

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 1200-79283 - Hydraulic System

Sample No: LH0272381

Oil Type: AW HYDRAULIC OIL ISO 68



Sample Information

Sample Number	LH0272381	LH0267329	LH0203824	LH0208038
Sample Date	10 Jun 2024	14 Mar 2024	22 Dec 2022	08 Nov 2021
Machine Hours	21047	20566	17772	14523
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ATTENTION	NORMAL	NORMAL	ABNORMAL

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Oil Condition

Visc @ 40°C	cSt	45.7	45.8	45.3	45.8
Acid Number (AN)	mg KOH/g	0.33	0.35	0.39	0.310



Contamination

Water	%	NEG	NEG	NEG	0.606
Particles >4µm		1451	5100	3398	---
Particles >6µm		509	1251	369	---
Particles >14µm		73	70	17	---
ISO 4406:1999 (c)		18/16/13	20/17/13	19/16/11	---
Silicon	ppm	<1	<1	<1	<1
Sodium	ppm	2	2	<1	0
Potassium	ppm	0	<1	0	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 amount and size of particulates present in the system are acceptable. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



Wear Metals

Iron	ppm	28	21	14	17
Copper	ppm	4	4	5	4
Lead	ppm	0	2	0	0
Tin	ppm	0	3	0	0
Aluminum	ppm	0	0	0	0
Chromium	ppm	5	4	2	1
Molybdenum	ppm	0	<1	0	0
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	<1	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	<1	<1	0	0



Additives

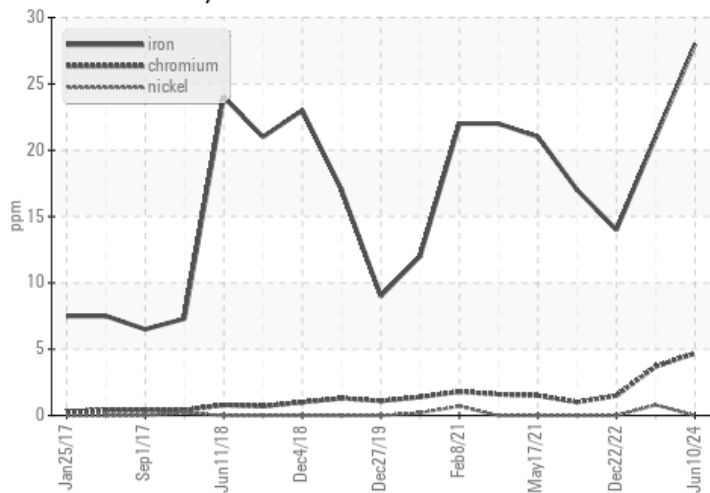
Calcium	ppm	54	37	38	53
Magnesium	ppm	<1	<1	0	0
Zinc	ppm	412	377	392	409
Phosphorus	ppm	330	295	326	333
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

Depot: GREPRILH
Unique No: 11085158
Signed: Don Baldrige
Report Date: 19 Jun 2024

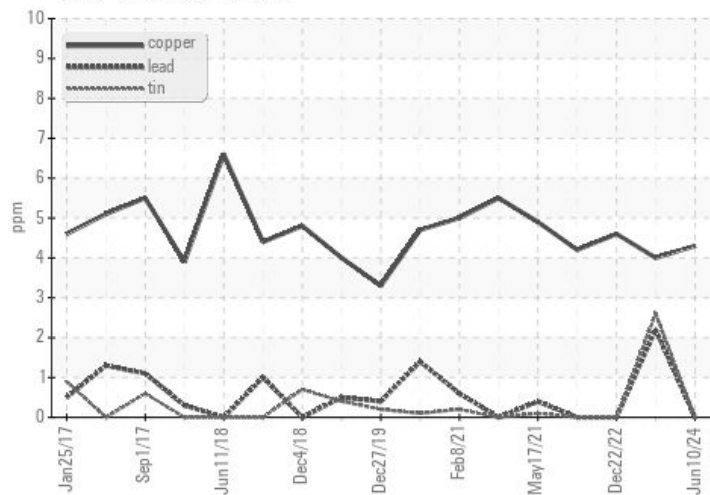


Graphs

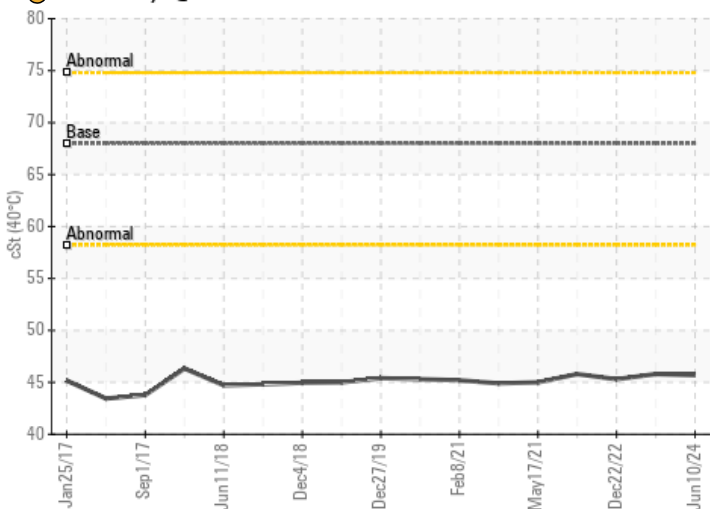
Ferrous Alloys



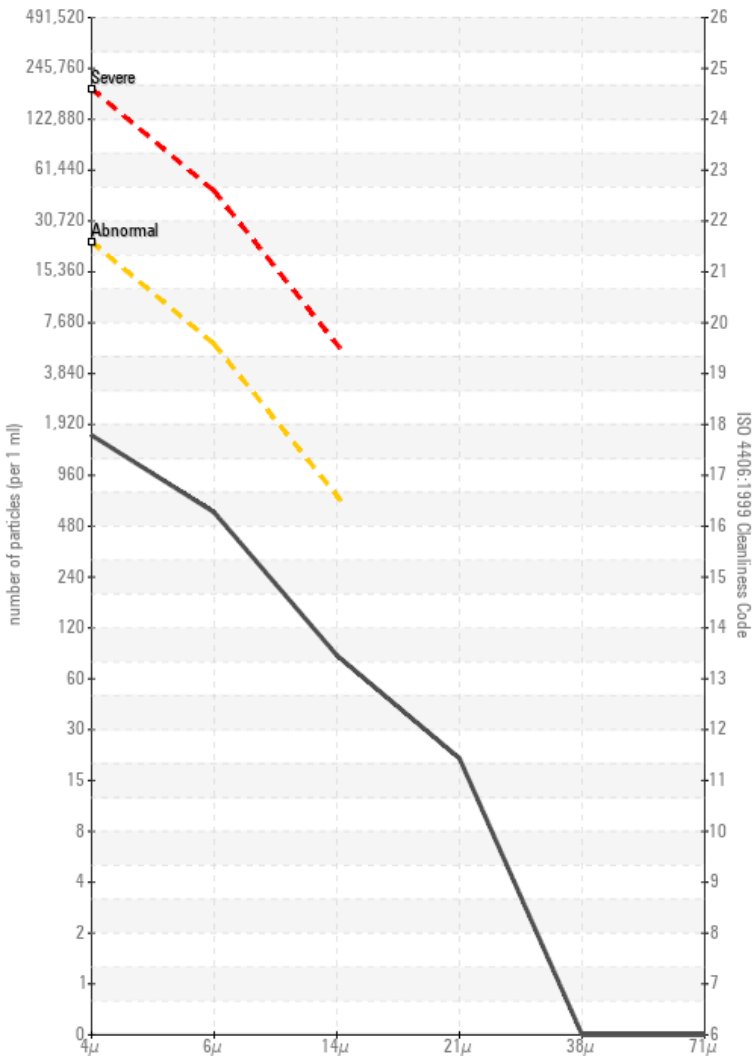
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

