

LIEBHERR

CONSTRUCTION EQUIPMENT



[(344443)] LIEBHERR LH24 118108-1251 - Hydraulic System

Sample No: LH0250457

Oil Type: MOBIL UNIVIS N-C 46



ABC RECYCLING
 8081 MEADOW AVE.
 BURNABY, BC
 CA V3N 2V9
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 T: (778)988-9944
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Sample Information

Sample Number	LH0250457	LH0194120	LH0194114	LH0194064
Sample Date	04 Apr 2024	04 Apr 2023	26 Jan 2023	21 Nov 2022
Machine Hours	7662	5211	4500	4075
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL



Oil Condition

Visc @ 40°C	cSt	29.3	29.0	29.3	30.2
Acid Number (AN)	mg KOH/g	---	0.47	0.50	0.61



Contamination

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		18675	2617	490	1752
Particles >6µm		4972	481	135	417
Particles >14µm		260	18	13	20
ISO 4406:1999 (c)		21/19/15	19/16/11	16/14/11	18/16/11
Silicon	ppm	2	3	2	2
Sodium	ppm	2	<1	<1	1
Potassium	ppm	0	0	<1	0



Wear Metals

Iron	ppm	13	10	9	13
Copper	ppm	4	3	3	4
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	0	0	<1
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	2	1	<1	1
Molybdenum	ppm	0	0	0	0
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	64	67	71	81
Magnesium	ppm	<1	<1	<1	<1
Zinc	ppm	442	439	432	457
Phosphorus	ppm	361	391	385	412
Barium	ppm	0	0	0	0
Boron	ppm	<1	<1	0	<1

Diagnosis

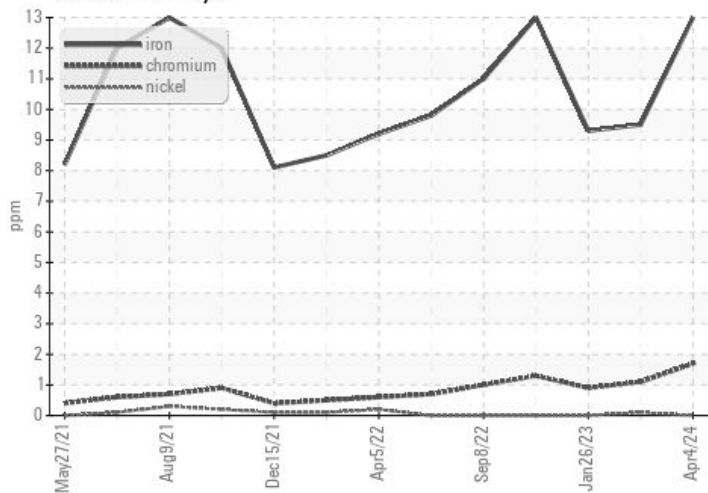
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL UNIVIS N-C 46, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Depot: ABCBUR
 Unique No: 5772137
 Signed: Kevin Marson
 Report Date: 24 Apr 2024

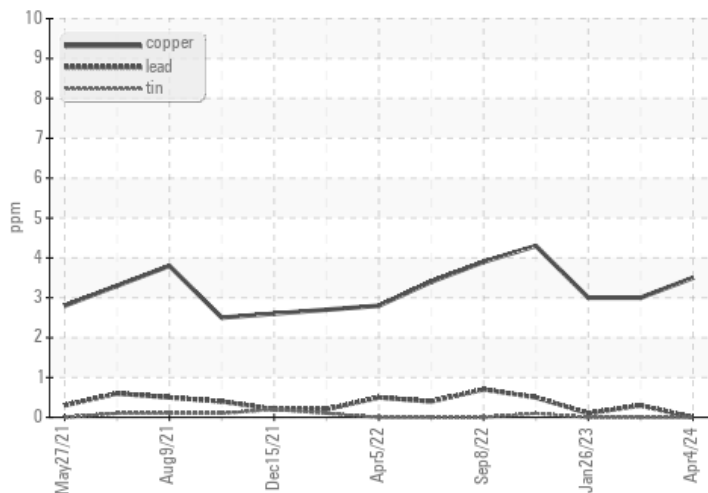


Graphs

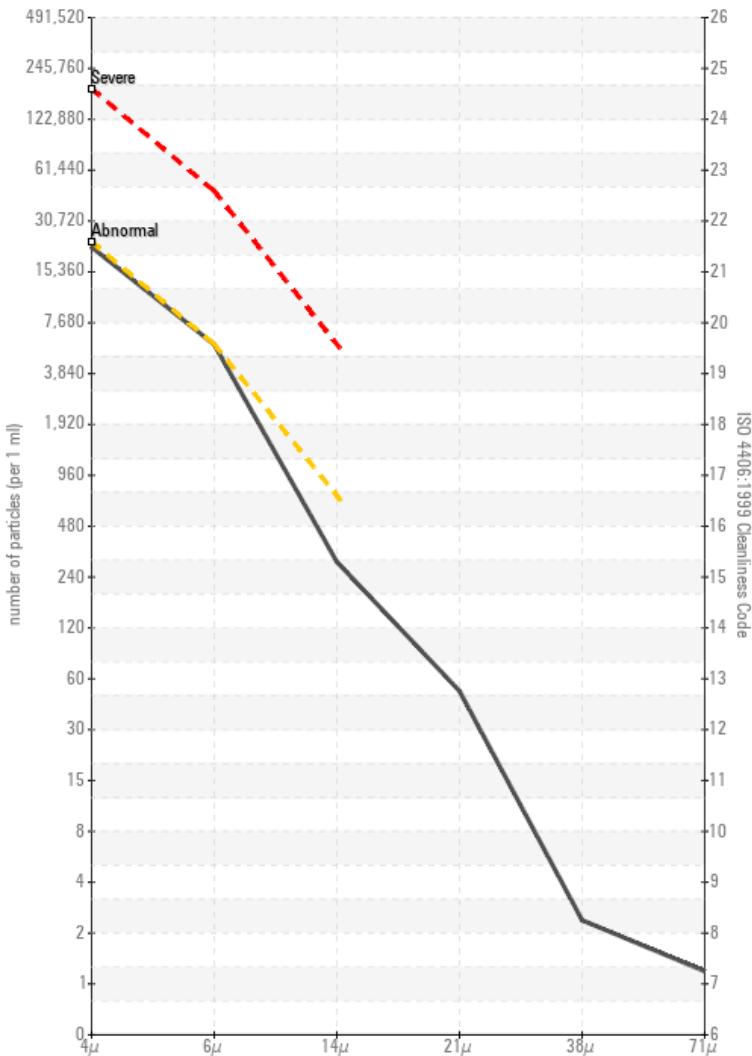
Ferrous Alloys



Non-ferrous Metals



Particle Count



Viscosity @ 40°C

