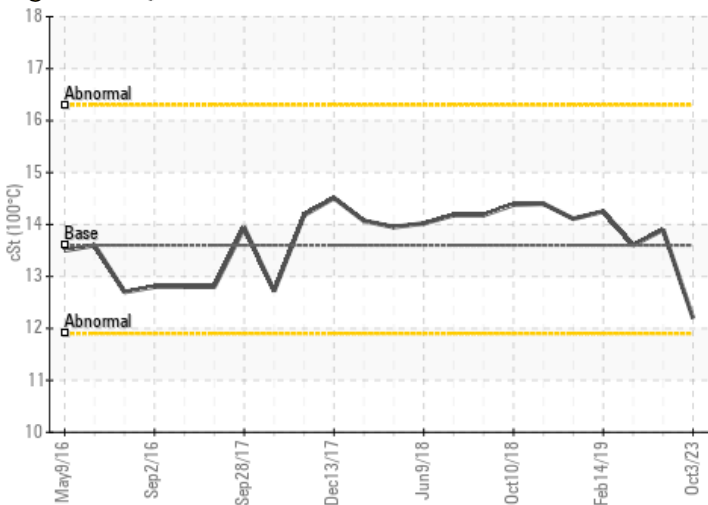
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

