

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L538 1559-59801 - Hydraulic System

Sample No: LH0209845

Oil Type: {unknown}



SAMPLE INFORMATION

Sample Number	LH0209845	LH05774410	LH0204066	LH0209832
Sample Date	28 Feb 2024	21 Feb 2023	09 Mar 2022	01 Mar 2022
Machine Hours	3009	0	0	966
Oil Hours	0	2003	0	0
Oil Changed	Not Changd	Not Changd	N/A	Not Changd
Sample Status	ATTENTION	ATTENTION	ABNORMAL	ABNORMAL

DIEHL AND NUEMAIER

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DE FOREST, WI
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OIL CONDITION

Visc @ 40°C	cSt	44.0	44.2	44.1	44.4
Acid Number (AN)	mg KOH/g	0.74	0.76	1.14	1.15



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		29757	25406	---	123104
Particles >6µm		5508	4100	---	12191
Particles >14µm		212	164	---	84
ISO 4406:1999 (c)		22/20/15	22/19/15	---	24/21/14
Silicon	ppm	2	2	2	3
Sodium	ppm	6	5	1	0
Potassium	ppm	2	3	0	2



WEAR METALS

Iron	ppm	16	12	10	4
Copper	ppm	8	7	6	7
Lead	ppm	10	6	3	3
Tin	ppm	0	0	<1	0
Aluminum	ppm	<1	0	<1	<1
Chromium	ppm	3	2	1	1
Molybdenum	ppm	3	4	<1	0
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	657	701	1525	1434
Magnesium	ppm	30	37	7	7
Zinc	ppm	524	564	729	754
Phosphorus	ppm	434	449	611	614
Barium	ppm	0	0	0	0
Boron	ppm	5	6	0	2

Diagnosis

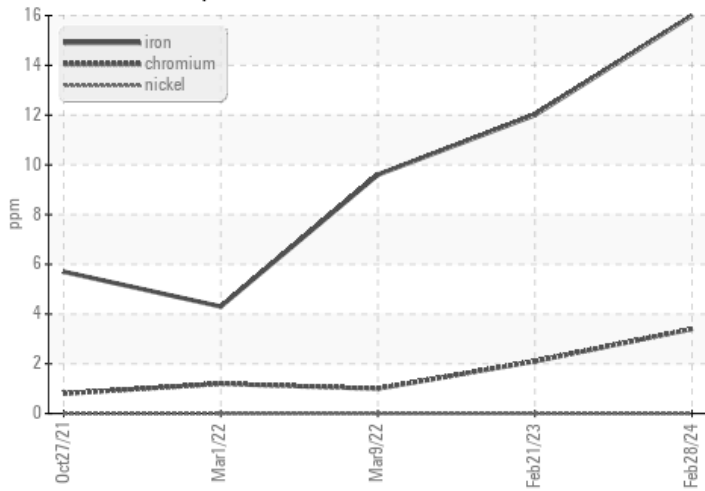
We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: DIEDEF
Unique No: 10912828
Signed: Wes Davis
Report Date: 06 Mar 2024

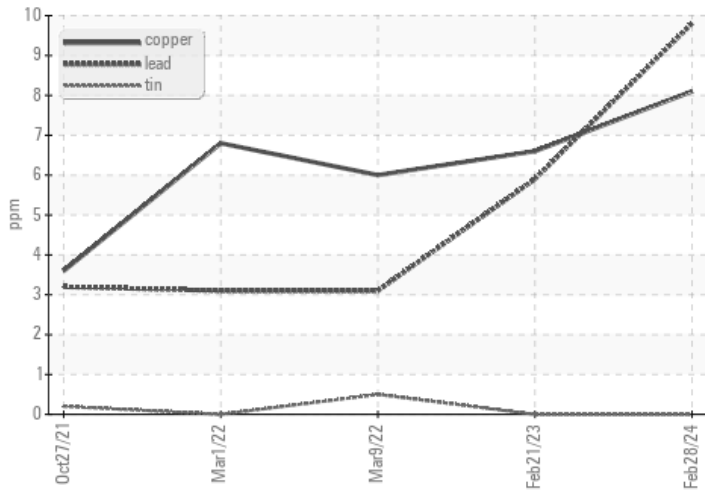


GRAPHS

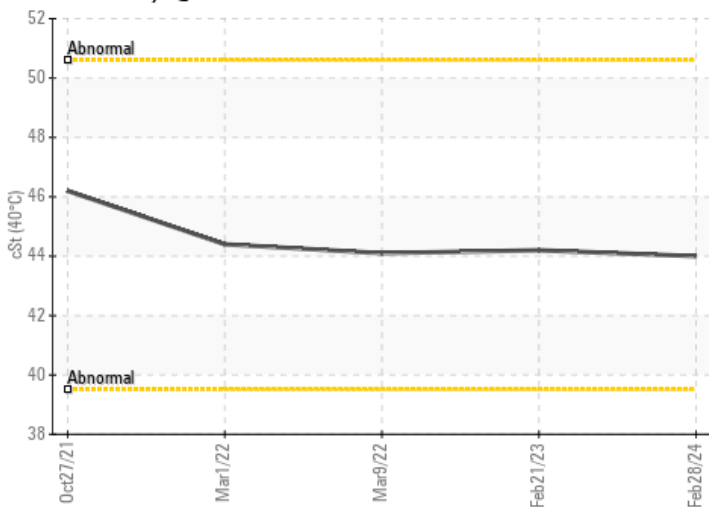
Ferrous Alloys



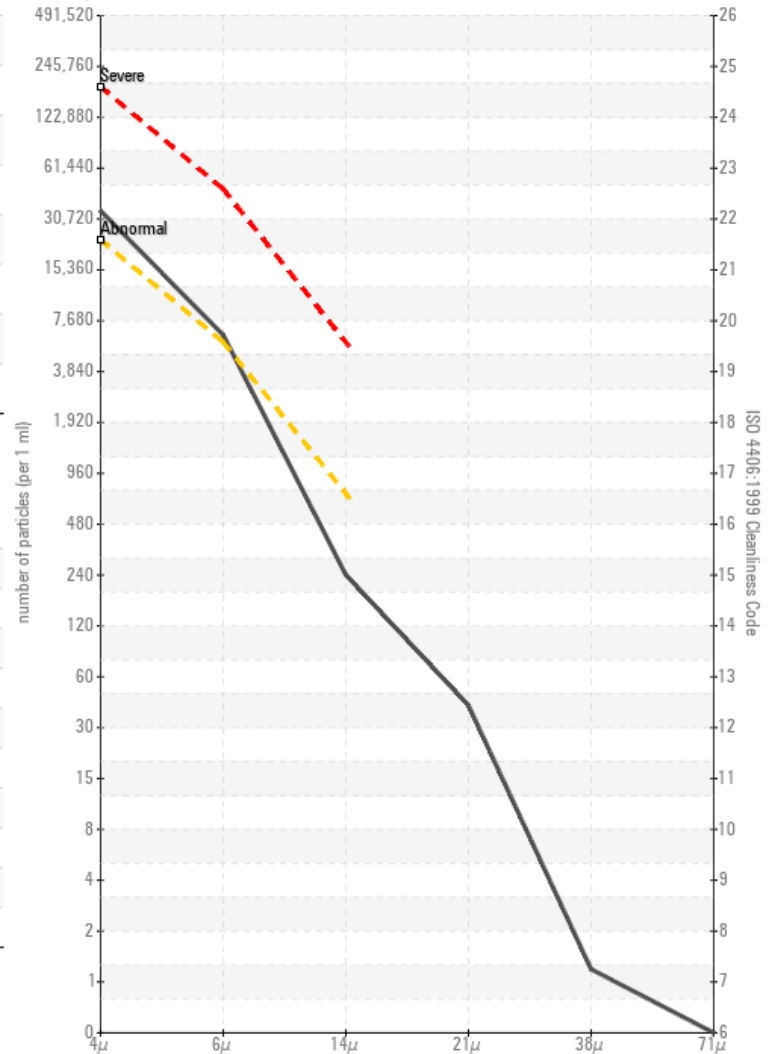
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

