

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 027905-1681 - Hydraulic System

Sample No: LH0264299

Oil Type: AW HYDRAULIC OIL ISO 68



Sample Information

Sample Number	LH0264299	LH0254556	LH0254179	LH0254250
Sample Date	22 May 2024	09 Apr 2024	02 Apr 2024	14 Mar 2024
Machine Hours	2389	1627	1463	1016
Oil Hours	2389	1627	1463	1016
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	ATTENTION	ATTENTION	ABNORMAL	ABNORMAL

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 MEMPHIS, TN
 US 38118
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 T:
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Oil Condition

Visc @ 40°C	cSt	48.9	49.1	49.2	47.6
Acid Number (AN)	mg KOH/g	1.09	1.19	1.15	1.30



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		8635	2427	50344	---
Particles >6µm		2759	376	13646	---
Particles >14µm		119	32	567	---
ISO 4406:1999 (c)		20/19/14	18/16/12	23/21/16	---
Silicon	ppm	6	6	2	6
Sodium	ppm	4	<1	12	2
Potassium	ppm	2	2	1	0



Wear Metals

Iron	ppm	3	5	<1	4
Copper	ppm	8	8	2	6
Lead	ppm	0	2	<1	0
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	<1	1	2	<1
Chromium	ppm	0	<1	<1	0
Molybdenum	ppm	0	1	<1	0
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	0	<1
Vanadium	ppm	0	<1	<1	0



Additives

Calcium	ppm	931	1008	482	1132
Magnesium	ppm	5	6	6	7
Zinc	ppm	637	606	293	661
Phosphorus	ppm	553	593	203	580
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

Diagnosis

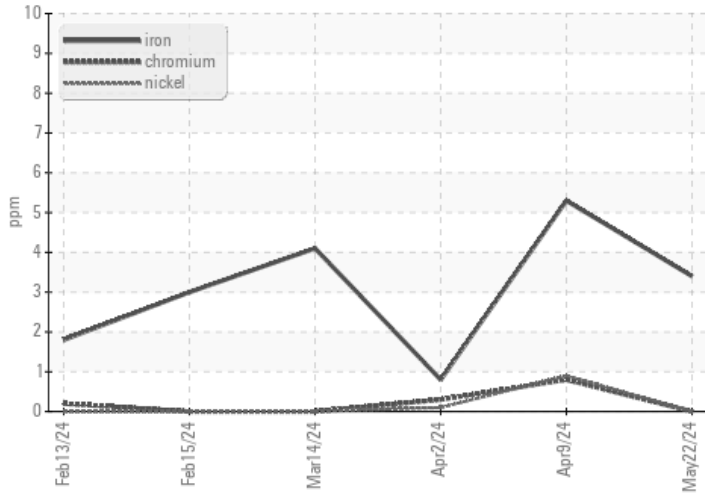
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Depot: LEC0051
Unique No: 11096298
Signed: Don Baldrige
Report Date: 25 Jun 2024

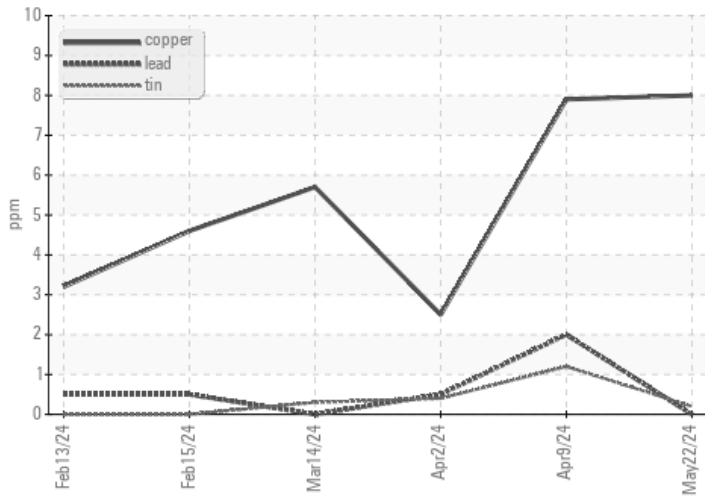


Graphs

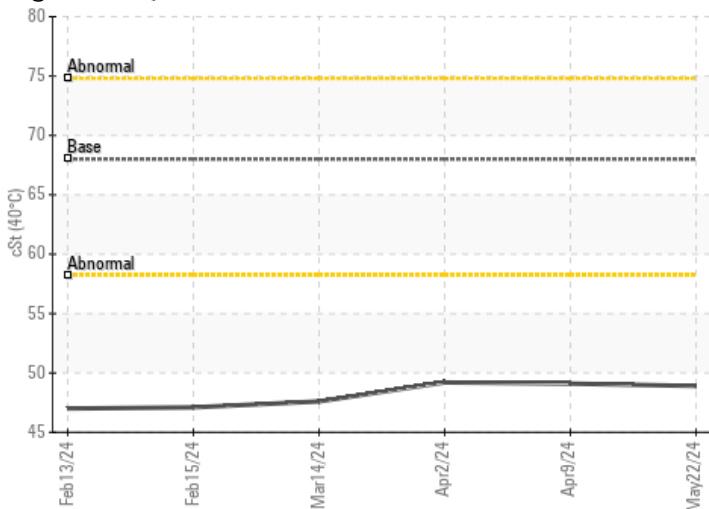
Ferrous Alloys



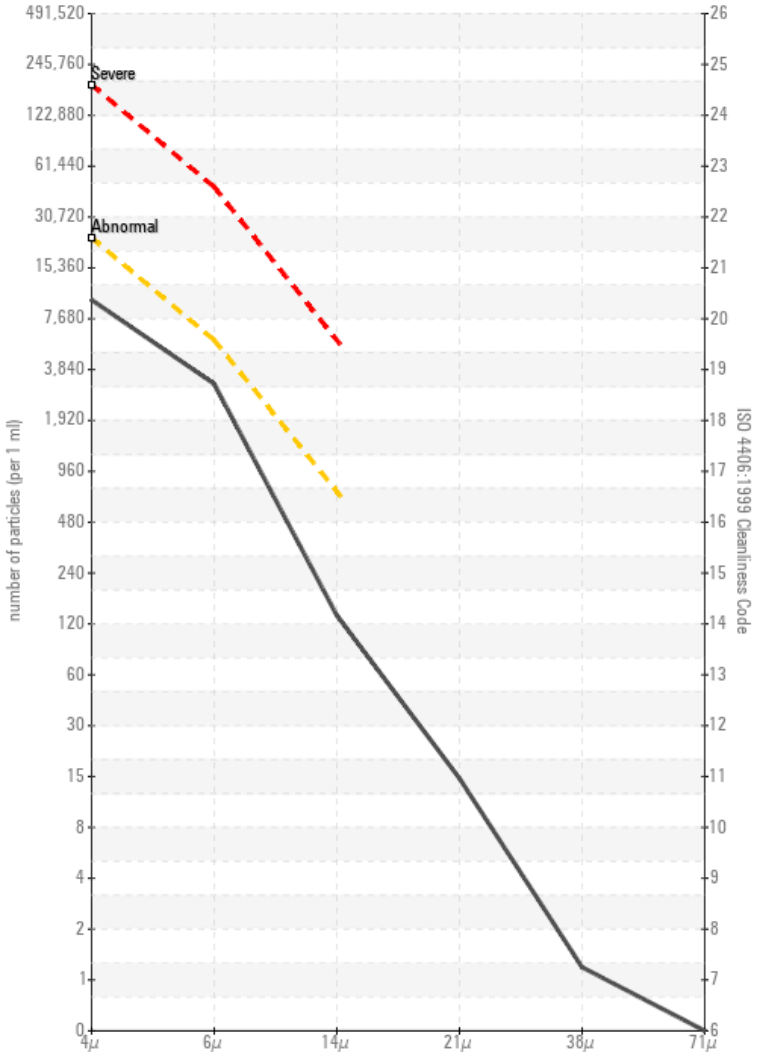
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

